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COMMONWEALTH BUREAU OF CENSUS AND STATISTICS,
CANBERRA.

OFFICIAL

YEAR BOOK

OF THE

COMMONWEALTH OF AUSTRALIA

No. 33.—1940.

Prepared under Instructions from
The Honorable the Treasurer,

BY

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ACTING COMMONWEALTH STATISTICIAN.



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PREFACE.

By the Constitution of the Commonwealth of Australia, the Parliament of the Commonwealth is empowered "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 thirty-third Official Year Book issued under the authority of the Commonwealth Government.

The synopsis on pp. viii to xxi immediately following shows the general arrangement of the work. The special index (following the usual 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 matter which, owing to limitations of space, has been omitted or is not printed fully in the present volume.

Economic and financial conditions during recent years have caused a demand for new information, or information expressed in new terms, concerning many matters of finance, trade, prices, production and population, and some progress has been made in the later volumes towards bringing closer to present day requirements the Chapters dealing with these branches of statistics, while a diary of the principal financial and economic events of more recent years is inserted after the last chapter.

The provisions as to censorship preclude the publication of certain statistics during the war period. In the present volume Chapters V. "Transport and Communication" and XXIV. "Trade" are chiefly affected. The "Defence" Chapter has been omitted but the data will be made available in a future issue.

Later information which has come to hand since the various Chapters were sent to press has been incorporated in the Appendix (p. 983).

The material contained in each issue is always carefully examined, but it would be idle to hope that all error has been avoided. I shall be grateful to those who will be kind enough to point out defects or make suggestions.

My thanks are due to the State Statisticians, who have collected and compiled the data on which the greater part of the information given in the Official Year Book is based. Thanks are also due to the responsible officers of the various Commonwealth and State Departments, and to others, who have kindly, and often at considerable trouble, supplied information; special mention should be made of the services of the Chief Draftsman of the Property and Survey Branch, Department of the Interior, who was responsible for the drawing of the graphs throughout this volume.

Most of the text of this volume was completed under the supervision of Dr. Roland Wilson prior to his being seconded for duty as Secretary, Department of Labour and National Service. An expression of keen appreciation is due in respect of the valuable work performed by Mr. S. H. Begley, the Editor of the Official Year Book, and of the services rendered by the officers in charge of the various 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,
Acting Commonwealth Statistician.

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STATISTICAL SUMMARY.

STATISTICAL SUMMARY, AUSTRALIA.

Heading.		Year.						
		1881.	1891.	1901.	1911.	1921.	1931.	1939.
Population(a)	Males	1,247,059	1,736,617	2,004,836	2,382,232	2,799,462	3,332,577	3,534,813
	Females	1,059,677	1,504,368	1,820,077	2,191,554	2,711,532	3,220,029	3,462,513
	Persons	2,306,736	3,240,985	3,824,913	4,573,786	5,510,994	6,552,606	6,997,326
Births	No.	80,004	110,187	102,945	122,193	136,198	118,509	122,891
	Rate	35.26	34.47	27.16	27.21	24.95	18.16	17.65
Deaths	No.	33,327	47,430	46,330	47,869	50,076	56,560	69,147
	Rate	14.69	14.84	12.22	10.66	9.91	8.67	9.93
Marriages	No.	17,244	23,862	27,753	39,482	46,869	38,882	64,249
	Rate	7.60	7.47	7.32	8.79	8.59	5.96	9.23
		1881-82.	1891-92.	1901-02.	1911-12.	1921-22.	1931-32.	1938-39.
Agriculture—								
Wheat	Area, acs.	2,995,814	3,334,957	5,115,965	7,427,834	9,719,042	14,741,313	14,346,380
	Yld., bshl.	21,443,862	25,675,265	38,561,619	71,636,347	129,088,806	190,612,188	155,368,621
	Av., "	7.16	7.70	7.54	9.64	13.28	12.93	10.83
Oats	Area, acs.	194,816	246,129	461,430	616,794	733,406	1,085,489	1,784,205
	Yld., bshl.	4,795,897	5,726,256	9,789,854	9,561,833	12,147,433	15,194,680	15,554,735
	Av., "	24.62	23.27	21.22	15.50	16.56	14.00	8.72
Barley	Area, acs.	75,864	68,068	74,511	116,466	298,910	342,396	744,737
	Yld., bshl.	1,353,380	1,178,560	1,519,819	2,056,836	6,085,685	6,290,672	10,830,714
	Av., "	17.84	17.31	20.40	17.66	20.36	18.37	14.54
Maize	Area, acs.	165,777	284,428	294,849	340,065	305,186	269,448	324,146
	Yld., bshl.	5,726,266	9,261,922	7,034,786	8,939,855	7,840,438	7,062,383	7,056,642
	Av., "	34.54	32.56	23.86	26.29	25.69	26.21	21.77
Hay	Area, acs.	768,388	942,166	1,688,402	2,518,351	2,994,519	2,634,680	3,250,260
	Yld., tons	767,194	1,067,255	2,024,608	2,867,973	3,902,189	3,167,459	3,321,161
	Av., "	1.00	1.13	1.20	1.14	1.30	1.20	1.02
Potatoes(b)	Area, acs.	76,265	112,884	109,685	130,463	149,144	145,111	98,048
	Yld., tons	243,216	380,477	322,524	301,489	388,091	379,102	274,441
	Av., "	3.19	3.37	2.94	2.31	2.60	2.74	2.80
Sugar-cane	Area, acs.	19,708	45,444	86,950	101,010	128,356	241,576	262,305
	Yld., tons	349,627	737,573	1,367,802	1,682,250	2,436,890	4,213,453	5,678,894
	Av., "	17.74	16.23	15.73	16.65	18.99	17.44	21.65
Vineyards	Area, acs.	14,569	48,882	63,677	60,602	92,474	112,961	126,507
	Wine, gal.	1,438,060	3,437,598	5,262,447	4,975,147	8,542,573	14,190,522	14,957,537
Total gross value all agricultural production		£ 15,519,000	16,988,000	23,835,000	38,774,000	81,890,000	74,489,000	76,851,000
Pastoral, dairying, etc.—								
Live Stock	Sheep	65,092,719	106,421,068	72,040,211	96,886,234	86,119,068	110,618,893	111,057,832
	Cattle	8,010,991	11,112,112	8,491,428	11,828,954	14,441,309	12,260,955	12,861,761
(a)	Horses	1,088,029	1,584,737	1,620,420	2,278,226	2,438,182	1,775,550	1,724,056
	Pigs	703,188	845,888	931,309	1,110,721	960,385	1,167,845	1,155,591
Wool prod. lb. (greasy)		319,649,000	634,046,000	539,395,000	798,391,000	723,059,000	1,007,455,847	983,581,974
Butter production		(d)	42,314,585	103,747,295	212,073,745	267,071,340	390,654,070	455,834,329
Cheese production		(d)	10,130,945	11,845,153	15,886,712	32,653,003	31,422,973	65,645,980
Bacon and ham		(d)	16,771,886	34,020,629	53,335,092	58,626,469	71,121,740	74,453,963
Total gross value of pastoral and dairying production		£ 29,538,000	39,256,000	36,890,000	72,883,000	119,399,000	103,018,000	145,299,000
		1881.	1891.	1901.	1911.	1921.	1931.	1938.
Mineral production—								
Gold	£	5,194,390	5,281,861	14,017,538	10,551,624	4,018,685	3,563,519	14,026,615
	£	45,622	3,736,352	2,248,598	3,022,177	1,539,992	1,443,867	1,745,046
Silver and lead	£	714,003	367,373	2,215,431	2,564,277	803,957	567,558	893,080
	£	1,145,889	560,505	448,234	1,209,978	418,418	216,295	711,628
Tin	£	200	2,979	4,067	1,415,169	283,455	512,795	916,905
	£	637,865	1,912,353	2,602,733	3,927,360	11,014,831	6,355,246	7,539,622
Total value of all mineral production		£ 7,820,290	12,074,106	21,816,772	23,302,878	20,029,107	13,352,316	32,462,995
Forestry production—								
Quantity of local timber								
sawn or hewn—								
1,000 sup. ft.		(d)	(d)	452,131	604,794	590,495	236,707	717,915

(a) At 31st December. (b) Partly estimated for 1881. (c) Area of productive cane. (d) Information not available (e) Years ended December, except for last two columns which refer to years ended June.

STATISTICAL SUMMARY, AUSTRALIA—continued.

Heading.	Year.						
	1881.	1891.	1901.	1911.	1921-22.	1931-32.	1939-40.
Manufactories—							
No. of factories				14,455	18,023	(b) 21,657	26,941
Hands employed				311,710	378,540	(b) 336,658	565,106
Wages paid				27,528,377	68,050,861	55,931,818	(b) 106,743,062
Value of production				51,259,004	121,674,119	110,981,830	(b) 203,416,610
Total value of output				133,022,090	320,340,765	281,645,785	(b) 500,419,977
Shipping—							
Oversea vessels	3,284	3,778	4,028	4,174	3,111	3,057	(b) 3,814
ent. & cleared tons	2,549,364	4,726,307	6,541,991	9,984,801	9,087,278	11,395,784	(b) 13,545,712
Commerce—							
Imports, oversea	£ 29,067,000	£ 37,711,000	£ 42,434,000	£ 66,967,488	£ 103,066,436	£ 44,712,868	(c) 115,675,505
per head	12/16/2	11/16/0	11/3/11	14/18/2	18/14/1	6/16/6	16/10/8
Exports, oversea	£ 27,528,000	£ 36,043,000	£ 49,696,000	£ 79,482,258	£ 127,846,535	(d) 85,842,887	cd 118,762,122
per head	12/2/8	11/5/6	13/2/2	17/13/10	23/4/1	13/1/11	16/19/6
Total oversea trade	£ 56,595,000	£ 73,754,000	£ 92,130,000	£ 146,449,746	£ 230,912,971	£ 130,555,755	(c) 234,437,627
per head	24/18/10	23/1/6	24/6/1	32/12/0	41/18/2	19/18/5	33/10/2
Customs and Excise duties	£ 4,809,326	£ 7,440,869	£ 8,566,530	£ 13,515,005	£ 27,565,199	£ 28,524,996	£ 53,733,094
per head	2/2/5	2/6/7	2/5/8	2/19/2	5/0/1	4/7/1	7/13/7
Principal Oversea Exports (e)							
Wool	lb. (greasy)	328,369,200	619,259,800	518,018,100	720,364,900	927,833,700	893,644,148
	cental	13,173,026	19,940,029	15,237,454	26,071,193	47,977,044	32,102,246
Wheat	cental	3,218,792	5,876,875	12,156,035	33,088,704	59,968,334	76,440,603
	tons	1,189,762	1,938,864	2,774,643	9,641,608	28,644,155	19,220,203
Flour	tons	49,549	33,363	96,814	175,891	359,734	610,858
	lb.	1,298,800	328,423	589,604	1,391,529	5,519,881	3,833,237
Butter	lb.	519,635	4,239,500	34,607,400	101,722,100	127,347,400	201,639,404
Skins and hides	£	316,878	206,868	1,451,168	4,637,362	7,968,078	10,250,002
Tallow	£	39,383	873,695	1,250,938	3,227,236	3,136,810	2,315,594
Meats	£	644,149	571,069	677,745	1,935,836	1,441,795	831,415
Timber (undressed)	£	118,117	38,448	731,301	1,023,960	1,158,166	432,595
Gold	£	6,445,365	5,703,532	14,315,741	12,045,766	3,683,239	12,694,786
Silver and lead	£	57,954	1,932,278	2,250,253	3,212,584	2,967,130	2,902,056
Copper	£	676,515	417,687	1,619,145	2,345,961	705,358	472,468
Coal	£	361,081	645,972	986,957	900,622	1,099,899	341,800
Govt. Railways—							
Lgth. of line open, mls.		3,832	9,541	12,579	16,078	23,502	26,959
Capital cost	£	42,741,350	99,764,090	123,223,779	152,194,603	244,353,233	323,365,450
Gross revenue	£	3,910,122	8,654,085	11,038,468	17,847,837	38,194,630	37,579,965
Working expenses	£	2,141,735	5,630,182	7,133,617	10,945,727	29,817,970	28,141,984
Per cent. of working expenses on earnings %		54.77	65.06	64.63	61.33	78.07	74.88
Postal—							
Letters and postcards dealt with	No.	67,640,000	157,297,000	220,853,000	453,063,000	561,973,105	g 731,134,500
per head		29.61	49.07	58.26	100.90	107.01	111.62
Newspapers dealt with	No.	38,063,000	85,280,000	102,727,000	141,638,000	140,477,184	139,502,100
per head		16.66	26.61	27.10	31.54	25.50	(b) 21.30
Cheque-paying Banks (h)—							
Note circulation	£	3,978,711	4,417,269	3,399,462	3,718,458	(i) 213,868	197,121
Coin & bullion held	£	9,108,243	16,712,923	19,780,528	33,470,770	21,626,832	2,882,026
Advances	£	57,732,824	129,741,583	86,352,832	108,578,774	193,435,760	260,917,515
Deposits	£	53,849,455	98,345,338	91,487,148	143,446,910	273,866,737	k 319,241,333
Savings Banks (l)—							
Total deposits	£	7,854,480	15,536,592	30,882,645	59,393,682	154,396,051	197,966,308
Aver. per head of population	£	3/10/5	4/18/7	8/3/0	13/8/5	28/0/4	30/1/11
							(n) 34/13/0
					1921.	1931.	1938.
State Schools—							
Number of Schools	No.	4,494	6,237	7,012	8,060	9,445	10,929
Teachers	No.	9,028	12,564	14,500	16,971	26,120	30,994
Enrollment	No.	432,320	561,153	638,478	638,850	819,042	934,090
Aver. attendance	No.	255,143	350,773	450,246	463,799	666,498	757,669

(a) Owing to variation in classification and lack of information, effective comparison is impossible. (b) 1938-39 figures. (c) Merchandise only. (d) British currency values. The recorded values were— Exports, 1931-32, £A109,034,065; and 1939-40, £A148,749,558. (e) Australian produce, except gold, which includes re-exports. (f) Not available for publication. (g) Includes packets. (h) Figures for the first three years are averages for the December quarter; the remainder for the June quarter. (i) Decrease due to prohibition of re-issue. (j) Quarter ended December, 1940. (k) Government "Set-off" accounts, Interstate (Commonwealth Bank) excluded. (l) First three years at 31st December, next three at 30th June. (m) Includes Commonwealth Savings Bank Deposits. (n) At 31st December, 1940.

CHRONOLOGICAL TABLE.

CHRONOLOGICAL TABLE OF CHIEF EVENTS SINCE THE ESTABLISHMENT OF SETTLEMENT IN AUSTRALIA.

NOTE.—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" at Botany Bay. Land in vicinity being found unsuitable for settlement, the expedition moved to Sydney Cove. Formal proclamation of colony on 7th February. Branch Settlement established at Norfolk Island. French navigator Lapérouse visited Botany Bay. First cultivation of wheat and barley. First grape vines planted.
- 1789 N.S.W.—First wheat harvest at Parramatta, near Sydney. Discovery of Hawkesbury River.
- 1790 N.S.W.—"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 the *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's 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 N.S.W.—Insurrection of convicts at Castle Hill. Vic.—Abandonment of settlement at Port Phillip. Tas.—Foundation of settlement at Hobart by Collins, and at Yorktown by Colonel Paterson.
- 1805 N.S.W.—First extensive sheep farm established at Camden by Capt. Macarthur. Portion of settlers from Norfolk Island transferred to Tasmania.
- 1806 N.S.W.—Shortage of provisions. Tas.—Settlement at Launceston.
- 1807 N.S.W.—Final transfer of convicts from Norfolk Island. First shipment of merchantable wool (245 lb.) to England.
- 1808 N.S.W.—Deposition of Governor Bligh.
- 1809 N.S.W.—Isaac Nichols appointed to supervise delivery of oversea letters.
- 1810 N.S.W.—Post Office officially established at Sydney, Isaac Nichols first post-master. First race meeting in Australia at Hyde Park, Sydney. Tas.—First Tasmanian newspaper printed.
- 1813 N.S.W.—Passage across Blue Mountains discovered by Wentworth, Lawson and Blaxland. Macquarie River discovered by Evans.
- 1814 N.S.W.—Flinders suggested the name "Australia," instead of "New Holland." Creation of Civil Courts.

- Year.
- 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.—Botanic Garden formed at Sydney.
- 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 by Captain King.
- 1819 N.S.W.—First Savings Bank in Australia opened at Sydney.
- 1820 Tas.—First importation of pure merino sheep.
- 1821 Tas.—Establishment of penal settlement at Macquarie Harbour.
- 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. Terr.
- 1825 N.S.W.—Extension of western boundary to 129th meridian. Tas.—Separation of Van Diemen's Land (Tasmania). 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 N.S.W.—Colony became self-supporting. 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.—Insurrection of convicts at Bathurst. Sturt, voyaging down Murrumbidgee and Murray Rivers, arrived at Lake Alexandrina. Tas.—Trouble with natives. Black line organized to force aborigines into Tasman's Peninsula, but failed. Between 1830 and 1835, however, George Robinson; by friendly suasion, succeeded in gathering the small remnant of aborigines (203) into settlement on Flinders Island.
- 1831 N.S.W.—Crown lands first disposed of by public competition. Mitchell's explorations north of Liverpool Plains. Arrival at Sydney of first steamer, *Sophia Jane*, from England. 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 Bros. S.A.—Formation of the South Australian Association. W.A.—Severe reprisals against natives at Pinjarrah.

Year.

- 1835 Vic.—John Batman arrived at Port Phillip; made treaty with the natives for 600,000 acres of land; claim afterwards disallowed by Imperial Government. Foundation of Melbourne.
- 1836 N.S.W.—Mitchell's overland journey from Sydney to Cape Northumberland. 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.—Melbourne named by Governor Bourke. First overlanders from Sydney arrived at Port Phillip.
- 1838 N.S.W.—Discontinuance of assignment of convicts. Qld.—Settlement of German missionaries at Brisbane. 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 payment 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 by Rev. W. B. Clarke. W.A.—Completion of Eyre's overland journey from Adelaide to King George's Sound. Tas.—Renewal of transportation.
- 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). First manufacture of tweed. Qld.—Moreton Bay granted legislative representation.
- 1844 Qld.—Leichhardt's expedition to Port Essington. 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. W.A.—Foundation of New Norcia (Benedictine) Mission.
- 1847 N.S.W.—Iron-smelting commenced near Berrima. Overland mail established between Sydney and Adelaide. Vic.—Melbourne created a City. Qld.—Explorations by Leichhardt, Burnett and Kennedy.
- 1848 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 convicts per *Hashemy* to squatters on Darling Downs. W.A.—Commencement of transportation to Western Australia.
- 1850 N.S.W.—Final abolition of transportation. First sod of first Australian railway turned at Sydney. Sydney University founded. Vic.—Gold discovered at Clunes by Hon. W. Campbell. Representative government granted. S.A.—Representative government granted. W.A.—Pearl oysters found by Lieut. Helpman at Saturday Island Shoal. Tas.—Representative government granted.

Year.

- 1851 N.S.W.—Payable gold discovered by Hargraves at Lewis Ponds and Summerhill Creek. Telegraph first used. Vic.—Separation of Port Phillip—erected into independent colony under the name of Victoria. Discovery of gold in various localities. "Black Thursday," 6th Feb., a day of intense heat. W.A.—Proclamation of Legislative Council Act.
- 1852 N.S.W.—Arrival of the *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 protests 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 Victorian railway—Flinders-street to Port Melbourne. Riots on Ballarat gold-fields. Storming of the Eureka Stockade, 3rd Dec.
- 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 Government in N.S.W., Vic., S.A. and Tas. (Act of 1855).
- 1857 N.S.W.—Wreck of the *Dunbar* (119 lives lost), and *Catherine Adamson* (21 lives lost), at Sydney Heads. 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.
- 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 Act. 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 railway begun and opened. First sugar made from Queensland cane. Tas.—First successful shipment of English salmon ova.
- 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 N.S.W.—Attempted assassination of the Duke of Edinburgh at Clontarf, near Sydney. W.A.—Arrival of the *Hougomont*, last convict ship. Tas.—First sod of first railway (Launceston and Western) turned by Duke of Edinburgh.
- 1869 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 transcontinental telegraph.
- 1871 N.S.W.—Permanent military force raised. W.A.—Passage of Elementary Education Act. Forrest's explorations. Tas.—Discovery of tin at Mount Bischoff. Launceston-Western railway opened for traffic.
- 1872 N.S.W.—International Exhibition at Sydney. Vic.—Mint opened. S.A.—Cable from Java to Port Darwin. Completion of transcontinental telegraph line.

- Year.
- 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. W.A.—John and Alexander Forrest arrived at Overland Telegraph from Murchison. S.A.—University of Adelaide founded.
- 1875 Qld.—Transfer of Port Albany Settlement to Thursday Island.
- 1876 N.S.W.—Completion of cable—Sydney (La Perouse) to Wellington (Wakapuaka). W.A.—Giles crossed colony from east to west. Tas.—Death of Truganini, last representative of Tasmanian aborigines.
- 1877 W.A.—Opening of telegraphic communication with South Australia.
- 1878 Qld.—Restriction of Chinese immigration.
Introduction of telephone into Australia.
- 1879 N.S.W.—First artesian bore at Killara. International Exhibition at Garden Palace, Sydney. First steam tramway. W.A.—A. Forrest's explorations in the Kimberley district, and discovery of the Fitzroy pastoral country.
- 1880 N.S.W.—Public Instruction Act passed. Vic.—Opening of first Victorian International Exhibition at Melbourne. First Australian Telephone Exchange opened in Melbourne.
Federal Conference at Melbourne and Sydney.
- 1881 N.S.W.—Further restrictions on Chinese immigration.
Visit to Australia of T.R.H. Prince Albert Victor and Prince George.
- 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 met at Hobart on 26th January.
- 1887 N.S.W.—Disaster at Bulli coal-mine (81 lives lost). S.A.—International Exhibition at Adelaide. W.A.—Cyclone destroyed nearly the whole pearling fleet off the Ninety-Mile Beach—200 lives lost. Gold discovered at Southern Cross.
First "Colonial" Conference in London. Australasian Naval Defence Force Act passed.
- 1888 N.S.W.—Centennial celebrations. Restrictive legislation against Chinese, imposing poll-tax of £100. Vic.—Second Victorian International Exhibition held at Melbourne. 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.—Direct railway communication established between Brisbane and Adelaide. W.A.—Framing of new Constitution. Tas.—University of Tasmania founded.
- 1890 W.A.—Responsible Government granted.
Meeting at Melbourne of Australasian Federation Conference.
- 1891 N.S.W.—Election to Legislative Assembly of 35 Labour members. 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 by Messrs. Bayley and Ford at Coolgardie.

- Year.
- 1893 N.S.W.—Departure by the *Royal Tar* of colonists for “New Australia.”
Financial crisis, chiefly affecting the eastern States.
- 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.
- 1897–8 Sessions of Federal Convention at Adelaide, Sydney and Melbourne.
- 1898 N.S.W.—First surplus of wheat for export.
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 Vic.—Old-age pensions instituted.
Proclamation of the Commonwealth at Sydney. First Federal Parliament opened at Melbourne by the Duke of Cornwall and York. Interstate free-trade established.
- 1902 N.S.W.—Disastrous explosion at Mount Kembla Colliery—95 lives lost. W.A.—Opening of pumping station at Northam in connexion with Gold-fields water supply. Completion of Pacific Cable (all-British). First Federal Tariff.
- 1903 W.A.—Coolgardie and Kalgoorlie Water Supply Scheme completed.
Inauguration of the Federal High Court.
- 1905 N.S.W.—Re-introduction of assisted immigration.
- 1906 Wireless telegraphy installed between Queenscliff, Vic., and Devonport, Tas.
Papua taken over by Commonwealth.
- 1907 N.S.W.—Telephone, Sydney to Melbourne, opened. First telephone trunk line service between Capital Cities, i.e., Sydney and Melbourne.
Imperial Conference in London.
- 1908 Canberra chosen as site of Australian Capital. Visit of U.S.A. fleet to Australia.
- 1909 Imperial Defence Conference in London—Commonwealth ordered two destroyers and one first-class cruiser for fleet unit. Visit of Lord Kitchener to report and advise on Commonwealth military defence. Queensland University founded.
- 1910 Referendum on financial relations between the Commonwealth and the States. Penny Postage. Arrival of the *Yarra* and *Paramatta*, 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 Federal Census. Transfer of Australian Capital Territory and Northern Territory to Commonwealth. Introduction of compulsory military training. Establishment of penny postage to all parts of British Empire. University of Western Australia founded.
- 1912 Opening of Commonwealth Bank. First payments of Maternity Bonus. First sod turned at Port Augusta of Trans-Australian Railway (Port Augusta to Kalgoorlie).
- 1913 Australian Capital named Canberra and foundation stone laid. Appointment of Interstate Commission.

- Year.
1914 Visit of General Sir Ian Hamilton to report on military defence scheme. Double dissolution of Federal Parliament. Visit of British Association for the Advancement of Science. Transfer of Norfolk Island to Commonwealth.
- European War declared 4th August. Australian Navy transferred to British Navy. Australian offer to equip and furnish 20,000 troops accepted. 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. First contingent landed in Egypt. Australian and New Zealand Army Corps (A.N.Z.A.C.) formed under Sir William Birdwood.
- 1915 Opening of Broken Hill Proprietary's Ironworks at Newcastle, N.S.W. Navy Department created.
- Australian and New Zealand troops landed at Gallipoli, 25th April. Battle of Sari Bair (Lone Pine), 6th-10th August. Evacuation, 18th-20th December. Australian warships with Grand Fleet, in Atlantic, Malaysia, and elsewhere overseas during remainder of war.
- 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. Battle of Romani, 4th August. Other troops with reinforcements organized as four infantry divisions (1st, 2nd, 4th and 5th) with some other units, and transferred to France. Fromelles, 19th July; the Somme, 1st July-18th November (Poizieres, Moquet Farm, Flers). 3rd Division, formed in Australia, landed in France. First proposal for compulsory military service defeated by referendum.
- 1917 National Ministry formed. Kalgoorlie-Port Augusta railway completed.
- German withdrawal from Somme; Arras offensive (Bullecourt, 11th April and 3rd May); Messines, 7th June; Third Battle of Ypres, 1st July-10th November (Menin Road, Polygon Wood, Broodseinde, Passchendaele). Palestine-Gaza, 26th March, 19th April, 31st October (Beersheba). Australian Flying Corps operating with R.F.C. in Palestine and France. Second proposal for compulsory military service defeated by referendum.
- 1918 Population of Australia reached 5,000,000. Australia House (Strand, London) opened by the King.
- Five Australian divisions in France formed into army corps, 1st January. Sir William Birdwood succeeded by Sir John Monash, 30th May. Defensive campaign on Somme, 21st March-25th April (Dernancourt, Villers-Bretonneux); Battles of the Lys, 9th-29th April (Hazebrouck); Hamel, 4th July; Battle of Amiens, 8th August; Mont St. Quentin, 31st August; Hindenburg Line, 18th September-5th October. Palestine-Megiddo, 19th September; Damascus, 1st October. Armistice with Germany, 11th November. Repatriation Department created.
- 1919 Messrs. Hughes and Cook represented Australia at Peace Conference. Return of Australian troops. Aerial flight England to Australia 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. Wholesale prices reached a point more than double the 1914 level.
- 1921 Second Commonwealth Census. Germany's indemnity fixed (Australia's share approximately £63,000,000). Mandate given to Australia over Territory of New Guinea. First direct wireless press message, England to Australia.
- 1922 First lock on River Murray opened at Blanchetown, South Australia. Queensland Legislative Council abolished.
- 1923 First sod turned on the site of Federal Parliament House at Canberra.

Year.

- 1924 Visit of British cruiser squadron. Directorate of Commonwealth Bank appointed. Australian Loan Council formed.
- 1925 Visit of American fleet. Solar Observatory established at Canberra. Brisbane-Grafton railway joining Sydney and Brisbane by uniform gauge was commenced. Sydney Harbour Bridge commenced.
- 1926 Population of Australia reached 6,000,000. Council for Scientific and Industrial Research established. Imperial Conference. Dominion Status defined.
- 1927 Transfer of Seat of Federal Government from Melbourne to Canberra. New Parliament House opened by H.R.H. the Duke of York. Beam Wireless established.
- 1928 Visit of British Economic Mission to report on the development of Australian resources. Financial agreement of Commonwealth and States; Loan Council reconstituted; State debts to be taken over; Referendum carried, November.
- 1929 Beginning of fall in export prices. Commonwealth Bank empowered to mobilize gold reserves. Substantial export of gold reserves towards end of year.
- 1930 Wireless phone service with other countries inaugurated. Export prices fell to half 1928 level. Cessation of oversea loans. Tariff embargoes and rationing of imports. Visit of Sir Otto Niemeyer, of Bank of England, to discuss financial questions. Heavy export of gold reserves. Exchange Pool formed. £28,000,000 Conversion Loan fully subscribed. Gold bonus granted. Government deficits total nearly £11,000,000. First Australian—Right Hon. Sir Isaac Alfred Isaacs, G.C.M.G., Chief Justice of the High Court—appointed Governor-General of Australia. Telephone trunk line service established between Adelaide and Perth linking up the whole of the mainland States by telephone.
- 1931 Depression continues; Australia substantially off gold standard with exchange rate at 130 in January; 10 per cent. cut in Federal basic wage. First experimental air mail England to Australia and return. New South Wales Savings Bank suspension and subsequent absorption by Commonwealth Bank. Postponement of sinking fund payments on war debt to British Government for two years. Initiation of Premiers' Conference plan to meet the financial situation. Commonwealth Bank Act amended to provide for temporary lower reserve against notes; substantial export of gold reserves. Hoover Moratorium on War Debts. England departs from gold standard in September; depreciation of Australian £1 on Sterling continued. Wheat bounty granted. Commonwealth Bank assumed control of exchange rate and lowered it to 125. Government deficits total £25,370,000, 1930-31.
- 1932 Sydney Harbour Bridge opened. Australian Broadcasting Commission established. New South Wales Government default in interest payments made good by Commonwealth Government; conflict of Commonwealth and New South Wales governments. Lang Ministry dismissed in New South Wales. Emergency restrictions on imports relaxed. Legislation passed enabling note reserve to be held in sterling securities, and subsequent shipping of gold to the United Kingdom. Imperial Economic Conference at Ottawa, with consequential tariff agreements. Sugar Agreement modified. Taxation reductions and assistance to wheat-growers. Government deficits reduced to £19,500,000 for 1931-32.
- 1933 Third Commonwealth Census. Imperial Air-mail "Astraea" arrived. World Economic Conference in London. Australia elected as Member of League of Nations. Secession Referendum (Western Australia). Referendum for reduction and limitation of number of members of Legislative Council (New South Wales). Disarmament Conference in London. Record wheat harvest (213,927,000 bushels). Antarctica and Ashmore and Cartier Islands taken over by the Commonwealth. Government deficits reduced to £4,500,000 for 1932-33.

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- 1934 Visit of H.R.H. the Duke of Gloucester to open Victorian Centenary Celebrations, Goodwill Mission to the East—Leader Rt. Hon. J. G. Latham. Record flight from England to Australia by Messrs. Scott and Black (Centenary Air Race) in 71 hours. Inauguration of England—Australia Air Mail Service.
- 1935 Silver Jubilee of His Majesty King George V. Visit to London for Jubilee Celebrations of the Rt. Hon. J. A. Lyons, Prime Minister. Empire Statistical Conference at Ottawa. Japanese Goodwill Mission to Australia. Meeting of the British Medical Association for the first time in Australia.
- 1936 Death of His Majesty King George V. South Australian Centenary. Trade dispute with Japan. Rise in wheat prices. Joint Commonwealth and State Marketing Schemes invalidated by decision of the Privy Council in the James case. Visit of British experts—Sir Walter Kinnear and Mr. G. H. Ince—to advise on national insurance. Abdication of King Edward VIII.
- 1937 Referendum on Commonwealth control of aviation and marketing defeated on both counts. Coronation of King George VI. Imperial conference in London. New Education Fellowship Conference held in all States. Commonwealth basic wage increased by 5s. per week. Report of the Royal Commission on Monetary and Banking Systems in Australia. Epidemic of Infantile Paralysis mainly in Victoria and Tasmania.
- 1938 New South Wales Sesqui-Centenary Celebrations. Australian Trade Delegation to review Ottawa Agreement. Resumption of nominated assisted migration. New Defence Programme involving expenditure of £63,000,000 over three years; militia forces to be raised to 70,000. New Trade Treaty with Japan.
- 1939 Death of the Rt. Hon. J. A. Lyons, Prime Minister of Australia. National Register of man-power. European war. Australia participating in vast Empire Air Training Scheme. Compulsory military training re-introduced for home defence. Special volunteer force of 20,000 men enlisted and trained for service overseas. Purchase by the British Government of the Australian wool clip and the export surplus of butter, cheese, eggs, meat, sugar, lead, zinc and copper.
- 1940 Exchange of representatives between Australia and Canada, Australia and United States of America and appointment of Australian Minister to Japan. Population of Australia reached 7,000,000. Australian Forces embark for oversea service. Naval Dock commenced at Sydney. Air crash at Canberra, resulting in death of three Cabinet Ministers—the Hon. G. A. Street, the Hon. J. V. Fairbairn, and the Hon. Sir Henry Gullett, and the Chief of General Staff, Sir Brudenell White. Petrol rationing introduced. Commonwealth elections held.

OFFICIAL YEAR BOOK

OF THE

COMMONWEALTH OF AUSTRALIA, 1940.

CHAPTER I.

DISCOVERY, COLONIZATION AND FEDERATION OF AUSTRALIA.

§ 1. Early Knowledge and Discovery of Australia.

1. *Introduction.*—It is proposed to give here only a brief summary of the more important facts relating to the early history of Australian discovery. A more complete account of this subject, together with bibliographical references thereto, may be found in Official Year Book No. 1 (pp. 45-51), although this account must be modified somewhat in view of later investigations.

2. *Early Tradition.*—It would appear that there was an early Chaldean tradition as to the existence of an Austral land to the south of India. Rumours to that effect in the course of time found their way to Europe, and were probably spread by travellers from Indian seas, more especially by the Greek soldiers who accompanied Alexander the Great [356-234 B.C.] to India. References to this *Terra Australis* are found in the works of Ælianus [A.D. 205-234], Manilius [probably a contemporary of Augustus or Tiberius Cæsar], and Ptolemy [A.D. 107-161]. In some of the maps of the first period of the Middle Ages there is evidence which might warrant the supposition of the knowledge of the existence of a *Terra Australis*, while some idea of the Austral land appears in the maps and manuscripts of the fourteenth and fifteenth centuries. But much of the map-drawing in these early days was more or less fanciful, and there is no evidence definitely connecting this so-called *Terra Australis* with Australia.

3. *Discovery of Australia.*—(i) *General.* The Venetian traveller Marco Polo [1254-1324] refers to a land called Locac, which through a misunderstanding of his meaning was long thought to be Australia. But Marco Polo knew nothing of any land to the south of Java, and in any case the description given of the so-called Locac could not possibly be applied to Australia, as the writer speaks of elephants, etc. On a Mappamundi in the British Museum, of not later date than 1489, there is a coast-line which has been considered to represent the west coast of Australia. Investigation by Wood and others proves this claim to be merely fanciful. Martin Behaim's globe, the oldest known globe extant, constructed in 1492, also shows what purports to be a part of Australia's coast-line, and a globe discovered in Paris bears an inscription to the effect that the *Terra Australis* was discovered in 1499. These also have other countries located in impossible positions. The term *Terra Australis* was, however, also applied to the region now known as Tierra del Fuego, hence little weight can be attached to this reference.

In the Dauphin map [about 1530-1536] Java la Grande has been supposed by some to represent Australia, but an inspection of the fanciful animals and other figures thereon lends no weight to the idea. As a matter of fact much of this map-drawing was simply an attempt to support the old notion that the land surface of the southern hemisphere must balance that of the northern.

(ii) *Arab Expeditions.* It has been stated that the Arabs had come to Australia long before the Portuguese, the Spaniards or the Dutch, but there is no evidence to support the statement.

(iii) *Spanish and Portuguese Expeditions.* The last decade of the fifteenth century and the commencement of the sixteenth saw numerous expeditions equipped in the ports of Spain and Portugal for the purpose of exploiting the new world. The Portuguese rounded the Cape of Good Hope in 1487 and eleven years later pushed eastward to India. The Spaniards, relying on the scientific conclusion that the world was spherical, attempted to get to the East by deliberately starting out west, Magalhaens by so doing reaching the Philippine Islands in 1521.

In 1606 Quiros, on reaching the island that has retained the name of Espiritu Santo (the largest island of the New Hebrides group), thought that 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 is made of this fact in his records. This voyage marks the close of Spanish activity in the work of discovery in the South Seas.

(iv) *Discoveries by the Dutch.* With the decline of Portuguese and Spanish naval supremacy came the opportunity of the Dutch for discovery. Cornelius Wytfliet's map, of which there was an English edition, published in Louvain in 1597, indicates roughly the eastern and western coasts of Australia, as well as the Gulf of Carpentaria. The following oft-quoted passage occurs in Wytfliet's *Descriptionis Ptolemaicae Augmentum*: "The *Australis Terra* is the most southern of all lands. It is separated from New Guinea by a narrow strait. Its shores are hitherto but little known, since after one voyage and another, that route has been deserted and seldom is the country visited, unless when sailors are driven there by storms. The *Australis Terra* begins at one or two degrees from the equator, and is maintained by some to be so great in extent that, if it were thoroughly explored, it would be regarded as a fifth part of the world." According to Wood the above passage has its origin in the voyages through the straits of Magellan and the discovery of Tierra del Fuego rather than that of Australia.

The Dutch discovered Australia when the Dutch East India Company sent the *Duyfken* from Bantam 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). Dirck Hartogs (on the plate in the Amsterdam Museum recording his voyage the name is written Dirck Hatches), in the *Eendracht* in 1616, sailed along a considerable part of the west coast of the continent. It may be mentioned that the route was not definitely selected, but that the navigator simply went farther east than the usual course from the Cape to Java.

In 1618 the *Zeeuwolf* found land in latitude 20° 15' south, and in the following year Frederik Houtman discovered the reef of the west coast, now known as *Houtman's Abrolhos*.

In 1622 the Dutch vessel *Leeuwin* rounded the Cape, which now bears that name, at the south-west of the continent, and in 1623 the Dutch vessels *Pera* and *Arnhem* discovered Arnhem Land, the peninsula on the western side of the Gulf of Carpentaria, which was so named in compliment to Peter Carpentier, Governor of the Dutch East India Company.

In 1627, Francis Thysz, Commander of the *Gulde Zeepaerd*, with Pieter Nuyts, of the Dutch Council of Seventeen, on board, coasted along a portion of the shore of the Great Australian Bight. In 1628, De Witt, Commander of the *Vianen*, discovered land on the north-west, namely, in about latitude 21° S. The *Batavia*, commanded by Francis Pelsart, was wrecked on the western coast of Australia in 1629. Pelsart was the first to carry to Europe an authentic account of the west coast of Australia, which, however, he described in the most unfavourable terms. The yachts *Amsterdam* and *Wesel*, under Gerrit Pool, visited the Gulf of Carpentaria in 1636.

Abel Janszoon Tasman, in command of two vessels, the *Heemskerck* and *Zeehaen*, set out from Batavia in 1642 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 down as the tropic of Capricorn.

William de Vlamingh landed at the mouth of the Swan River at the end of 1696 and an exploring squadron under Martin Van Delft explored and named part of the north-west coast in 1705, but the period of Dutch discoveries may be said to have ended with Tasman's second voyage, and, with the decline of her maritime power, the Dutch interest in Australian discovery disappeared.

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 *Cygnet*, a trading vessel whose crew had turned buccaneers. In describing the country, Dampier stated that he was certain that it joined neither Asia, Africa nor America. 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.

It was a question at the end of the seventeenth century 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 James Cook's first voyage, though primarily undertaken for the purpose of observing the transit of Venus from Otaheite, had also for its objective to ascertain 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 burthen, carrying about 85 persons, and accompanied by Sir Joseph Banks, Dr. Solander the naturalist, Green the astronomer, draughtsmen and servants, Cook, after observing the transit of Venus at Otaheite, turned towards New Zealand, sighting that land on the 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 the 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 the 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 the 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 the 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, and 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 the 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 Flinders and Bass 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 the 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° to this place, latitude 10½° S., in right of His Majesty King George the Third." Cook, however, proclaimed British sovereignty only over 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 the 26th January, 1788. It was on this last date that Captain Phillip's commission, first issued to him on the 12th October, 1786, and amplified on the 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. I, 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 a matter of doubt 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 facts that under the Supreme Court Act (Imperial) of 1823 British residents in New Zealand were brought under the jurisdiction of the Court at Sydney, while 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 unequivocally become British territory until 1840. In that year, on the 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 the 5th February, the Treaty of Waitangi, made with the native chiefs, was signed. Finally, on the 21st May, British sovereignty over the islands of New Zealand was explicitly proclaimed. From that date until the 3rd May, 1841, New Zealand was a dependency of New South Wales.

3. **Extension of New South Wales Westward, 1825.** On the 17th February, 1824, Earl Bathurst advised 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 Brewer of H.M.S. *Tamar*, who was selected for the purpose, took possession on the 20th September, 1824, of the coast from the 135th to the 129th degree of east longitude. On the 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 III. Sound, sailed from Sydney on the 9th November, 1826, landed at the Sound on the 26th December following, and 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's 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 the 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 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 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, by sailing through Bass Strait, Flinders and Bass proved that it was an island. 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 acres. A further area of 518,134 square miles was added in 1825, when the western boundary was extended to the 129th 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 310,942 square miles.

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 the 14th June of that year. The area of the colony was 26,215 square miles.

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's Sound remained under the latter jurisdiction.

4. **South Australia.**—On the 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 the 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 the 10th December, 1861, by the authority of the Imperial Act 24 and 25 Vic., cap. 44, the western boundary of South Australia was extended to coincide with the eastern boundary of Western Australia, namely, the 129th meridian. The area of the extension was approximately 70,220 square miles. Nearly two years later, on the 6th July, 1863, the Northern Territory comprising 523,620 square miles was, by letters patent, brought under the jurisdiction of South Australia, which therefore 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, was, by letters patent of the 16th November of that year, constituted a separate colony under the powers of the Act 3 and 4 Vic., cap. 62, of the 7th August, 1840. Proclamation of the separation was made on the 3rd May, 1841. The area of the colony was 103,862 square miles.

6. **Victoria.**—In 1851, what 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 the 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 country of Stanley, were granted an independent administration and formed into a

distinct colony under the name of Queensland, by letters patent dated the 6th June, 1859, although separation from New South Wales was not consummated until the 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 the 13th March, 1861, forwarded by the Colonial Secretary to the Governor of Queensland on the 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.

§ 4. Establishment of the Commonwealth of Australia.

1. *General.*—On the 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"—excepting in the case of the Northern Territory, to which the designation "Territory" is applied—being at the same time changed into that of "States." The total area of the Commonwealth of Australia is 2,974,581 square miles. The dates of creation and the areas of its component parts, as determined on the final adjustment of their boundaries, are shown below:—

THE COMMONWEALTH OF AUSTRALIA: AREA, ETC., OF COMPONENT PARTS.

State.	Year of Formation into Separate Colony.	Present Area in Square Miles.	State.	Year of Formation into Separate Colony.	Present Area in Square Miles.
New South Wales ^(a)	1786	310,372	Tasmania ..	1825	26,215
Victoria ..	1851	87,884	Northern Territory	1863	523,620
Queensland ..	1859	670,500			
South Australia ..	1834	380,070	Area of the Commonwealth ..	..	2,974,581
Western Australia	1829	975,920			

^(a) Including the Australian Capital Territory embracing an area of 911 square miles, and 28 square miles at Jervis Bay. See par. 3 below.

2. *Transfer of the Northern Territory to the Commonwealth.*—On the 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 the 14th May, 1908), and by the Commonwealth Parliament under the Northern Territory Acceptance Act 1910 (assented to on the 16th November, 1910). The Territory was formally transferred to the Commonwealth on the 1st January, 1911, and became the Northern Territory of Australia.

3. *Transfer of the Australian Capital Territory to the Commonwealth.*—On the 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 the 5th December, 1910, a proclamation was issued vesting the

Territory in the Commonwealth on and from the 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. **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 the 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.

5. **Transfer of Norfolk Island.**—Although administered for many years by the Government of New South Wales, this Island was a separate Crown Colony until 1st July, 1914, when it was transferred to the Commonwealth under the authority of the Norfolk Island Act 1913. The Island is situated in latitude $29^{\circ} 3' 45''$ S. longitude $167^{\circ} 58' 6''$ E., and comprises an area of 8,528 acres.

6. **Territory of New Guinea.**—It was agreed by the 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 dates from 9th May, 1921.

7. **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 longitude 166° E., 26 miles south of the Equator, and comprises about 5,400 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, giving the Government immediately responsible for the administration greater powers of control over the Administrator, was approved in 1932. The administration under the mandate has operated from 17th December, 1920, and so far the administrators have been appointed by the Commonwealth Government.

8. **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 and were transferred on 10th May, 1934.

9. **Australian Antarctic Territory.**—An Imperial Order in Council, 7th February, 1933, placed under the authority of the Commonwealth the Antarctic Territories, comprising all the islands and territory, other than Adélie Land, situated south of 60° S. latitude, and lying between 160° E. longitude and 45° E. longitude. The Territory was accepted by the Commonwealth under the name of the Australian Antarctic Territory in the Australian Antarctic Territory Acceptance Act 1933.

§ 5. The Exploration of Australia.

A fairly complete, though brief, account of the exploration of Australia was given in Official Year Book No. 2 (pp. 20–39), and a summary of the more important facts relating to the subject was embodied in this Chapter in succeeding issues up to and including No. 22.

§ 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 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, and the Constitution Alteration (State Debts) 1928 is given *in extenso* hereunder.

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

* 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.

is notified, 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 provisions, 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, 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 1918-1934, Section 39 (repealing an earlier provision made by the Commonwealth Franchise Act 1902).

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 acknowledgement 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 :

* The Parliamentary allowance was raised to £600 per annum in 1907 and to £1,000 per annum in 1920, but in the case of Ministers, the Presiding Officers of the two Houses, and the Chairmen of Committees, the allowance was fixed at £800 per annum. Several reductions under financial emergency legislation reduced the allowance to £750 per annum in 1932, but it was gradually restored to £1,000, the last reduction being removed in May, 1938. The latter Act also increased the allowance to holders of Parliamentary Office to £1,000 per annum.

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

- (xxi) Marriage :
- (xxii) Divorce and matrimonial causes ; and in relation thereto, parental rights, and the custody and guardianship of infants :
- xxiii) Invalid and old-age pensions :
- 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 laws so as to increase any proposed charge or burden on the people.

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 provisions 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.

* The Ministers of State were increased in 1915 to eight, in 1917 to nine, in 1935 to ten, and in 1938 to eleven. A sum of £1,650 was added to the annual appropriation for Ministers' salaries for each additional Minister and £800 per annum was allowed each Minister by the Parliamentary Allowances Act 1920. Reductions under financial emergency legislation reached their maximum in 1932, when Ministers' salaries were reduced by 30 per cent, and their allowance as members by 25 per cent. ; the reductions were gradually removed, the final one in May, 1938, by the Parliamentary Salaries Adjustment Act 1938. The latter Act also made provision for an additional allowance of £1,500 per annum to the Prime Minister, and increased the parliamentary allowance to Ministers from £300 to £1,000 per annum.

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 exception 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.

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.

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 State 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.† (i) *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.*

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

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

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

* 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.

(v) *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.*

(vi) *The powers conferred by this section shall not be construed as being limited in any way by 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.

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.

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.

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.

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 reads 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.

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 39° 8' S., or, including Tasmania, 43° 39' S. On its north are the Timor and Arafura Seas and Torres Strait—on its south the Southern Ocean and Bass Strait. The extreme points are “Steep Point” on the west, “Cape Byron” on the east, “Cape York” on the north, “Wilson’s Promontory” on the south, or, if Tasmania be included, “South-East Cape.”

(ii) *Tropical and Temperate Regions.* Of the total area of Australia nearly 40 per cent. lies within the tropics. Assuming, as is usual, that the latitude of the Tropic of Capricorn is 23° 30' S. (its mean value for 1939 was 23° 26' 49.99"), the areas within the tropical and temperate zones are approximately as follows:—

AUSTRALIA: AREAS OF TROPICAL AND TEMPERATE REGIONS.

(STATES AND TERRITORY PARTIALLY WITHIN TROPICS.)

Area.	Queensland.	Western Australia.	Northern Territory.	Total.
Within Tropical Zone . . sq. miles	359,000	364,000	426,320	1,149,320
Within Temperate Zone	311,500	611,920	97,300	1,020,720
Ratio of Tropical part to whole State . .	0.535	0.373	0.814	0.530
Ratio of Temperate part to whole State	0.465	0.627	0.186	0.470

Thus the tropical part is roughly about one-half (0.530) of the three territories mentioned above, or about five-thirteenths of the whole of Australia (0.386).

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, more than one-fifth of the area of the British Empire, nearly three-fourths of the whole area of Europe, and about 25 times as large

as Great Britain and Ireland. This great area, coupled with a limited population, renders the solution of the problem of Australian development a particularly difficult one. The areas of Australia and of certain other countries are given in the following table :—

AREA OF AUSTRALIA AND OF OTHER COUNTRIES, *Circa 1938.*

Country.	Area.	Country.	Area.
Continental Divisions—	Sq. miles.	AFRICA—continued.	Sq. miles.
Europe	4,411,000	Italian East Africa	659,000
Asia	16,047,000	Angola	488,000
Africa	11,699,000	Union of South Africa	472,000
North and Central America and West Indies	8,658,000	Egypt	386,000
South America	7,047,000	Tanganyika Territory	374,000
Australasia and Polynesia	3,462,000	Nigeria and Protectorate..	338,000
Total, exclusive of Arctic and Antarctic Conts. . .	51,324,000	South-West Africa	322,000
		Mozambique	298,000
		Northern Rhodesia	288,000
		Bechuanaland Protectorate	275,000
		Madagascar	229,000
		Kenya Colony and Protec- torate	225,000
Europe—		Other	1,160,000
U.S.S.R. (Russia)	2,316,000	Total	11,699,000
Germany(a)	225,000	North and Central America—	
France	213,000	Canada	3,684,000
Spain (inc. possessions) ..	194,000	United States of America..	3,027,000
Sweden	173,000	Mexico	760,000
Poland	150,000	Alaska	586,000
Finland	150,000	Newfoundland and Labra- dor	163,000
Italy(b)	130,000	Honduras	59,000
Norway	125,000	Nicaragua	49,000
Rumania	114,000	Other	330,000
Yugoslavia	96,000	Total	8,658,000
United Kingdom	95,000	South America—	
Other	430,000	Brazil	3,286,000
Total	4,411,000	Argentine Republic	1,078,000
Asia—		Bolivia	507,000
U.S.S.R. (Russia)	5,860,000	Peru	482,000
China and Dependencies ..	4,287,000	Colombia (exc. of Panama)	440,000
British India and Adminis- tered Territories	1,097,000	Venezuela	352,000
Arabia and Autonomous States	1,004,000	Chile	287,000
Feudatory Indian States ..	712,000	Paraguay	177,000
Iran	634,000	Ecuador	176,000
Netherlands Indies	574,000	Other	262,000
French Indo-China	286,000	Total	7,047,000
Turkey	285,000	Australasia and Polynesia—	
Japan and Dependencies..	262,000	Commonwealth of Australia	2,974,581
Afghanistan	251,000	Dutch New Guinea	161,000
Thai	200,000	New Zealand and Depen- dencies	103,934
Other	595,000	Territory of New Guinea..	93,000
Total	16,047,000	Papua	90,540
Africa—		Other	38,945
French West Africa	1,815,000	Total	3,462,000
Anglo-Egyptian Sudan	969,000	British Empire	13,353,952
French Equatorial Africa	960,000		
Belgian Congo	910,000		
Algeria	851,000		
Libya	680,000		

(a) Including Austria and part of Czecho-Slovakia.

(b) Including Albania.

The figures quoted in the table have been extracted from the *Statistical Year Book of the League of Nations* or the *Statesman's Year Book*.

3. **Areas of Political Subdivisions.**—As already stated, Australia consists of six States and the Northern and Australian Capital Territories. The areas of these, and their proportions of the total of Australia, are shown in the following table :—

AUSTRALIA: AREA OF STATES AND TERRITORIES.

State or Territory.	Area.		Percentage on Total.
	Sq. miles.		%
New South Wales	309,433		10.40
Victoria	87,884		2.96
Queensland	670,500		22.54
South Australia	380,070		12.78
Western Australia	975,920		32.81
Tasmania	26,215		0.88
Northern Territory	523,620		17.60
Australian Capital Territory	939		0.03
Total	2,974,581		100.00

4. **Coastal Configuration.**—(i) *General.* There are no 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 coast-line of Australia (see pp. 60-68).

(ii) *Coast-line.* The lengths of coast-line, exclusive of minor indentations, of each State and of the whole continent, and the area per mile of coast-line, are shown in the following table :—

AUSTRALIA: COAST-LINE AND AREA PER MILE THEREOF.

State.	Coast-line.		State.	Coast-line.		Area per Mile of Coast-line.
	Miles.	Area per Mile of Coast-line. Sq. miles.		Miles.	Sq. miles.	
New South Wales(a)	700	443	South Australia	1,540	247	
Victoria ..	680	129	Western Australia	4,350	224	
Queensland ..	3,000	223	Continent (b) ..	11,310	261	
Northern Territory	1,040	503	Tasmania ..	900	29	

(a) Including Australian Capital Territory.

(b) Area 2,948,366 square miles.

For the entire Commonwealth of Australia this gives a coast-line of 12,210 miles and an average of 244 square miles for one mile of coast-line. According to Strelbitski, Europe has only 75 square miles of area to each mile of coast-line, and, according to recent figures, England and Wales have only one-third of this, namely, 25 square miles.

(iii) *Historical Significance of Coastal Names.* It is interesting to trace the voyages of some of the early navigators by the names bestowed by them on various coastal features—thus Dutch names are found on various points of the Western Australian coast, in Nuyts' Archipelago, in the Northern Territory, and in the Gulf of Carpentaria; Captain Cook can be followed along the coasts of New South Wales and Queensland; Flinders' track is easily recognized from Sydney southwards, as far as Cape Catastrophe, by the numerous Lincolnshire names bestowed by him; and the French navigators of the end of the eighteenth and the beginning of the nineteenth century have left their names all along the Western Australian, South Australian and Tasmanian coasts.

5. **Geographical Features of Australia.**—In each of the earlier issues of the Official Year Book fairly complete information has been given concerning some special geographical element. The nature of this information and its position in the various issues can be readily ascertained on reference to the special index following the index to maps and graphs at the end of this issue.

6. **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 naturally preclude their repetition in each volume. As pointed out in par. 5, however, the nature and position of these articles can be readily ascertained from the special index.

§ 2. Climate and Meteorology of Australia.*

1. **Introductory.**—In Official Year Book No. 3, pp. 79 and 80, some account was given of the history of Australian meteorology, including a reference to the development of magnetic observations. In Official Year Book No. 4, pp. 84 and 87, will be found a short sketch of the creation and organization of the Commonwealth Bureau of Meteorology, and a résumé of the subjects dealt with at the Meteorological Conference in 1907.

2. **Meteorological Publications.**—Reference to publications issued by the Central Meteorological Bureau will be found in Official Year Book No. 22, pp. 40 and 41. The following publications have since been issued:—Volume of "Results of Rainfall Observations made in Western Australia," for all years of record to 1927; Map of Normal Meteorological Conditions in Australia affecting Aviation; a Paper "A Basis for Seasonal Forecasting", by H. A. Hunt; Bulletin No. 18, "Foreshadowing Monsoonal Rains in Northern Australia"; Bulletin No. 19, "Thunderstorms in Australia"; Bulletin No. 20, "Zones of Relative Physical Comfort in Australia"; Bulletin No. 21, "Air Masses over Eastern Australia"; Bulletin No. 22, "Australian Rainfall in Sunspot Cycles"; Bulletin No. 23, "Australian Rainfall in District Averages"; Bulletin Nos. 24 and 25, "Weather Conditions affecting Aviation in the Tasman Sea"; a Paper on "Frost Risks and Frost-Forecasting"; Booklet containing Meteorological Data for certain Australian Localities; a volume of "Results of Rainfall Observations made in Tasmania"; a volume of "Results of Rainfall Observations made in Victoria" (Supplementary volume to 1936); and a volume of "Mean Diurnal Variations of Corrected Mean Sea Level Pressures in 1-1,000 inches."

3. **Equipment.**—The determination of the climatological data has been made by records of the following instruments:—

- (i) *Rainfall.* Rainfall has been measured by a cylindrical gauge generally 8 inches in diameter.
- (ii) *Temperature.* Temperatures have been recorded by means of self-registering maximum and minimum thermometers which are read and set daily.
- (iii) *Humidity.* Humidities have been determined by the aid of tables from readings of dry and wet bulb thermometers.
- (iv) *Atmospheric Pressure.* Pressures have been measured by mercurial barometers of the Kew (or Fortin) pattern.
- (v) *Evaporation.* The standard evaporimeter in use consists of a cylindrical galvanized iron tank 3 feet in diameter with a water jacket. Concrete tanks of similar form and dimensions are also used.
- (vi) *Wind Mileage and Pressures.* The travel of the wind has been measured by means of anemometers of the Robinson pattern. The wind pressures corresponding to the observed mileage per hour have been calculated from the formula $P = 0.003V^2$ in which P denotes pressure in lb. per square foot and V the velocity in miles per hour.

4. **General Description of Australia.**—A considerable portion (0.530) of three divisions of Australia is north of the tropic of Capricorn—that is to say, within the States of Queensland and Western Australia, and the Northern Territory, no less than 1,149,320 square miles belong to the tropical zone and 1,020,720 to the temperate zone. The whole area of Australia within the temperate zone, however, is 1,825,261 square miles; thus the tropical part is about 0.386, or about five-thirteenths of the whole, or the "temperate" region is half as large again as the "tropical" (more accurately 1.588). By reason of its insular geographical position and the absence of striking physical features, 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, on the whole, more temperate.

The altitudes of the surface of Australia range up to a little over 7,300 feet, hence its climate embraces 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.

* Prepared from data supplied by the Commonwealth Meteorologist.

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 large areas also 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. Climatologically, therefore, Australia may be said to present a great variety of features.

5. *Meteorological Divisions.*—(i) *General.* Reference to the divisions adopted by the Commonwealth Meteorologist will be found in Official Year Book No. 22; p. 41.

(ii) *Special Climatological Stations.* The latitudes, longitudes and altitudes of special stations, the climatological features of which are graphically represented hereinafter, are as follows:—

SPECIAL CLIMATOLOGICAL STATIONS: AUSTRALIA.

Locality.	Height above Sea Level.	Latitude. S.	Longitude. E.	Locality.	Height above Sea Level.	Latitude. S.	Longitude. E.
	Feet.	deg. min.	deg. min.		Feet.	deg. min.	deg. min.
Perth ..	197	31 57	115 50	Canberra ..	1,837	35 20	149 15
Adelaide ..	140	34 56	138 35	Darwin ..	97	12 28	130 51
Brisbane ..	137	27 28	153 2	Alice Springs	1,926	23 38	133 37
Sydney ..	138	33 52	151 12	Dubbo ..	870	32 18	148 35
Melbourne ..	115	37 49	144 58	Laverton, W.A.	1,530	28 40	122 23
Hobart ..	177	42 53	147 20	Coolgardie ..	1,389	30 57	121 10

6. *Temperatures.*—(i) *Comparisons with other Countries.* In respect of Australian temperatures generally, it may be pointed out that the mean annual isotherm for 70° Fahrenheit extends in South America and South Africa as far south as latitude 33°, while in Australia it reaches only as far south as latitude 30°, 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° isotherm extends in several of the western States as far north as latitude 41°. In Europe, the same isotherm reaches almost to the southern shores of Spain, passing, however, afterwards 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 higher temperature than 70°.

The extreme range of temperature is less than 100° over practically the whole of Australia, that figure being only slightly exceeded at a very few places; it is mostly 70° to 90° over inland areas, and somewhat less on the coast. In parts of Asia and North America, the extreme range exceeds 130° and 150° 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 months is only 8.5°, and the extreme readings for the year, or the highest maximum on record and the lowest minimum, show a difference of under 50°.

(ii) *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 with increasing distance from the coast.

In the interior of Australia, and during exceptionally dry summers, the temperature occasionally reaches or exceeds 120° in the shade, and during the dry winters the major portion of the country to the south of the tropics is subject to ground frosts. The hottest area of the continent is situated in the northern part of Western Australia about the Marble Bar and Nullagine gold-fields, where the maximum shade temperature during the summer sometimes exceeds 100° continuously for days and weeks. The coldest part of Australia is the extreme south-east of New South Wales and extreme east of Victoria—the region of the Australian Alps. Here the temperature seldom, if ever, reaches 100° even in the hottest of seasons, while in winter, readings slightly below zero are occasionally recorded.

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

(iii) *Monthly Maximum and Minimum Temperatures.* The normal monthly maximum and minimum temperatures can be best shown by means of graphs, which exhibit the nature of the fluctuation of each for all available years. In the diagram herein for nine representative places in Australia, the upper heavy curves show the mean maximum, and the lower heavy curves the mean minimum temperatures based upon daily observations, while the other curves show the humidities.

7. **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.

In this publication the *absolute humidity* has been graphically represented in inches of vapour pressure (i.e., that portion of the barometric pressure due to vapour). It is this total quantity of moisture in the air which affects personal comfort, plays an important part in varying the density of the atmosphere, and in heating and refrigerating processes. The more commonly quoted value, called the *relative humidity*, refers to the ratio which the actual moisture content of the air bears to the total amount possible if saturation existed at the given temperature, and is usually quoted as a percentage. The relative humidity is an important factor in all drying operations, but is much less important than the *absolute humidity as affecting animal life*.

The mean monthly vapour pressure has also been added to the tables of climatological data for the capital cities included herein.

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 diminishes in the order, Sydney, Canberra, Melbourne, Darwin, Hobart, Brisbane, Perth, Adelaide and Alice Springs.

8. **Evaporation.**—(i) *General.* The rate and quantity of evaporation in any territory is influenced by the prevailing temperature, and by atmospheric humidity, pressure and movement. In Australia, the question is of perhaps 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 tabular records herein, which show that the yearly amount varies from about 31 inches at Hobart to more than 100 inches in the Central parts of Australia. Over the *inland* districts of the continent it has been calculated that evaporation equals the rainfall where the annual totals are about 36 inches, the variations above and below this quantity being inverse.

(ii) *Monthly Evaporation Curves.* The diagrams herein showing the mean monthly evaporation in various parts of Australia disclose how characteristically different are the amounts for the several months in different localities.

(iii) *Loss by Evaporation.* In the interior of Australia the possible evaporation is greater than the actual rainfall. 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 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. These matters are naturally of more than ordinary concern in the drier districts of Australia.

9. **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.

* In Australia, artificial storage ponds or reservoirs are called "tanks."

Australia lies within the zones of the south-east trades and prevailing westerly winds. The southern limit of the south-east trade strikes the eastern shores at about 30° 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, 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 herein shows that the heaviest yearly falls—over 50 inches—occur over the coastal region of the Northern Territory, over most of the Cape York Peninsula and coastal districts of Queensland, over many of the coastal areas of New South Wales, and the western parts of 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.

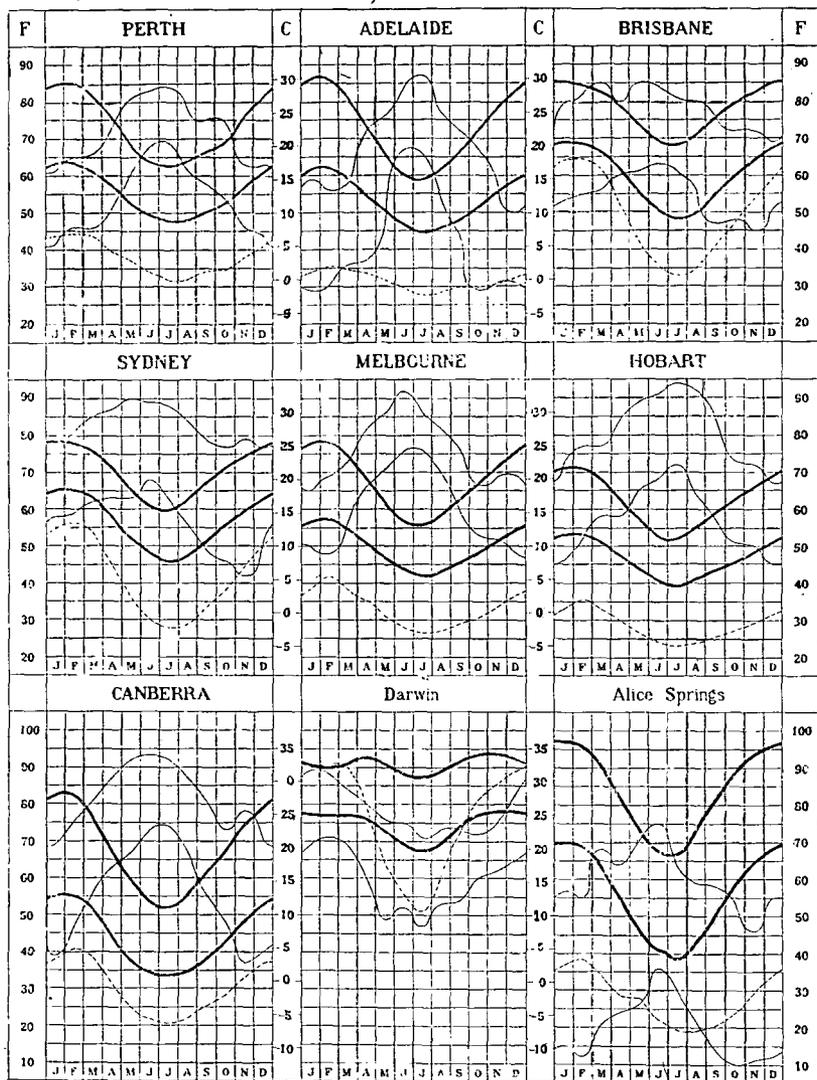
The former chiefly affect the northern, eastern, and to some extent the central parts of the continent and operate in an irregular manner during the warmer half of the year, but principally from December to March. They vary considerably in activity and scope from year to year, occasionally developing 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, specially 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 with irregular rains.

The map showing mean monthly distribution of rainfall over Australia gives information on the amount and occurrence of rain in graphic form.

(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 Tully on the Tully River has an average rainfall of 176.89 inches yearly, while three stations situated on, or adjacent to, the Johnstone and Russell Rivers have an average annual rainfall of between 143 and 169 inches. The maximum and minimum falls there are:—

AVERAGE ANNUAL FLUCTUATIONS OF NORMAL MAXIMUM AND MINIMUM TEMPERATURE AND HUMIDITY.



EXPLANATION.—The upper and lower heavy lines in each graph represent the mean maximum and mean minimum temperatures respectively. The Fahrenheit temperature scales are shown on the outer edge of the sheet under "F" and the centigrade scales in the two inner columns under "C."

The broken line shows the normal absolute humidity in the form of 9 a.m. vapour pressures for which the figures in the outer "F" columns represent hundredths of an inch of barometric pressure.

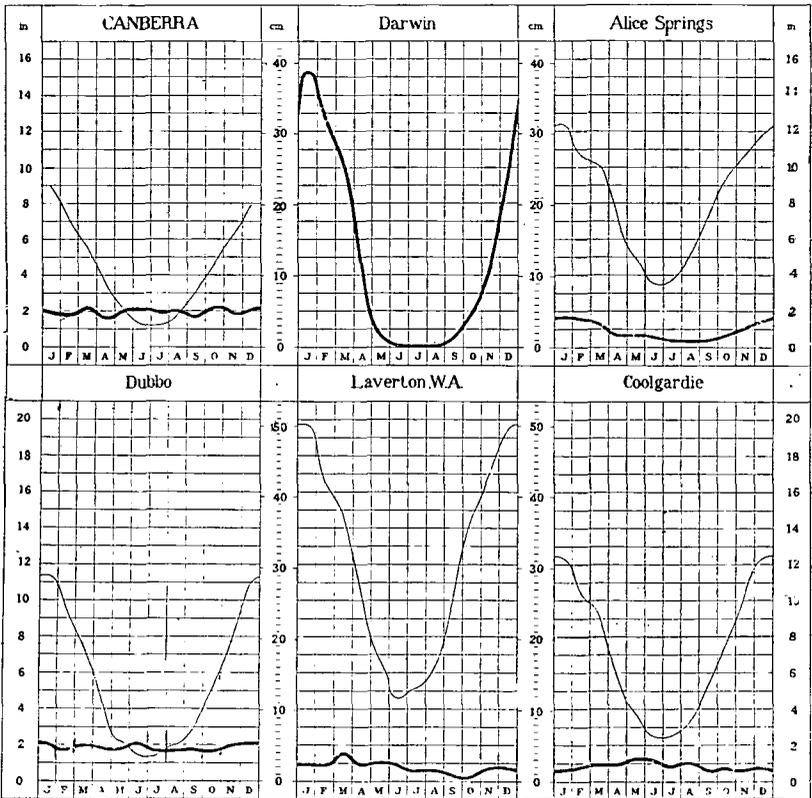
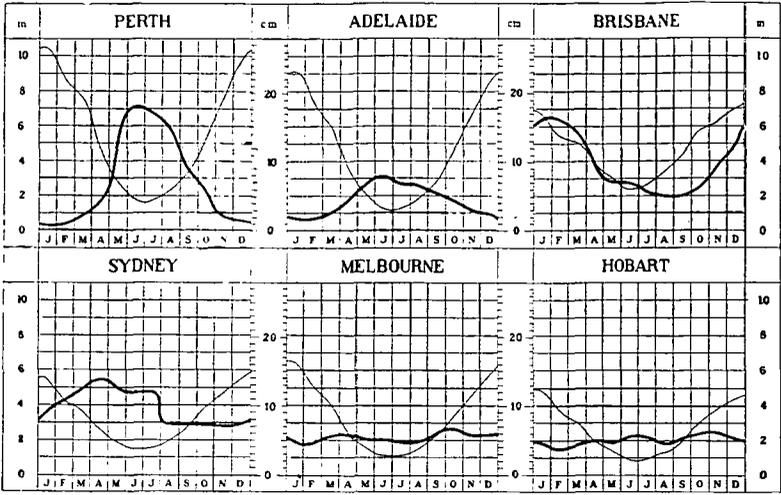
The upper and lower fine lines join the greatest and the least monthly means of relative humidity respectively, the figures under the outer columns "F" indicating percentage values.

The curves for temperature and vapour pressure joining the mean monthly values serve to show the annual fluctuation of these elements, but the relative humidity graphs joining the extreme values for each month do not indicate any normal annual variation.

Comparison of the maximum and minimum temperature curves affords a measure of the mean diurnal range of temperature. At Perth in the middle of January, for instance, there is normally a range of 21° from 63° F. to 84° F., but in July it is only 15° from 48° F. to 63° F.

The relative humidity curves illustrate the extreme range of the mean monthly humidity over a number of years.

MEAN MONTHLY RAINFALL AND EVAPORATION.



EXPLANATION.—On the preceding graphs thick lines denote rainfall, and thin lines evaporation, and show the fluctuation of the mean rate of fall or evaporation *per month* throughout the year. The results, plotted from the Climatological Tables herein, are shown in inches (see the outer columns), and the corresponding metric scale (centimetres) is shown in the two inner columns. The evaporation is not given for Darwin.

At Perth, Adelaide, Brisbane, Melbourne, Hobart, Canberra, Alice Springs, and Coolgardie the results have been obtained from jacketed tanks sunk in the ground. At Sydney and Dubbo sunken tanks without water jackets are used, whilst at Laverton (W.A.) the records are taken from a small portable jacket evaporation dish of 8 inches in diameter.

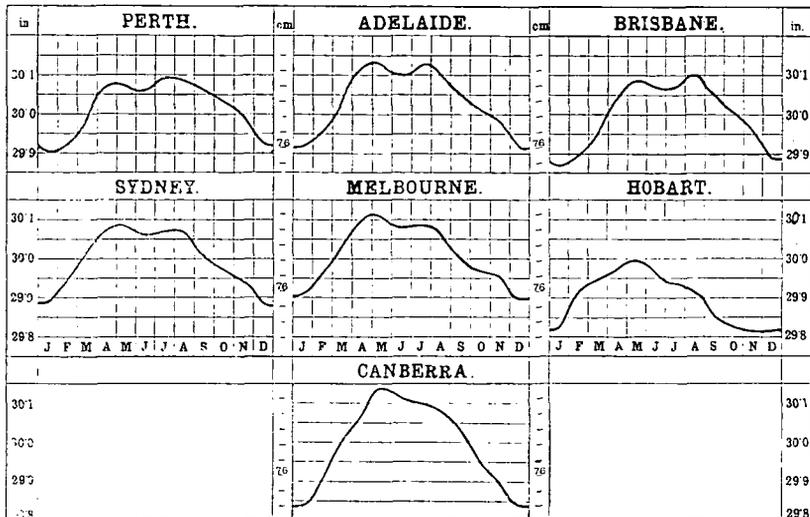
The distance for any date from the zero line to the curve represents the average number of inches, reckoned as per month, of rainfall at that date. Thus, taking the curve for Adelaide in the middle of January, the rain falls on the average at the rate of about three-fourths of an inch per month or, say, at the rate of about 9 inches per year. In the middle of June it falls at the rate of a little over 3 inches per month, or, say, at the rate of about 37 inches per year. At Dubbo, the evaporation is at the rate of nearly $1\frac{1}{2}$ inches per month about the middle of January, and only about $1\frac{1}{4}$ inches at the middle of June.

The mean annual rainfall and evaporation at the places indicated are given in the appended table.

MEAN ANNUAL RAINFALL AND EVAPORATION.

Place.	Rainfall.	Evapora- tion.	Place.	Rainfall.	Evapora- tion.
	In.	In.		In.	In.
Perth ..	34.90	66.17	Canberra ..	23.30	53.42
Adelaide ..	21.17	55.65	Darwin ..	58.84	—
Brisbane ..	44.91	56.15	Alice Springs ..	10.57	97.21
Sydney ..	46.90	39.86	Dubbo ..	21.85	66.37
Melbourne ..	25.64	39.11	Laverton, W.A.	9.10	145.17
Hobart ..	24.08	31.32	Coolgardie ..	10.22	85.37

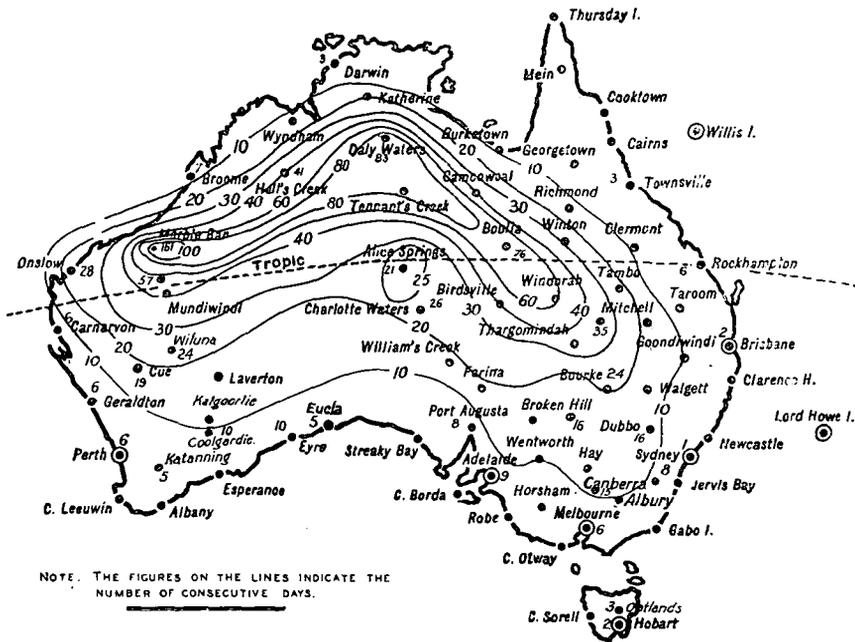
MEAN BAROMETRIC PRESSURE.—CAPITAL CITIES.



EXPLANATION.—The lines representing the yearly fluctuations of barometric pressure at the State capital cities are means for long periods, and are plotted from the Climatological Tables herein. The pressures are shown in inches on about $2\frac{1}{4}$ times the natural scale, and the corresponding pressures in centimetres are also shown in the two inner columns, in which each division represents one millimetre.

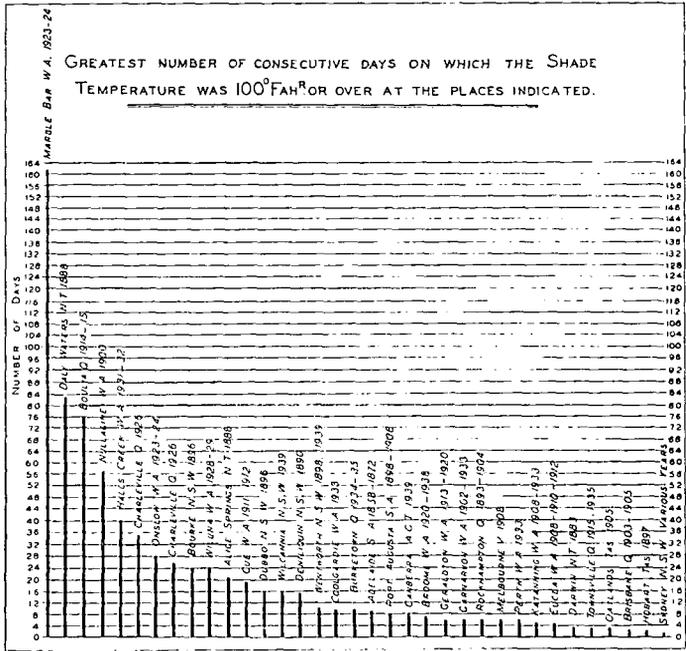
Taking the Brisbane graph for purposes of illustration, it will be seen that the mean pressure in the middle of January is about 29.87 inches, and there are maxima in the middle of May and August of about 30.09 inches.

AREA AFFECTED AND PERIOD OF DURATION OF THE LONGEST HEAT WAVES WHEN THE MAXIMUM TEMPERATURE FOR CONSECUTIVE 24 HOURS REACHED OR EXCEEDED 100°F.



NOTE. THE FIGURES ON THE LINES INDICATE THE NUMBER OF CONSECUTIVE DAYS.

JUNE 1940.



COMMONWEALTH OF AUSTRALIA
 METEOROLOGICAL BRANCH · DEPARTMENT OF
 THE INTERIOR · MELBOURNE

MAP OF AUSTRALIA

SHOWING
AVERAGE ANNUAL RAINFALL
 REVISED TO 1938.

SCALE OF MILES
 0 100 200 300 400 500

Printed under the authority of the Minister of State for the Department of the Interior
 by W. & A. WATTS, Commonwealth Meteorologists.

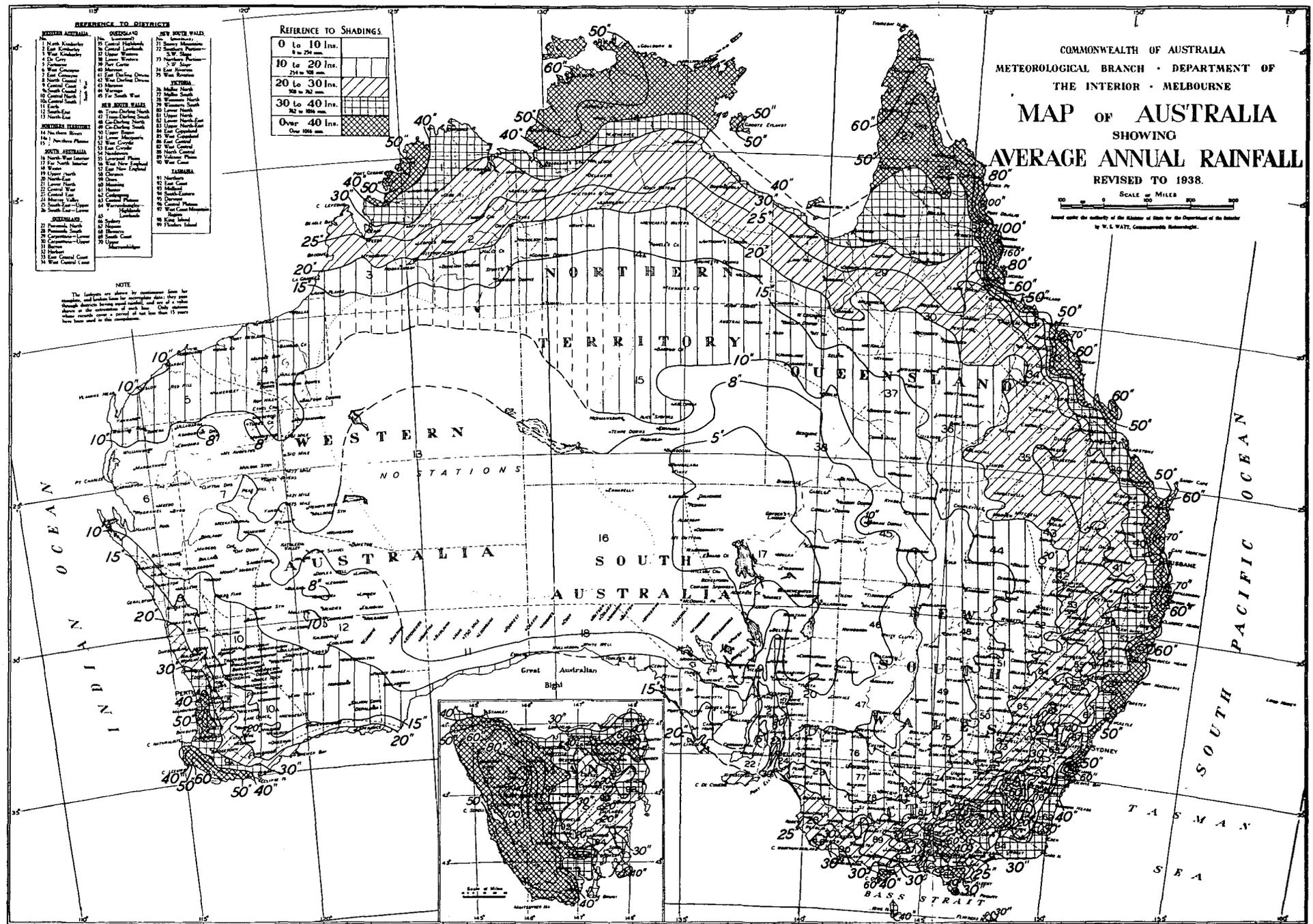
REFERENCE TO SHADINGS

0 to 10 Ins.	0 to 254 mm.
10 to 20 Ins.	254 to 508
20 to 30 Ins.	508 to 762
30 to 40 Ins.	762 to 1016
Over 40 Ins.	Over 1016 mm.

REFERENCE TO DISTRICTS

WESTERN AUSTRALIA		QUEENSLAND		NEW SOUTH WALES	
1. Perth	2. Geraldton	1. Brisbane	1. Brisbane	1. Sydney	1. Sydney
3. Fremantle	4. Mandurah	2. Ipswich	2. Ipswich	2. Newcastle	2. Newcastle
5. Perth	6. Perth	3. Toowoomba	3. Toowoomba	3. Maitland	3. Maitland
7. Perth	8. Perth	4. Rockhampton	4. Rockhampton	4. Cessnock	4. Cessnock
9. Perth	10. Perth	5. Mackay	5. Mackay	5. Tamworth	5. Tamworth
11. Perth	12. Perth	6. Cairns	6. Cairns	6. Orange	6. Orange
13. Perth	14. Perth	7. Townsville	7. Townsville	7. Dubbo	7. Dubbo
15. Perth	16. Perth	8. Mount Isa	8. Mount Isa	8. Bathurst	8. Bathurst
17. Perth	18. Perth	9. Darwin	9. Darwin	9. Sydney	9. Sydney
19. Perth	20. Perth	10. Adelaide	10. Adelaide	10. Newcastle	10. Newcastle
21. Perth	22. Perth	11. Melbourne	11. Melbourne	11. Sydney	11. Sydney
23. Perth	24. Perth	12. Sydney	12. Sydney	12. Newcastle	12. Newcastle
25. Perth	26. Perth	13. Brisbane	13. Brisbane	13. Sydney	13. Sydney
27. Perth	28. Perth	14. Toowoomba	14. Toowoomba	14. Newcastle	14. Newcastle
29. Perth	30. Perth	15. Mackay	15. Mackay	15. Sydney	15. Sydney
31. Perth	32. Perth	16. Cairns	16. Cairns	16. Newcastle	16. Newcastle
33. Perth	34. Perth	17. Townsville	17. Townsville	17. Sydney	17. Sydney
35. Perth	36. Perth	18. Darwin	18. Darwin	18. Newcastle	18. Newcastle
37. Perth	38. Perth	19. Adelaide	19. Adelaide	19. Sydney	19. Sydney
39. Perth	40. Perth	20. Melbourne	20. Melbourne	20. Newcastle	20. Newcastle
41. Perth	42. Perth	21. Sydney	21. Sydney	21. Sydney	21. Sydney
43. Perth	44. Perth	22. Brisbane	22. Brisbane	22. Newcastle	22. Newcastle
45. Perth	46. Perth	23. Toowoomba	23. Toowoomba	23. Sydney	23. Sydney
47. Perth	48. Perth	24. Mackay	24. Mackay	24. Newcastle	24. Newcastle
49. Perth	50. Perth	25. Cairns	25. Cairns	25. Sydney	25. Sydney
51. Perth	52. Perth	26. Townsville	26. Townsville	26. Newcastle	26. Newcastle
53. Perth	54. Perth	27. Darwin	27. Darwin	27. Sydney	27. Sydney
55. Perth	56. Perth	28. Adelaide	28. Adelaide	28. Newcastle	28. Newcastle
57. Perth	58. Perth	29. Melbourne	29. Melbourne	29. Sydney	29. Sydney
59. Perth	60. Perth	30. Sydney	30. Sydney	30. Newcastle	30. Newcastle
61. Perth	62. Perth	31. Brisbane	31. Brisbane	31. Sydney	31. Sydney
63. Perth	64. Perth	32. Toowoomba	32. Toowoomba	32. Newcastle	32. Newcastle
65. Perth	66. Perth	33. Mackay	33. Mackay	33. Sydney	33. Sydney
67. Perth	68. Perth	34. Cairns	34. Cairns	34. Newcastle	34. Newcastle
69. Perth	70. Perth	35. Townsville	35. Townsville	35. Sydney	35. Sydney
71. Perth	72. Perth	36. Darwin	36. Darwin	36. Newcastle	36. Newcastle
73. Perth	74. Perth	37. Adelaide	37. Adelaide	37. Sydney	37. Sydney
75. Perth	76. Perth	38. Melbourne	38. Melbourne	38. Newcastle	38. Newcastle
77. Perth	78. Perth	39. Sydney	39. Sydney	39. Sydney	39. Sydney
79. Perth	80. Perth	40. Brisbane	40. Brisbane	40. Newcastle	40. Newcastle
81. Perth	82. Perth	41. Toowoomba	41. Toowoomba	41. Sydney	41. Sydney
83. Perth	84. Perth	42. Mackay	42. Mackay	42. Newcastle	42. Newcastle
85. Perth	86. Perth	43. Cairns	43. Cairns	43. Sydney	43. Sydney
87. Perth	88. Perth	44. Townsville	44. Townsville	44. Newcastle	44. Newcastle
89. Perth	90. Perth	45. Darwin	45. Darwin	45. Sydney	45. Sydney
91. Perth	92. Perth	46. Adelaide	46. Adelaide	46. Newcastle	46. Newcastle
93. Perth	94. Perth	47. Melbourne	47. Melbourne	47. Sydney	47. Sydney
95. Perth	96. Perth	48. Sydney	48. Sydney	48. Newcastle	48. Newcastle
97. Perth	98. Perth	49. Brisbane	49. Brisbane	49. Sydney	49. Sydney
99. Perth	100. Perth	50. Toowoomba	50. Toowoomba	50. Newcastle	50. Newcastle
101. Perth	102. Perth	51. Mackay	51. Mackay	51. Sydney	51. Sydney
103. Perth	104. Perth	52. Cairns	52. Cairns	52. Newcastle	52. Newcastle
105. Perth	106. Perth	53. Townsville	53. Townsville	53. Sydney	53. Sydney
107. Perth	108. Perth	54. Darwin	54. Darwin	54. Newcastle	54. Newcastle
109. Perth	110. Perth	55. Adelaide	55. Adelaide	55. Sydney	55. Sydney
111. Perth	112. Perth	56. Melbourne	56. Melbourne	56. Newcastle	56. Newcastle
113. Perth	114. Perth	57. Sydney	57. Sydney	57. Sydney	57. Sydney
115. Perth	116. Perth	58. Brisbane	58. Brisbane	58. Newcastle	58. Newcastle
117. Perth	118. Perth	59. Toowoomba	59. Toowoomba	59. Sydney	59. Sydney
119. Perth	120. Perth	60. Mackay	60. Mackay	60. Newcastle	60. Newcastle
121. Perth	122. Perth	61. Cairns	61. Cairns	61. Sydney	61. Sydney
123. Perth	124. Perth	62. Townsville	62. Townsville	62. Newcastle	62. Newcastle
125. Perth	126. Perth	63. Darwin	63. Darwin	63. Sydney	63. Sydney
127. Perth	128. Perth	64. Adelaide	64. Adelaide	64. Newcastle	64. Newcastle
129. Perth	130. Perth	65. Melbourne	65. Melbourne	65. Sydney	65. Sydney
131. Perth	132. Perth	66. Sydney	66. Sydney	66. Newcastle	66. Newcastle
133. Perth	134. Perth	67. Brisbane	67. Brisbane	67. Sydney	67. Sydney
135. Perth	136. Perth	68. Toowoomba	68. Toowoomba	68. Newcastle	68. Newcastle
137. Perth	138. Perth	69. Mackay	69. Mackay	69. Sydney	69. Sydney
139. Perth	140. Perth	70. Cairns	70. Cairns	70. Newcastle	70. Newcastle
141. Perth	142. Perth	71. Townsville	71. Townsville	71. Sydney	71. Sydney
143. Perth	144. Perth	72. Darwin	72. Darwin	72. Newcastle	72. Newcastle
145. Perth	146. Perth	73. Adelaide	73. Adelaide	73. Sydney	73. Sydney
147. Perth	148. Perth	74. Melbourne	74. Melbourne	74. Newcastle	74. Newcastle
149. Perth	150. Perth	75. Sydney	75. Sydney	75. Sydney	75. Sydney
151. Perth	152. Perth	76. Brisbane	76. Brisbane	76. Newcastle	76. Newcastle
153. Perth	154. Perth	77. Toowoomba	77. Toowoomba	77. Sydney	77. Sydney
155. Perth	156. Perth	78. Mackay	78. Mackay	78. Newcastle	78. Newcastle
157. Perth	158. Perth	79. Cairns	79. Cairns	79. Sydney	79. Sydney
159. Perth	160. Perth	80. Townsville	80. Townsville	80. Newcastle	80. Newcastle
161. Perth	162. Perth	81. Darwin	81. Darwin	81. Sydney	81. Sydney
163. Perth	164. Perth	82. Adelaide	82. Adelaide	82. Newcastle	82. Newcastle
165. Perth	166. Perth	83. Melbourne	83. Melbourne	83. Sydney	83. Sydney
167. Perth	168. Perth	84. Sydney	84. Sydney	84. Newcastle	84. Newcastle
169. Perth	170. Perth	85. Brisbane	85. Brisbane	85. Sydney	85. Sydney
171. Perth	172. Perth	86. Toowoomba	86. Toowoomba	86. Newcastle	86. Newcastle
173. Perth	174. Perth	87. Mackay	87. Mackay	87. Sydney	87. Sydney
175. Perth	176. Perth	88. Cairns	88. Cairns	88. Newcastle	88. Newcastle
177. Perth	178. Perth	89. Townsville	89. Townsville	89. Sydney	89. Sydney
179. Perth	180. Perth	90. Darwin	90. Darwin	90. Newcastle	90. Newcastle
181. Perth	182. Perth	91. Adelaide	91. Adelaide	91. Sydney	91. Sydney
183. Perth	184. Perth	92. Melbourne	92. Melbourne	92. Newcastle	92. Newcastle
185. Perth	186. Perth	93. Sydney	93. Sydney	93. Sydney	93. Sydney
187. Perth	188. Perth	94. Brisbane	94. Brisbane	94. Newcastle	94. Newcastle
189. Perth	190. Perth	95. Toowoomba	95. Toowoomba	95. Sydney	95. Sydney
191. Perth	192. Perth	96. Mackay	96. Mackay	96. Newcastle	96. Newcastle
193. Perth	194. Perth	97. Cairns	97. Cairns	97. Sydney	97. Sydney
195. Perth	196. Perth	98. Townsville	98. Townsville	98. Newcastle	98. Newcastle
197. Perth	198. Perth	99. Darwin	99. Darwin	99. Sydney	99. Sydney
199. Perth	200. Perth	100. Adelaide	100. Adelaide	100. Newcastle	100. Newcastle

NOTE
 The rainfall is based on the observations of the Meteorological Department of Australia. It is based on the observations of the Meteorological Department of Australia. It is based on the observations of the Meteorological Department of Australia.



COMMONWEALTH OF AUSTRALIA.
BUREAU OF METEOROLOGY.
MELBOURNE.

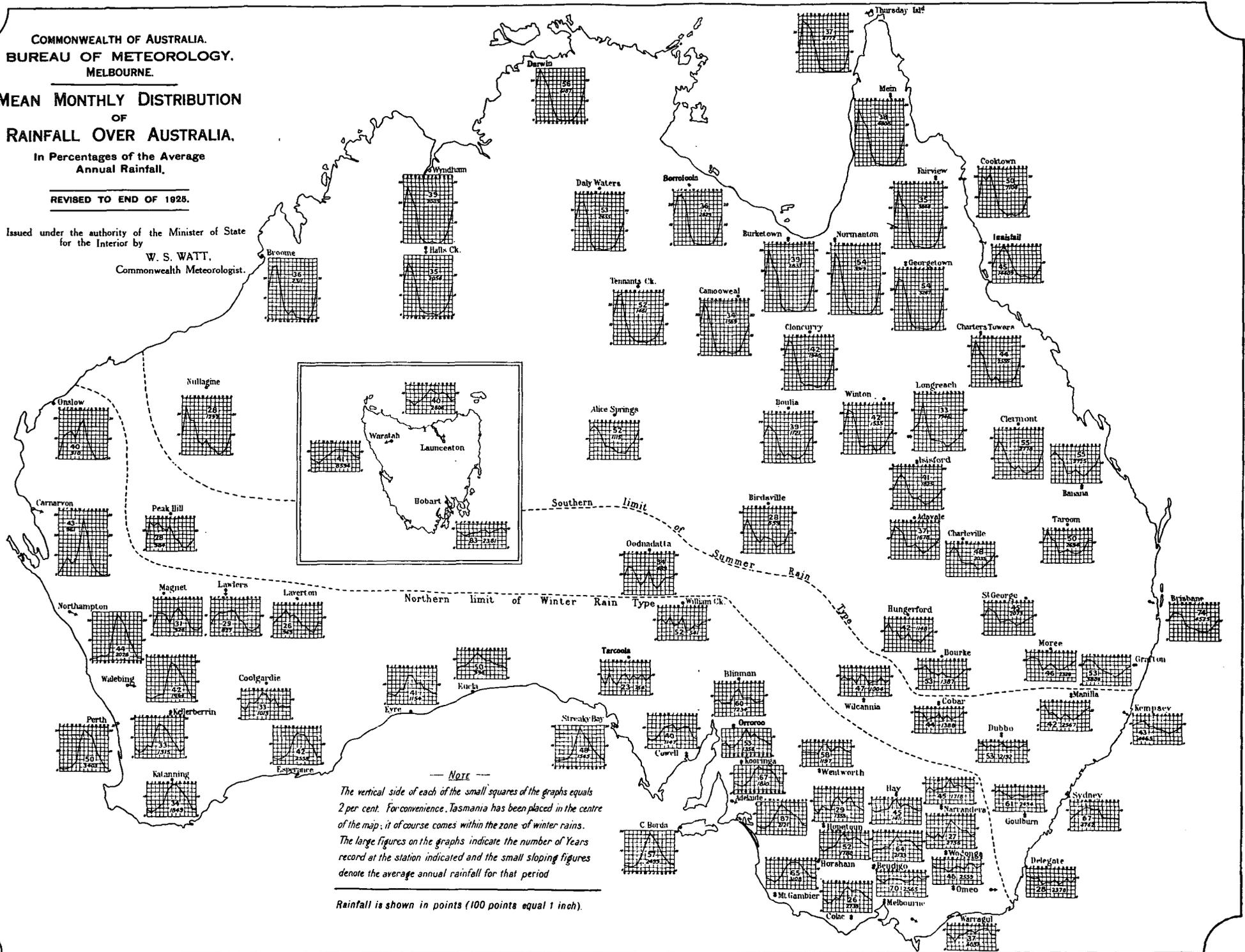
MEAN MONTHLY DISTRIBUTION
OF
RAINFALL OVER AUSTRALIA.

In Percentages of the Average
Annual Rainfall.

REVISED TO END OF 1928.

Issued under the authority of the Minister of State
for the Interior by

W. S. WATT,
Commonwealth Meteorologist.



NOTE

The vertical side of each of the small squares of the graphs equals 2 per cent. For convenience, Tasmania has been placed in the centre of the map; it of course comes within the zone of winter rains. The large figures on the graphs indicate the number of Years record at the station indicated and the small sloping figures denote the average annual rainfall for that period

Rainfall is shown in points (100 points equal 1 inch).

Tully, 234.37 in 1936 and 133.23 inches in 1938, or a range of 101.14 inches; Goondi, 241.53 in 1894 and 67.88 inches in 1915, or a range of 173.65 inches; Innisfail, 211.24 in 1894 and 69.87 inches in 1902, or a range of 141.37 inches; Harvey Creek, 254.77 in 1921 and 80.47 inches in 1902, or a range of 174.30 inches.

On four occasions more than 200 inches have been recorded at Goondi, the last of these being in 1910, when 204.82 inches were registered. The record at this station covers a period of 53 years.

Both Tully and Harvey Creek, in the shorter periods of 13 and 30 years respectively, have four times exceeded 200 inches. At Tully 234.37 inches were recorded during 1936 and at Harvey Creek the total for 1921 was 254.77 inches. At the South Johnstone Sugar Experiment Station 202.52 inches were recorded in 1921.

In Tasmania the wettest part is in the West Coast region, the average annual rainfall at Lake Margaret being 145 inches, with a maximum of 175.12 inches in 1924.

The driest known part of the continent is in the Lako Eyre district in South Australia (the only part of the continent below sea level), where the annual average is only 5 inches, and where the fall rarely exceeds 10 inches for the twelve months.

The inland districts of Western Australia were at one time regarded as the driest part of Australia, but authentic observations in recent years over most settled districts in the east of that State show that the annual average is about 10 inches.

(v) *Quantities and Distribution of Rainfall.* The general distribution is best seen from the rainfall map herein, which shows the areas subject to average annual rainfalls lying between certain limits. The areas enjoying varying quantities of rainfall determined from the latest available information are shown in the following table :—

AVERAGE ANNUAL RAINFALL DISTRIBUTION.

Average Annual Rainfall.	N.S.W. (a)	Victoria.	Queens- land.	South Australia	Western Australia.	Tas- mania. (b)	Northern Territory	Total. (b)
	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.	sq. mls.
Under 10 inches	48,749	nil	80,496	310,660	486,952	nil	140,500	1,067,357
10—15 "	78,454	18,701	81,549	30,460	255,092	nil	132,780	603,036
15—20 "	55,762	13,800	111,833	19,940	94,101	304	63,026	358,766
20—25 "	45,140	13,551	143,610	8,620	44,340	3,844	49,157	308,262
25—30 "	30,539	14,528	99,895	3,258	31,990	3,016	41,608	224,834
30—40 "	33,557	15,802	61,963	1,036	59,520	5,027	37,642	214,547
Over 40 "	18,171	11,502	91,154	96	3,925	11,247	58,907	195,002
Total area ..	310,372	87,884	670,500	380,070	975,920	23,438	523,620	2,971,804

(a) Including Australian Capital Territory. (b) Over an area of 2,777 square miles no records are available.

Referring first to the capital cities the records of which are given in the next table, it will be seen that Sydney, with a normal rainfall of 47.30 inches, occupies the chief place; Brisbane, Perth, Melbourne, Hobart, Canberra and Adelaide follow in that order, Adelaide with 21.17 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 (19.48 inches).

In order to show how the rainfall is distributed throughout the year in various parts of the continent, the figures for representative towns have been selected. (See map.) The figures for Darwin, typical of the Northern Territory, 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 Perth, as representing the south-western part of the continent, are the reverse for while the summer months are dry, the winter ones are very wet. In Melbourne and Hobart the rain is fairly well distributed throughout the twelve months, with a maximum in October for the former, and in November for the latter. The records at Alice Springs and Daly Waters indicate that in the central parts of Australia most of the rain occurs from November to March. 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 six months of the year are the wettest, with a maximum 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 or more inches, the remaining two-thirds averaging from 5 to 20 inches.

(vi) *Curves of Rainfall and Evaporation.* The relative amounts of rainfall and evaporation at different times through the year are clearly indicated in the graphs herein. Inspection thereof will show how large is the evaporation when water is fully exposed to the direct rays of the sun and to wind.

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

RAINFALL: AUSTRALIAN CAPITAL CITIES.

Year.	CANBERRA.(a)		PERTH.		ADELAIDE.		BRISBANE.		SYDNEY.		MELBOURNE.		HOBART.	
	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.
	in.		in.		in.		in.		in.		in.		in.	
1906 .. ..	..	..	32.37	121	26.51	127	42.85	125	31.89	160	22.29	114	23.31	155
7 .. ..	..	..	40.12	132	17.78	125	31.46	119	31.32	132	22.26	102	25.92	166
8 .. ..	..	..	30.52	106	24.56	125	44.01	125	45.65	167	17.72	130	16.50	148
9 .. ..	..	..	39.11	107	27.69	138	34.06	111	32.45	177	25.86	171	27.29	170
10 .. ..	..	..	37.02	135	24.62	116	49.00	133	46.91	160	24.61	167	25.22	205
11 .. ..	..	..	23.38	108	15.99	127	35.21	128	50.24	155	36.61	168	26.78	193
12	19.27	76	27.85	123	19.57	116	41.30	114	47.51	172	20.37	157	23.14	181
13	16.38	71	38.28	141	18.16	102	40.81	115	57.70	141	21.17	157	19.36	165
14	18.49	81	20.21	128	11.39	91	33.99	141	56.42	149	18.57	129	15.42	154
15	22.31	87	43.61	164	19.38	117	25.66	93	34.79	117	20.95	167	20.91	198
16	31.26	119	35.16	128	28.16	142	52.80	136	44.91	161	38.04	170	43.39	203
17	29.70	144	45.64	146	28.90	153	40.92	127	52.40	151	30.57	171	30.62	214
18	18.27	95	39.58	138	17.41	107	24.95	121	42.99	149	27.13	160	26.04	179
19	16.31	85	30.66	120	17.21	108	19.36	93	58.71	152	24.89	141	22.48	153
20	29.30	107	40.35	124	26.70	119	39.72	122	43.42	159	28.27	162	18.00	182
21 .. ..	..	..	41.09	135	22.64	100	54.31	167	43.34	140	29.76	154	18.04	159
22 .. ..	..	..	31.86	135	23.20	117	35.82	109	39.35	136	25.02	151	28.27	189
23 .. ..	..	..	44.47	134	29.79	139	23.27	93	37.01	123	22.64	158	32.93	198
24	25.95	68	33.79	119	23.44	143	41.08	114	37.01	136	36.48	171	28.76	197
25	33.71	59	31.41	126	21.91	118	53.10	139	50.35	145	17.57	144	22.67	170
26	20.53	97	49.22	167	22.20	116	30.82	111	37.07	127	20.51	149	25.79	187
27	21.40	83	36.59	133	16.92	101	62.08	130	48.56	138	17.98	135	20.13	185
28	17.82	96	44.88	140	19.43	107	52.64	145	40.07	130	24.09	151	30.23	205
29	22.34	88	36.77	132	17.51	119	39.78	118	57.90	129	28.81	168	26.55	194
30	16.52	86	39.80	129	18.65	116	41.22	144	44.47	141	25.41	145	19.38	152
31	24.25	105	39.18	118	22.26	145	66.72	136	49.22	153	28.63	164	27.17	179
32	19.13	107	39.40	121	25.04	141	24.70	97	37.47	146	31.08	179	30.29	155
33	20.30	88	32.47	116	22.12	130	49.71	118	42.71	153	22.28	136	23.18	182
34	35.89	118	40.61	120	20.24	125	54.26	117	64.91	183	33.53	157	33.17	194
35	24.40	102	32.28	129	23.45	140	34.64	111	30.97	131	29.98	183	32.22	196
36	29.49	121	30.64	118	19.34	121	21.77	101	30.22	130	24.30	187	19.60	178
37	22.50	93	35.28	120	23.01	128	34.79	113	52.00	157	21.45	144	20.65	160
38	20.15	85	29.64	111	19.26	119	43.49	110	39.17	132	17.63	171	31.32	169
39	26.95	128	45.70	123	23.29	139	41.43	122	33.67	127	33.11	166	27.23	188
Average	23.30	95	34.90	121	21.17	124	44.73	126	47.30	152	26.11	140	24.08	153
No. of Years	25	25	64	64	101	101	90	80	100	100	97	84	97	96

(a) Records commenced in 1912; details are not available for the years 1921 to 1923.

NOTE.—The foregoing average rainfall figures for Brisbane, Sydney and Melbourne differ slightly from the average annual falls given in the Climatological Tables and on page 46, which are for a less number of years. Annual totals from 1860 to 1901 inclusive will be found in Official Year Book No. 15, p. 53.

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

HEAVY RAINFALLS: NEW SOUTH WALES, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amtt.	Name of Town or Locality.	Date.	Amtt.
		in.			in.
Broger's Creek ..	14 Feb., 1898	20.05	South Head (near Sydney) ..	16 Oct., 1844	20.41
" " ..	13 Jan., 1911	20.83	Towamba ..	5 Mar., 1893	20.00
Cordeaux River ..	14 Feb., 1898	22.58	Viaduct Creek ..	15 " 1936	20.00
Morpeth ..	9 Mar., 1893	21.52			

HEAVY RAINFALLS: QUEENSLAND, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amtt.	Name of Town or Locality.	Date.	Amtt.
		in.			in.
Babinda (Cairns) ..	2 Mar., 1935	24.14	Mackay ..	21 Jan., 1918 ^a	24.70
Buderim Mountain	11 Jan., 1898	26.20	Macnade Mill ..	6 " 1901	23.33
Crohamhurst (Blackall Range)	2 Feb., 1893	35.71	Plane Creek (Mackay) ..	26 Feb., 1913	27.73
Deeral ..	2 Mar., 1935	27.60	Port Douglas ..	1 Apr., 1911	31.53
Goondi ..	30 Jan., 1913	24.10	Tully ..	19 Jan., 1932	27.20
Harvey Creek ..	3 " 1911	27.75	Woodlands (Yepp'n)	31 Jan., 1893	23.07
Kuranda (Cairns) ..	2 Apr., 1911	28.80	Yarrabah ..	2 Apr., 1911	30.65

(a) 37½ hours.

HEAVY RAINFALLS: WESTERN AUSTRALIA, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amtt.	Name of Town or Locality.	Date.	Amtt.
		in.			in.
Balla Balla ..	21 Mar., 1899	14.40	Roebuck Plains ..	5 Jan., 1917	14.01
Boodarie ..	21 Jan., 1896	14.53	" " ..	6 " 1917	22.36
Broome ..	6 " 1917	14.00	Thangoc ..	17-19 Feb. '96	24.18
Derby ..	7 Jan., 1917	16.47	Whim Creek ..	3 Apr., 1898	29.41
Fortescue ..	3 May, 1890	23.36	Winderrie ..	17 Jan., 1923	14.23
Pilbara ..	2 Apr., 1898	14.04			

HEAVY RAINFALLS: NORTHERN TERRITORY, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amtt.	Name of Town or Locality.	Date.	Amtt.
		in.			in.
Bathurst Island			Brock's Creek ..	24 Dec., 1915	14.33
Mission ..	7 Apr., 1925	11.85	Cape Don ..	13 Jan., 1934	13.58
Birrimbah ..	6 Mar., 1935	16.50	Darwin ..	7 Dec., 1915	11.67
Borroloola ..	14 " 1899	14.00			

HEAVY RAINFALLS: SOUTH AUSTRALIA, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
Coober Pedy ..	19 Feb., 1938	in. 6.50	Nunjikompita ..	21 Feb., 1938	in. 6.50
Lobethal ..	18 Apr., 1938	6.44	Wilmington ..	1 Mar., 1921	7.12

HEAVY RAINFALLS: VICTORIA, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
Cann River ..	16 Mar., 1938	in. 9.94	Mt. Buffalo ..	6 June, 1917	in. 8.53
Cunninghame ..	26 Dec., 1935	8.50	Murrungowar ..	16 Mar., 1938	8.36
Hazel Park ..	1 Dec., 1934	10.50	Olinda ..	1 Dec., 1934	9.10
Kalorama ..	1 " "	10.05	Tambo Crossing ..	13 July, 1925	8.89
Korumburra ..	1 " "	8.51	Tonghi Creek ..	27 Feb., 1919	9.90

HEAVY RAINFALLS: TASMANIA, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
Cullenswood ..	5 Apr., 1929	in. 11.12	Riana ..	5 Apr., 1929	in. 11.08
Gould's Country ..	8-10 Mar., '11	15.33	The Springs ..	30-31 Jan., '16	10.75
Lottah ..	8-10 Mar., '11	18.10	Triabunna ..	5 June, 1923	10.20
Mathinna ..	5 Apr., 1929	13.25			

HEAVY RAINFALLS: AUSTRALIAN CAPITAL TERRITORY, UP TO 1939, INCLUSIVE.

Name of Town or Locality.	Date.	Amnt.	Name of Town or Locality.	Date.	Amnt.
Canberra ..	27 May, 1925	in. 6.84	Uriarra ..	27 May, 1925	in. 6.57
Cotter Junction ..	" "	7.13			

11. **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 the State 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 also the temperature falls below zero Fahrenheit during the night. In the ravines around Mt. Kosciusko and similar localities the snow never entirely disappears.

12. **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.

13. **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 30.11 inches at Alice Springs. Barometer readings corrected to mean sea-level and standard gravity have, under anticyclonic conditions in the interior of the continent, ranged as high as 30.78 inches (at Kalgoorlie on the 28th July, 1901) and have fallen as low as 27.55 inches. This lowest record was registered at Mackay during a tropical hurricane on the 21st January, 1918. An almost equally abnormal reading of 27.88 inches was recorded at Innisfail during a similar storm on the 10th March, 1918. The mean barometric pressure for the capitals of Australia is shown on the graphs herein.

14. **Wind.**—(i) *Trade Winds.* The two distinctive wind currents in Australia are as previously stated, the south-east and westerly trade 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 very high latitudes, thereby bringing the south-east trade winds as far south as 30° south latitude. The westerly trade winds retreat a considerable distance to the south of Australia, and are rarely 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 the Leeuwin to Cape Howe, and during some seasons are remarkably persistent and strong, and occasionally penetrate to almost tropical latitudes.

(ii) *Land and Sea Breezes.* The prevailing winds second in order of importance are the land and sea breezes. On the east coast the sea breezes which come in from the north-east, when in full force, frequently reach the velocity of a gale during the afternoon in the summer months, the maximum hourly velocity, ordinarily attained about 3 p.m., not infrequently attaining a rate of 35 to 40 miles per hour. This wind, although strong, is usually shallow in depth, and does not ordinarily penetrate more than 9 or 12 miles inland.

The land breezes on the east coast blow out from a westerly direction during the night.

On the western shores of the continent the directions are reversed. The sea breezes come in from the south-west, and the land breezes blow out from the north-east.

(iii) *Inland Winds.* Inland, the direction of the prevailing winds is largely regulated by the seasonal changes of pressure, so disposed as to cause the winds to radiate spirally outward from the centre of the continent during the winter months, and to circulate spirally from the seaboard to the centre of Australia during the summer months.

(iv) *Prevailing Direction at the Capital Cities.* In Canberra, the winds are mainly from easterly and north-westerly directions, the former predominating to a somewhat greater degree in the mornings, the latter in the afternoons and in the colder half of the year.

In Perth, southerly (south-west to south-east) is the prevailing direction for August to April inclusive and north-north-west to north-north-east for the midwinter months.

In Adelaide the summer winds are from the south-west and south, and in the winter from north-east to north.

In Brisbane, south-east winds are in evidence all the year round, but more especially from January to April.

In Sydney from May to September the prevailing direction is westerly, and for the remaining seven months north-easterly.

Melbourne winter winds are from north-west to north-east, and those of the summer from south-west to south-east, with a moderate percentage of northerly.

At Hobart the prevailing direction for the year is from north-west.

Over the greater part of Australia, January is the most windy month, i.e., is the month when the winds are strongest on the average, though the most violent wind storms occur at other times during the year, the time varying with the latitude.

15. *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 cyclonic storms, evolved from the V-shaped 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, including the coast-line of Victoria, and on the west coast of Tasmania. Apparently the more violent wind pressures from these cyclones 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 S.W. and finally towards the S.E. Only a small percentage, however, reach Australia, the majority recurving in their path to the east of New Caledonia.

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 apparently originate in the ocean in the vicinity of Cambridge Gulf, 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, and cause great havoc amongst the pearl-fishers. 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, will be found in previous issues of the Official Year Book (see No. 6, pp. 84-86).

A special article dealing with "Australian Hurricanes and Related Storms" appeared in Official Year Book No. 16, pp. 80-84.

16. **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, the mean temperature of Sydney shows a rise of two tenths of a degree during the last twenty years, a change probably brought about by the great increase of residential and manufacturing buildings within the city and in the surrounding suburbs. Again, low-lying lands on the north coast of New South Wales, which originally were seldom subject to frosts, have, with the denudation of the surrounding hills from forests, 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 alternative 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 has 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.

In previous issues some notes on observations made in other countries were added (see Official Year Book No. 6, pp. 86 and 95).

17. **Rainfall and Temperatures, Various Cities.**—The following table shows rainfall and temperature for various important cities throughout the world, for the Australian capital, and for the capitals of the Australian States.

RAINFALL AND TEMPERATURES: VARIOUS CITIES.

Place.	Height above M.S.L.	Annual Rainfall.			Temperature.					
		Average.	Highest.	Lowest.	(a) Mean Summer.	(b) Mean Winter.	Highest on Record.	Lowest on Record.	Average Hottest Month.	Average Coldest Month.
		Ft.	In.	In.	In.	Fahr.	Fahr.	Fahr.	Fahr.	Fahr.
Amsterdam (Gardens) ..	3	31.26	38.39	20.24	61.3	37.4	93.2	3.2	64.0	37.0
Auckland ..	160	44.85	74.15	26.32	65.8	52.3	85.0	35.0	66.6	51.6
Athens ..	351	15.48	33.33	4.56	79.2	49.1	109.4	19.6	81.0	47.4
Bergen ..	116	73.43	107.32	54.33	56.1	34.7	86.0	7.3	57.4	34.8
Berlin (Central) ..	161	22.72	30.04	14.25	64.8	33.0	98.6	-13.4	66.0	31.8
Berne ..	1,877	36.30	58.23	24.69	62.2	50.1	91.4	-3.6	64.4	28.0
Bombay ..	32	70.54	114.89	33.42	82.7	74.7	100.2	-53.2	84.3	73.9
Breslau ..	410	22.60	32.51	15.01	64.2	30.9	99.9	-25.6	64.2	30.9
Brussels ..	328	28.35	41.18	17.73	62.6	36.0	95.4	-4.4	63.7	34.5
Budapest ..	425	24.96	37.05	16.81	60.3	32.2	101.7	-10.1	71.2	30.2
Buenos Aires ..	82	38.78	79.72	20.04	72.7	50.0	104.0	22.3	73.8	50.0
Calcutta ..	21	61.82	98.48	38.43	85.6	68.0	111.3	44.2	86.0	66.4
Capetown ..	40	25.50	36.72	17.71	68.1	54.7	102.0	34.0	68.8	53.9
Caracas ..	3,420	30.03	47.36	23.70	68.3	65.3	87.8	48.2	69.2	63.7
Chicago ..	823	33.28	45.86	24.52	70.0	26.1	103.0	-23.0	72.4	23.7
Christchurch ..	22	25.21	35.30	13.54	60.8	43.5	95.7	21.3	61.6	42.7
Christiana (Oslo) ..	82	25.39	36.18	16.24	61.0	25.5	95.0	-13.4	63.1	24.4
Colombo ..	24	88.53	123.96	53.56	81.6	78.7	97.2	61.6	82.0	78.6
Constantinople ..	445	28.75	42.74	14.78	74.0	43.5	103.6	13.0	75.7	42.0
Copenhagen ..	243	22.80	32.52	14.02	60.9	32.7	91.4	-13.0	62.6	31.8
Dresden ..	115	24.22	34.42	11.73	64.6	33.2	93.4	-15.3	66.0	31.6
Dublin (City) ..	54	27.66	35.56	16.60	59.1	42.8	87.0	13.0	60.4	42.5
Dunedin ..	300	36.02	54.51	21.86	57.3	43.5	94.0	23.0	58.0	42.5
Durban ..	260	40.79	71.27	27.24	75.6	64.4	110.6	41.1	76.7	63.8
Edinburgh (Leith) ..	441	25.21	32.05	16.44	55.9	39.0	90.0	6.0	57.3	38.7
Geneva ..	1,332	32.13	47.60	18.73	64.0	33.4	100.0	-13.5	65.8	31.8
Genoa ..	157	51.29	108.22	28.21	73.8	46.8	94.5	16.7	75.4	45.5
Glasgow ..	139	38.49	56.18	29.05	57.0	39.5	84.9	6.6	58.3	39.3
Greenwich ..	149	23.50	35.54	16.38	61.7	40.4	100.0	4.0	63.3	40.1
Hong Kong ..	109	85.61	119.72	45.84	81.5	60.5	97.0	32.0	82.0	58.8
Johannesburg ..	5,750	31.63	50.00	21.66	65.4	54.4	93.6	20.8	68.2	48.0
Leipzig ..	394	24.69	31.37	17.10	63.9	31.6	96.4	-16.6	64.8	30.0
Leningrad ..	16	21.30	29.52	13.75	61.1	17.4	89.6	-30.3	63.7	15.2
Lisbon ..	313	26.07	52.82	16.34	70.0	52.9	102.9	9.0	71.1	51.8
London (Kew) ..	18	23.80	38.18	12.16	60.8	39.9	94.0	9.0	62.3	39.1
Madras ..	22	40.85	78.92	21.74	80.0	76.8	113.0	57.5	89.9	76.1
Madrid ..	2,149	16.23	27.48	9.13	73.0	41.2	107.1	10.5	75.7	39.7
Marseilles ..	246	22.10	43.04	11.11	70.4	45.5	101.5	6.3	72.0	44.3
Moscow ..	526	18.94	29.07	12.07	63.4	14.7	95.0	-41.4	66.1	11.9
Naples ..	489	34.00	56.58	21.75	73.6	48.0	99.1	23.9	75.4	46.8
New York ..	314	44.63	58.68	33.17	71.4	31.8	102.0	-13.0	73.5	30.2
Ottawa ..	236	33.51	51.25	25.63	66.6	14.0	98.0	-33.0	69.1	11.8
Paris (Parc-St. Maur) ..	174	22.68	29.80	10.94	63.5	37.9	101.1	-19.5	64.8	36.7
Pekin ..	123	22.66	36.00	18.00	77.9	26.8	100.2	2.7	79.3	23.7
Quebec ..	296	41.25	53.79	32.12	63.4	12.6	97.0	-34.0	65.6	9.8
Rome ..	166	32.57	57.89	12.72	74.3	46.0	103.0	21.4	76.1	44.6
San Francisco ..	155	22.27	38.82	9.00	58.8	50.5	101.0	29.0	59.3	49.5
Shanghai ..	21	45.00	62.52	27.92	78.0	41.1	102.9	10.2	80.4	37.8
Singapore ..	8	81.99	158.68	32.71	81.2	78.6	94.2	63.4	81.5	78.1
Stockholm ..	146	21.60	28.47	11.77	62.2	26.4	91.8	-22.0	59.7	27.3
Tokio ..	65	61.45	86.37	45.72	74.8	39.2	91.0	29.7	77.7	37.5
Trieste ..	85	42.94	63.14	26.57	73.9	41.3	99.5	14.0	76.3	39.9
Vienna ..	664	25.51	35.55	16.54	65.3	31.3	97.2	-14.4	66.7	29.5
Vladivostok (Mt.) ..	420	29.23	38.48	21.17	65.5	9.7	92.3	-22.2	69.4	3.6
Washington ..	112	43.50	61.33	30.85	74.7	34.5	106.0	-15.0	76.8	32.9
Wellington ..	10	39.86	67.68	27.83	61.9	48.7	88.0	28.6	62.6	48.0
Zürich ..	1,542	45.15	78.27	29.02	63.3	31.3	94.1	-0.8	65.1	29.5

AUSTRALIAN CAPITAL.

Canberra ..	1,837	23.30	35.89	16.31	68.0	43.9	109.0	14.0	68.9	42.6
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STATE CAPITALS.

Perth ..	197	34.90	49.22	20.21	73.1	56.1	112.2	34.2	74.1	55.3
Adelaide ..	140	21.17	30.87	11.39	72.9	53.2	117.7	32.0	73.9	51.9
Brisbane ..	137	44.86	88.26	16.17	76.7	59.8	108.9	36.1	77.2	58.6
Sydney ..	138	46.90	82.76	23.01	71.0	54.3	113.6	35.7	71.6	52.9
Melbourne ..	115	25.64	38.04	15.61	66.6	50.0	114.1	27.0	67.6	48.8
Hobart ..	177	24.08	43.39	13.43	61.4	47.0	105.2	27.0	62.3	45.9

(a) Mean of the three hottest months.

(b) Mean of the three coldest months.

18. Climatological Tables.—The averages and extremes for a number of climatological elements have been determined from long series of observations at the Australian capitals up to and including the year 1939. These are given in the following tables:—

CLIMATOLOGICAL DATA: CANBERRA, AUSTRALIAN CAPITAL TERRITORY.

LAT. 35° 20' S., LONG. 149° 15' E. HEIGHT ABOVE M.S.L. 1,837 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 Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m. and 9 a.m. to 3 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of yrs. over which observations extend.	22	11	11	11	23	23	11(a)	12	21	14
January	29.832	358 23/33	0.10	4,271	E	W	8.97	4	4.5	9
February	29.901	366 24/33	0.08	3,410	E	W	7.00	4	4.7	8
March	30.003	351 22/31	0.06	3,309	E	E	5.59	4	4.7	8
April	30.060	326 29/29	0.06	3,106	E & SE	W	3.40	3	4.7	7
May	30.143	302 3/30	0.03	2,470	E	N	2.09	1	4.9	8
June	30.113	386 2/30	0.05	3,075	N	NW	1.30	1	5.2	6
July	30.117	562 7/31	0.04	2,837	E	W	1.28	0	5.0	7
August	30.064	377 25/36	0.07	3,602	N	N & W	1.84	1	4.9	7
September	30.037	418 28/34	0.09	3,888	E	N	3.08	2	4.2	9
October	29.955	293 19/36	0.07	3,679	E	W	4.71	2	4.9	7
November	29.904	402 14/30	0.08	3,755	E	W	6.24	4	4.9	8
December	29.840	386 11/38	0.09	4,166	E	W & NW	7.92	6	5.0	6
Year { Totals	—	—	—	—	—	—	53.42	32	—	90
Averages	29.997	—	0.07	3,464	E	W	—	—	4.8	—
Extremes	—	562 7/7/31	—	—	—	—	—	—	—	—

(a) Canberra Forestry School Record.

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).			Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.	Highest in Sun.		Lowest on Grass.		
									(a)		21
No. of yrs. over which observations extend.	23	23	23	23	23	23	(a)	21	16	
January	82.4	55.4	68.9	109.0 11/39	38.2 8/38	70.8	—	33.2 17/33	244.0	
February	82.1	55.3	68.7	102.6 16/19	33.0 21/33	69.6	—	26.8 21/33	205.7	
March	76.0	51.1	63.5	99.2 6/38	31.0 24/35	68.2	—	25.5 24/17	216.9	
April	67.0	44.0	55.5	91.0 6/38	26.5 29/17	64.5	—	17.5 29/17	194.2	
May	59.7	37.2	48.5	74.7 9/19	19.0 30/24	55.7	—	12.0 28/20	157.9	
June	53.2	34.4	43.8	66.2 5/17	17.8 20/35	48.4	—	9.9 20/35	126.9	
July	52.1	33.2	42.6	65.0 8/19	14.0 19/24	51.0	—	10.0 (c)	147.4	
August	55.5	35.0	45.3	73.0 (b)	18.0 5/19	55.0	—	11.8 5/19	173.9	
September	61.3	38.1	49.7	83.2 27/19	24.0 12/39	59.2	—	17.0 26/36	211.2	
October	68.1	43.0	55.5	93.8 31/19	27.0 2/18	66.8	—	20.0 (d)	233.3	
November	74.8	48.3	61.5	97.7 29/36	28.1 24/15	69.6	—	22.4 11/36	232.4	
December	79.6	53.1	66.3	103.4 27/38	32.0 3/24	71.4	—	30.2 2/39	244.8	
Year { Averages	67.6	44.0	55.8	—	—	—	—	—	2388.6(e)	
Extremes	—	—	—	109.0 11/1/39	14.0 19/7/24	95.0	—	9.9 20/6/35	—	

(a) No record.

(b) 28/1923 and 23/1924.

(c) 19/1924 and 24/1935.

(d) 1 and 3/1923.

(e) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%)			Rainfall (Inches).					Dew. Mean No. of Days Dew.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of yrs. over which observations extend.	21	21	21	21	25	25	25	25	25	7
January	0.381	56	69	39	1.93	6	5.18 1936	0.07 { 1919 1932	2.92 6/27	4
February	0.407	61	75	47	1.73	6	4.07 1936	0.00 1933	2.75 23/16	5
March	0.382	69	81	56	2.19	7	5.81 1914	0.21 1924	1.86 7/20	9
April	0.311	75	87	63	1.64	7	3.63 1935	0.20 1925	1.94 8/21	9
May	0.246	82	92	67	1.83	7	13.37 1925	0.06 1934	6.84 27/25	9
June	0.217	85	93	73	2.10	9	5.86 1931	0.44 1935	3.95 22/25	6
July	0.205	85	92	74	1.82	10	4.15 1933	0.25 1913	2.40 13/33	4
August	0.219	81	87	67	2.22	11	4.67 1939	0.01 1914	1.90 18/25	4
September	0.252	72	81	55	1.04	8	5.26 1915	0.36 1928	2.18 20/15	5
October	0.288	64	73	48	2.24	9	7.50 1934	0.62 1936	2.74 25/34	6
November	0.330	59	78	37	1.92	8	6.95 1924	0.09 1918	2.38 5/23	5
December	0.366	56	70	40	2.04	8	4.49 1910	0.11 1925	2.10 28/29	3
Year { Totals	—	—	—	—	23.30	96	—	—	—	69
Averages	0.288	70	—	—	—	—	—	—	—	—
Extremes	—	93	37	—	—	—	13.37 5/1925	0.00 2/1933	6.84 27/25	—

CLIMATOLOGICAL DATA: PERTH, WESTERN AUSTRALIA.

LAT. 31° 57' S., LONG. 115° 50' E. HEIGHT ABOVE M.S.L. 197 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.					Mean Amount of Evaporation (Inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m. and 9 a.m. to 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.					
No. of yrs. over which observations extend.	55	42	42	42	41	41	41	42	32	43
January	29.905	797 27/98	0.54	10,907	ESE	SSW	10.39	1.9	2.9	14.2
February	29.923	650 6/08	0.58	9,497	ESE	SSW	8.64	1.5	3.1	12.0
March	29.983	651 6/13	0.51	9,747	N	SSW	7.58	1.6	3.5	12.2
April	30.071	955 25/00	0.37	8,025	ENE	SW	4.73	1.5	4.2	8.5
May	30.668	825 24/32	0.34	7,974	NNE	SSW	2.73	2.4	5.5	5.4
June	30.062	914 17/27	0.35	8,870	NNE	SW	1.77	2.3	5.9	4.0
July	30.091	1,015 20/26	0.38	8,462	NNE	W	1.73	2.2	5.6	5.1
August	30.083	966 15/03	0.42	8,851	NNE	WSW	2.36	1.6	5.6	5.4
September	30.065	864 11/05	0.44	8,772	NE	WSW	3.41	1.2	4.9	6.4
October	30.031	809 6/16	0.50	9,633	SE	SW	5.35	1.0	4.7	6.7
November	29.991	777 18/97	0.56	8,891	SE	SW	7.65	1.4	3.9	8.3
December	29.927	776 6/22	0.61	10,689	SE	SSW	9.81	1.9	3.1	12.7
Year { Totals	—	—	—	—	—	—	—	—	—	—
Year { Averages	30.017	1,015 20/7/26	0.47	9,192	E	SW	66.17	20.5	—	100.9
Year { Extremes	—	—	—	—	—	—	—	—	—	—

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).			Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.	Highest in Sun.		Lowest on Grass.		
No. of yrs. over which observations extend.	43	43	43	43	43	43	41	41	42	
January	84.5	63.2	73.9	110.2 21/34	48.6 20/25	61.6	177.3 22/14	40.4 1/21	324.2	
February	84.9	63.4	74.1	112.2 8/33	47.7 1/02	64.5	173.7 4/34	39.8 1/13	273.7	
March	81.5	61.3	71.4	106.4 14/22	45.8 8/03	60.6	167.0 19/18	36.7 8/03	269.7	
April	76.2	57.3	66.7	90.7 9/10	39.3 20/14	60.4	157.0 8/16	31.0 20/14	219.0	
May	68.9	52.8	60.9	90.4 2/07	34.3 11/14	56.1	146.0 4/25	25.3 11/14	176.0	
June	64.1	49.5	56.8	81.7 2/14	35.0 30/20	46.7	135.5 9/14	26.3 11/37	145.3	
July	62.8	47.8	55.3	76.4 21/21	34.2 7/16	42.2	132.9 25/13	25.1 30/20	166.3	
August	63.8	48.4	56.1	81.0 12/14	35.4 31/08	45.6	145.1 29/21	26.7 24/35	186.1	
September	66.5	50.4	58.5	90.9 30/18	38.8 18/00	52.1	153.6 29/16	29.2 21/16	210.0	
October	69.3	52.5	60.9	95.3 30/22	40.0 16/31	55.3	157.5 31/36	29.8 16/31	244.9	
November	75.9	56.9	66.4	104.6 24/13	42.0 1/04	62.6	167.0 30/15	35.4 6/10	288.7	
December	81.2	60.9	71.0	107.9 20/04	48.0 2/10	59.9	168.8 11/27	39.0 (a)	325.7	
Year { Averages	73.3	55.4	64.3	112.2 8/2/33	34.2 7/7/16	78.0	177.3 22/1/14	25.1 30/7/20	2830.46	
Year { Extremes	—	—	—	—	—	—	—	—	—	

(a) 2/1910 and 12/1920. (b) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (Inches).	Rel. Hum. (%).				Rainfall (Inches).				Dew. Mean No. of Days Dew.	
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.		
No. of yrs. over which observations extend.	43	43	43	43	64	64	64	64	43		
January	0.437	52	61	41	0.33	3	2.17	1879	0.00 (a)	1.74 27/79	2.9
February	0.440	53	65	46	0.41	3	2.98	1915	0.00 (a)	1.63 26/15	4.2
March	0.436	58	66	46	0.83	4	5.71	1934	0.00 (a)	1.03 9/34	6.6
April	0.394	61	73	51	1.70	7	5.85	1926	0.00 1920	2.62 30/04	10.6
May	0.371	73	81	61	5.13	14	12.13	1879	0.98 1903	2.80 20/79	13.2
June	0.338	76	83	68	7.11	17	12.80	1923	2.16 1877	3.90 6/20	13.0
July	0.316	76	84	69	6.74	18	12.28	1926	2.42 1876	3.00 4/91	13.4
August	0.320	73	79	62	5.79	18	12.21	1928	0.46 1902	2.97 7/03	11.9
September	0.340	67	75	58	3.36	15	7.84	1923	0.34 1916	1.82 4/31	10.8
October	0.344	60	75	54	2.18	12	7.87	1890	0.49 1892	1.73 3/03	6.4
November	0.376	54	63	46	0.77	6	2.78	1916	0.00 1891	1.11 30/33	3.7
December	0.409	50	63	44	0.55	4	3.05	1888	0.00 { 1886 1924	1.72 1/88	2.7
Year { Totals	—	—	—	—	—	—	—	—	—	—	—
Year { Averages	0.371	61	—	—	34.90	121	—	—	—	—	99.4
Year { Extremes	—	—	84	41	—	—	12.80 6/1923	0.00 (b)	—	3.90 6/6/20	—

(a) Various years. (b) Various months in 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. Min. Sea Level and Standard Gravity from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (Inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of yrs. over which observations extend.	83	62	62	62	62	62	70	68	72	58
January ..	29.915	758 19/99	0.33	7,804	SW	SW	9.10	2.3	3.6	8.7
February ..	29.952	691 22/96	0.28	6,578	NE	SW	7.42	2.1	3.5	7.7
March ..	30.038	628 9/12	0.23	6,556	S	SW	6.01	2.1	4.0	7.4
April ..	30.118	773 10/96	0.21	6,078	NE	SW	3.56	1.6	5.0	4.6
May ..	30.125	760 9/80	0.20	6,187	NE	NW	2.10	1.6	5.3	2.4
June ..	30.102	750 12/78	0.23	6,395	NE	N	1.28	1.0	6.2	1.8
July ..	30.125	674 25/82	0.23	6,620	NE	NW	1.37	1.0	5.9	1.9
August ..	30.093	773 31/97	0.27	7,120	NE	SW	1.90	2.1	5.6	2.6
September ..	30.044	720 2/87	0.29	7,184	NNE	SW	2.97	2.2	5.2	3.4
October ..	29.999	768 28/98	0.32	7,744	NNE	SW	4.84	3.3	5.1	4.0
November ..	29.979	677 2/04	0.32	7,462	SW	SW	6.69	3.3	4.6	5.4
December ..	29.921	675 12/91	0.32	7,782	SW	SW	8.53	3.5	3.9	7.0
Year { Totals ..	—	—	—	—	—	—	55.65	26.4	—	56.9
Year { Averages ..	30.034	—	0.27	6,959	NE	SW	—	—	4.9	—
Year { Extremes ..	—	773 (a)	—	—	—	—	—	—	—	—

(a) 10/4/96 and 31/8/97.

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).			Extreme Temperature (Fahr.).			Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.	Extreme Range.	Highest in Sun.	Lowest on Grass.		
No. of yrs. over which observations extend.	83	83	83	83	83	83	56	79	58	
January ..	86.0	61.5	73.8	117.7 12/39	45.1 21/84	72.6	180.0 18/82	36.5 14/79	307.2	
February ..	86.1	61.9	74.0	113.6 12/99	45.5 23/18	68.1	170.5 10/00	35.8 23/26	262.2	
March ..	80.9	58.9	69.9	110.5 9/34	43.9 21/33	66.6	174.0 17/83	32.1 21/33	240.5	
April ..	73.3	54.6	63.9	98.6 5/38	39.6 15/59	59.0	155.0 1/83	30.2 16/17	180.1	
May ..	65.9	50.3	58.1	89.5 4/21	36.9 (a)	52.6	148.2 12/79	25.6 19/28	149.8	
June ..	60.4	46.7	53.6	76.0 23/65	32.5 27/76	43.5	138.8 18/79	22.9 12/13	123.2	
July ..	59.7	44.7	51.9	74.0 11/06	32.0 24/08	42.0	134.5 26/90	22.1 30/29	130.4	
August ..	62.0	45.9	54.0	85.0 31/11	32.3 17/59	52.7	140.0 31/92	22.8 11/29	163.1	
September ..	72.4	48.0	57.2	90.7 23/82	32.7 4/58	58.0	160.5 23/82	25.0 25/27	185.1	
October ..	78.6	51.4	61.9	102.9 21/22	36.0 2/57	66.9	162.0 30/21	27.8 (c)	226.0	
November ..	83.1	55.4	67.0	113.3 21/65	40.8 2/09	72.7	166.9 20/78	31.5 2/09	262.3	
December ..	83.1	58.2	71.0	114.6 29/31	43.0 (b)	71.6	175.7 7/99	32.5 4/84	298.8	
Year { Averages ..	72.8	53.2	63.0	—	—	—	—	—	2534.7	
Year { Extremes ..	—	—	—	117.7 12/1/39	32.0 24/7/08	85.7	180.0 18/1/82	22.1 30/7/20	(d)	

(a) 26/1895 and 24/1904.

(b) 16/1861 and 4/1906.

(c) 2/1918 and 4/1931.

(d) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%).				Rainfall (inches).					Dew. Mean No. of Days Dew.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.		
No. of yrs. over which observations extend.	72	72	72	72	101	101	101	101	101	68	
January ..	0.337	38	59	29	0.75	4	4.00	1850	0.00 (d)	2.30 2/89	3.5
February ..	0.355	41	56	30	0.74	4	6.09	1925	0.00 (d)	5.57 7/25	5.5
March ..	0.345	40	58	36	1.02	6	4.60	1878	0.00 (d)	3.50 5/78	10.4
April ..	0.335	55	72	37	1.75	10	6.78	1853	0.03 1923	3.15 5/60	13.9
May ..	0.316	67	76	49	2.71	13	7.75	1875	0.10 1934	2.75 1/53	16.3
June ..	0.297	76	84	67	3.07	16	8.58	1916	0.42 1886	2.11 1/20	16.2
July ..	0.277	76	87	66	2.61	16	5.38	1865	0.37 1899	1.75 10/65	17.5
August ..	0.286	69	77	54	2.56	16	6.24	1852	0.35 1914	2.23 19/51	16.8
September ..	0.296	60	72	44	2.06	14	5.83	1923	0.45 1896	1.59 20/23	15.8
October ..	0.298	51	67	39	1.71	11	3.83	1870	0.17 1914	2.24 16/08	12.8
November ..	0.307	42	57	31	1.16	8	4.10	1934	0.04 1885	2.08 7/34	6.6
December ..	0.323	39	50	31	1.03	6	3.98	1801	0.00 1904	2.42 23/13	4.3
Year { Totals ..	—	—	—	—	21.17	124	—	—	—	—	139.6
Year { Averages ..	0.309	53	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	87	29	—	—	8.58	6/16	0.00 (b)	5.57 7/2/25	—

(a) Various years.

(b) Various months in various years.

CLIMATOLOGICAL DATA : BRISBANE, QUEENSLAND.

LAT. 27° 28' S., LONG. 153° 1' E. HEIGHT ABOVE M.S.L. 127 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F., M. Sea Level and Standard Gravity, and from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m., 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day. (a)	Mean Hourly Pressure. (lb.) (a)	Total Miles. (a)	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of yrs. over which observations extend.	53	25	25	25	53	53	31	53	48	31
January	29.866	361 1/22	0.14	5,236	SE	E & NE	6.676	7.2	5.7	3.5
February	29.903	503 5/31	0.14	4,767	S & SE	NE & E	5.464	5.7	5.7	2.5
March	29.964	488 1/29	0.13	4,970	S	SE & E	5.038	4.6	5.3	5.0
April	30.039	400 3/25	0.11	4,388	S	SE & E	3.964	4.0	4.5	7.6
May	30.087	430 17/26	0.10	4,362	S	SE	3.054	3.2	4.3	8.3
June	30.072	455 14/28	0.10	4,166	SW & S	S & W	2.409	2.4	4.4	9.2
July	30.076	359 2/23	0.09	4,219	SW & S	SW	2.657	2.5	3.6	12.2
August	30.095	355 4/35	0.10	4,361	S & SW	SW & NE	3.447	3.7	3.4	13.0
September	30.048	329 4/31	0.10	4,308	S & SW	NE & E	4.387	5.6	3.4	12.7
October	30.066	355 14/36	0.11	4,696	S	NE	5.764	6.8	4.1	8.4
November	29.960	371 10/28	0.13	4,867	SE & NE	NE	6.252	8.6	4.9	5.7
December	29.888	467 15/26	0.15	5,287	SE	NE	7.037	9.4	5.2	3.8
Year { Totals	—	—	—	—	—	—	—	—	—	—
Year { Averages	30.000	—	0.12	4,636	S	NE	56.149	63.6	—	91.9
Year { Extremes	—	503 5/2/31	—	—	—	—	—	—	4.5	—

(a) Records prior to August, 1914, have been discarded as unreliable.

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).			Extreme Temperature (Fahr.).			Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.	Extreme Range.	Highest in Sun.	Lowest on Grass.		
No. of yrs. over which observations extend.	53	53	53	53	53	53	45	53	31	
January	85.4	69.0	77.2	108.9 14/02	58.8 4/93	50.1	169.0 2/37	49.9 4/93	233.5	
February	84.5	68.6	76.6	105.7 21/25	58.5 2/31	47.2	165.2 6/10	49.1 22/31	209.9	
March	82.3	66.4	74.3	99.4 5/19	52.4 29/13	47.0	161.7 4/25	45.4 29/13	214.1	
April	78.9	61.5	70.2	95.2 (b)	44.4 25/25	50.8	153.8 11/16	30.7 24/25	211.1	
May	73.6	55.6	64.6	90.3 21/23	41.3 24/99	50.8	147.0 1/10	29.8 8/97	203.8	
June	69.3	51.1	60.2	88.6 10/18	36.3 29/08	42.6	136.0 3/18	25.4 23/88	185.4	
July	68.4	48.7	58.6	83.4 28/98	36.1 (b)	47.3	146.1 20/15	23.9 11/90	209.3	
August	71.2	49.9	60.6	88.5 25/28	37.4 6/87	51.1	141.9 20/17	27.1 9/99	239.4	
September	75.5	54.7	65.1	95.2 16/12	40.7 1/96	54.5	155.5 26/03	30.4 1/89	244.0	
October	79.5	60.1	69.8	101.4 18/93	43.3 3/99	58.1	157.4 31/18	34.9 8/89	257.6	
November	82.4	64.2	73.3	106.1 18/13	48.5 2/95	57.6	162.3 7/39	38.8 1/95	243.3	
December	84.8	67.4	76.1	105.0 26/93	56.4 13/12	49.5	162.1 26/37	40.1 3/94	254.9	
Year { Averages	78.0	59.8	68.9	—	—	—	—	—	2766.3	
Year { Extremes	—	—	—	108.9	36.1 (c)	72.8	169.0	23.9	(d)	

(a) 9/1896 and 5/1903.

(b) 12/1894 and 2/1896.

(c) 12/7/94 and 2/7/96.

(d) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%).					Rainfall (inches).			Dew. Mean No. of Days Dew.
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of yrs. over which observations extend.	53	53	53	53	88	79	88	88	70	53
January	0.639	66	79	53	6.34	13	27.72 1895	0.32 1919	18.31 21/87	9.2
February	0.645	69	82	56	6.28	14	40.39 1893	0.58 1849	10.61 6/31	9.4
March	0.614	72	85	56	5.75	15	34.04 1870	0.00 1849	11.18 14/08	12.5
April	0.520	71	80	60	3.76	12	15.28 1867	0.05 1897	5.46 5/33	15.1
May	0.426	73	85	61	2.83	10	13.85 1876	0.00 1846	5.62 9/79	16.2
June	0.356	73	84	63	2.66	8	14.03 1873	0.00 1847	6.01 9/93	14.5
July	0.328	72	81	61	2.21	8	8.46 1889	0.00 1841	3.54 (c)	15.6
August	0.347	68	80	56	1.95	7	14.67 1879	0.00 (a)	4.89 12/87	14.8
September	0.406	64	76	47	1.97	8	5.43 1886	0.10 1907	2.46 2/94	14.2
October	0.474	60	72	48	2.56	9	9.99 1882	0.14 1900	3.75 3/27	12.7
November	0.536	61	72	45	3.78	10	12.41 1917	0.00 1842	4.46 16/86	8.9
December	0.397	61	69	51	4.82	12	13.99 1910	0.35 1865	6.60 28/71	8.6
Year { Totals	—	—	—	—	44.91	126	—	—	—	151.7
Year { Averages	0.491	67	—	—	—	—	—	—	—	—
Year { Extremes	—	85	45	—	—	—	40.39 2/93	0.00 (b)	18.31 21/1/87	—

(a) 1862, 1869, 1880.

(b) Various months in various years.

(c) 15/1876 and 16/1880.

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 32° F. Mm. Sea Level and Standard Gravity from hourly readings.	Wind. (a)					Mean Amount of Evaporation (inches).	No. of Days of Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m. and 9 p.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.					
					9 a.m.	3 p.m.				
No. of yrs. over which observations extend.	81	73	73	73	73	60	80	78	29	
January ..	29.892	627 3/93	0.26	6,957	NE	ENE	5.420	5.1	5.8	4.8
February ..	29.941	697 12/69	0.23	5,984	NE	ENE	4.300	4.3	5.9	5.4
March ..	30.012	754 20/70	0.18	5,802	W	ENE	3.674	4.1	5.6	5.6
April ..	30.070	642 6/82	0.16	5,299	W	ENE	2.664	3.7	5.1	7.2
May ..	30.086	682 6/98	0.17	5,373	W	NE	1.863	2.9	4.9	7.5
June ..	30.063	642 13/08	0.21	5,815	W	W	1.477	2.1	4.8	8.3
July ..	30.072	744 17/79	0.19	5,965	W	W	1.551	2.2	4.4	10.1
August ..	30.065	649 22/72	0.19	5,862	W	NE	1.996	3.1	4.0	11.0
September ..	30.011	771 6/74	0.22	6,091	W	NE	2.777	3.8	4.3	10.0
October ..	29.969	741 4/72	0.24	6,608	W	ENE	3.024	4.9	5.0	7.3
November ..	29.940	583 12/87	0.24	6,500	ENE	ENE	4.714	5.4	5.6	5.7
December ..	29.881	750 3/84	0.26	6,924	ENE	ENE	5.498	5.8	5.7	4.9
Year { Totals ..	—	—	—	—	—	—	39.857	47.4	—	87.8
Year { Averages ..	30.000	—	0.21	6,098	W	ENE	—	—	5.1	—
Year { Extremes ..	—	771 6/9/74	—	—	—	—	—	—	—	—

(a) Early records revised during 1929. Values for period 1867 to September 1885, reduced 20 per cent.; for period September 1885 to March 1913, reduced 10 per cent.

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).		Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
	81	81	81	81	81		77	81		19(a)
No. of yrs. over which observations extend.	81	81	81	81	81	81	77	81	19(a)
January ..	78.4	64.9	71.6	113.6 14/39	51.2 14/65	62.4	164.3 26/15	43.7 6/25	227.4
February ..	77.7	65.0	71.3	107.8 8/26	49.3 28/63	58.5	168.3 14/39	42.8 22/33	205.0
March ..	75.8	63.0	69.4	102.6 3/69	48.8 14/86	53.8	158.3 10/26	39.9 17/13	198.3
April ..	71.4	58.0	64.7	91.4 1/36	44.6 27/64	46.8	144.1 10/77	33.3 24/09	183.0
May ..	65.7	52.2	59.0	86.0 1/19	40.2 22/59	45.8	129.7 1/96	29.3 25/17	176.3
June ..	61.3	48.2	54.7	80.4 11/31	35.7 22/32	44.7	125.5 2/23	28.0 22/32	160.5
July ..	59.9	45.9	52.9	78.3 22/26	35.9 12/90	42.4	124.7 19/77	24.0 4/93	187.6
August ..	63.0	47.5	55.2	82.0 31/84	36.8 3/72	45.2	149.0 30/78	26.1 4/09	219.0
September ..	67.1	51.3	59.2	92.3 27/10	40.8 18/64	51.5	142.2 12/78	30.1 17/05	221.3
October ..	71.3	55.8	63.6	98.9 19/98	42.2 6/27	56.7	152.2 20/33	28.0 9/05	232.0
November ..	74.3	59.6	67.0	102.7 21/78	45.8 1/05	56.9	158.5 28/99	36.0 6/06	231.4
December ..	77.1	63.0	70.0	107.5 31/04	48.4 3/24	59.1	164.5 27/89	41.4 3/24	231.2
Year { Averages ..	70.3	56.2	63.2	—	—	—	168.3	24.0	2473.0(b)
Year { Extremes ..	—	—	—	113.6 14/1/30	35.7 22/6/32	77.9	164.5 27/89	41.4 3/24	—

(a) From 1921 only; previous records discarded owing to faulty exposure of instruments. (b) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%).				Rainfall (inches).					Dew. Mean No. of Days Dew.
		Mean 9 a.m.	Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.	
No. of yrs. over which observations extend.	81	81	81	81	81	81	81	81	81	81	80
January ..	0.546	67	78	58	3.63	14	15.26 1911	0.25 1932	7.08 13/11	—	1.7
February ..	0.562	70	81	59	4.17	13	18.56 1873	0.12 1939	8.90 25/73	—	3.0
March ..	0.532	73	85	62	4.93	14	18.70 1870	0.42 1876	6.52 9/13	—	5.0
April ..	0.442	76	87	63	5.40	14	24.49 1861	0.06 1868	7.52 29/60	—	7.0
May ..	0.360	78	90	63	4.99	14	23.03 1893	0.78 1860	8.36 28/89	—	8.2
June ..	0.301	77	89	68	4.73	13	16.30 1885	0.19 1904	5.17 16/84	—	6.9
July ..	0.278	76	88	63	4.72	12	13.21 1900	0.12 1862	7.80 7/31	—	7.7
August ..	0.290	71	84	56	2.93	11	14.89 1899	0.04 1885	5.33 2/70	—	7.0
September ..	0.332	66	79	49	2.85	12	14.05 1879	0.08 1882	5.69 10/60	—	4.9
October ..	0.382	62	77	46	2.84	12	11.14 1916	0.21 1867	6.37 13/02	—	3.5
November ..	0.444	63	79	42	2.80	12	9.88 1865	0.07 1915	4.23 19/00	—	2.4
December ..	0.505	64	77	51	2.91	13	15.82 1920	0.23 1913	4.75 13/10	—	1.7
Year { Totals ..	—	—	—	—	46.90	154	—	—	—	—	59.0
Year { Averages ..	0.402	70	—	—	—	—	—	—	—	—	—
Year { Extremes ..	—	—	90	42	—	—	24.49 4/1861	0.04 8/1885	8.90 25/2/73	—	—

CLIMATOLOGICAL DATA : MELBOURNE, VICTORIA.

LAT. 37° 49' S., LONG. 144° 58' E. HEIGHT ABOVE M.S.L. 115 FT.

BAROMETER, WIND, EVAPORATION, LIGHTNING, CLOUDS AND CLEAR DAYS.

Month.	Bar. corrected to 32° F. M. Sea Level and Standard (Gravity) from hourly readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. to 3 p.m. and 9 p.m. to 3 a.m.	No. of Clear Days.
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction. (a)					
					9 am.	3 p.m.				
No. of yrs. over which observations extend.	82	66	66	66	21	21	67	32	82	32
January	29.907	583 10/97	0.25	6,831	S. & SW	S	6.421	1.81	5.1	6.9
February	29.957	566 8/68	0.23	5,880	N & S	S	5.029	2.3	4.9	6.7
March	30.032	677 9/81	0.19	5,896	N & S	S	4.017	1.7	5.4	5.4
April	30.098	597 7/68	0.16	5,330	N & S	S	3.240	1.2	5.9	4.5
May	30.168	693 12/65	0.16	5,422	N & S	S	1.509	0.5	6.4	3.2
June	30.082	761 13/76	0.19	5,764	N & S	S	1.136	0.4	6.6	2.5
July	30.089	755 8/74	0.18	5,837	N & S	S	1.094	0.4	6.3	3.0
August	30.058	637 14/75	0.22	6,328	N & S	S	1.496	0.9	6.3	2.8
September	30.000	617 11/72	0.24	6,448	N & S	S	2.324	1.2	6.1	3.3
October	29.967	899 5/66	0.25	6,770	N	S	3.363	1.8	6.0	3.8
November	29.952	734 13/66	0.25	6,541	S. & SW	S	4.550	2.5	5.9	3.8
December	29.898	655 1/75	0.26	6,968	SW & S	S	5.747	2.0	5.5	4.4
Year { Totals	—	—	—	—	—	—	39.106	16.7	—	50.3
Year { Averages	30.012	—	0.22	6,168	N	S	—	—	5.9	—
Year { Extremes	—	899 5/10/66	—	—	—	—	—	—	—	—

(a) Revised for 21 years, 1919-39 inclusive.

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fabr.).			Extreme Shade Temperature (Fabr.).		Extreme Range.	Extreme Temperature (Fabr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.		Highest in Sun.	Lowest on Grass.	
No. of yrs. over which observations extend.	84	84	84	84	84	84	79	80	58
January	78.1	56.7	67.4	114.1 13/39	42.0 28/85	72.1	178.5 14/62	30.2 28/85	256.8
February	78.1	57.2	67.6	109.5 7/01	40.2 24/24	69.3	167.5 15/70	30.9 6/01	235.0
March	74.6	54.8	64.7	105.5 2/93	37.1 17/84	68.4	164.5 1/68	28.9 (a)	206.2
April	68.2	50.7	59.4	94.8 5/38	34.8 24/88	60.0	152.0 8/61	25.0 23/97	159.0
May	61.7	46.8	54.2	83.7 7/05	29.9 29/16	53.8	142.6 2/59	21.1 26/16	137.4
June	56.8	43.9	50.3	72.2 1/07	28.0 11/66	44.2	129.0 11/61	19.9 30/29	109.2
July	55.7	41.9	48.8	69.3 22/26	27.0 21/69	42.3	125.8 27/80	20.5 12/03	129.0
August	58.7	43.4	51.0	77.0 20/85	28.3 11/63	48.7	137.4 29/69	21.3 14/02	150.3
September	62.7	45.6	54.2	88.6 28/28	31.1 16/08	57.5	142.1 20/67	22.8 8/18	170.1
October	67.2	48.3	57.8	98.4 24/14	32.1 3/71	66.3	154.3 28/68	24.8 22/18	198.7
November	71.4	51.3	61.4	105.7 27/94	36.5 2/96	69.2	159.6 20/65	24.6 2/96	220.0
December	75.3	54.4	64.8	110.7 15/76	40.0 4/70	70.7	170.3 20/69	33.2 1/01	244.5
Year { Averages	67.4	49.6	58.5	—	—	—	—	—	222.5
Year { Extremes	—	—	—	114.1 13/1/30	27.0 21/7/69	87.1	178.5 14/1/62	19.9 30/6/70	—

(a) 17/1884 and 20/1897.

(b) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (inches).	Rel. Hum. (%).					Rainfall (inches).				Dew. Mean No. of Days Dew.		
		Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.	Greatest in One Day.				
										32		32	32
No. of yrs. over which observations extend.	32	32	32	32	84	84	84	81	32				
January	0.384	58	65	50	1.88	8	5.68	1904	0.01	1932	2.97	9/07	2.6
February	0.410	62	69	48	1.82	7	7.72	1939	0.03	1870	3.42	26/39	4.0
March	0.383	64	73	57	2.17	9	7.50	1911	0.14	1934	3.55	5/19	7.6
April	0.319	72	82	66	2.32	11	6.71	1901	0.06	1923	2.28	22/01	9.0
May	0.340	79	86	71	2.08	13	4.31	1862	0.14	1934	1.85	7/91	10.2
June	0.276	84	92	76	2.09	15	4.31	1859	0.73	1877	1.74	21/04	8.2
July	0.264	82	86	76	1.87	14	7.02	1901	0.57	1902	2.71	12/01	8.1
August	0.271	76	82	70	1.90	15	4.35	1939	0.48	1903	1.94	26/24	7.3
September	0.290	68	76	60	2.28	14	7.93	1916	0.52	1907	2.62	12/80	6.4
October	0.307	62	67	53	2.68	14	7.61	1899	0.29	1914	3.00	17/09	5.8
November	0.335	60	69	52	2.25	11	6.71	1916	0.25	1895	2.57	16/76	2.4
December	0.368	59	69	48	2.30	10	7.18	1863	0.11	1904	3.20	1/34	1.8
Year { Totals	—	—	—	—	25.64	141	—	—	—	—	—	—	—
Year { Averages	0.324	69	—	—	—	—	—	—	—	—	—	—	73.4
Year { Extremes	—	62	—	48	—	—	7.93	9/1916	0.00	4/1923	3.55	5/3/19	—

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 55° F. Mm. Sea Level and Standard Gravity, and from 9 a.m. and 3 p.m. readings.	Wind.					Mean Amount of Evaporation (inches).	No. of Days Lightning.	Mean Amount of Clouds, 9 a.m. and 9 p.m.	
		Greatest Number of Miles in One Day.	Mean Hourly Pressure. (lb.)	Total Miles.	Prevailing Direction.				No. of Clear Days.	
					9 a.m.	3 p.m.				
No. of yrs. over which observations extend.	55	29	29	29	34	34	29	32	77	33
January ..	29.825	500 30/16	0.19	5,951	NNW to NW	SE	4.838	1.0	6.0	2.4
February ..	29.916	605 4/27	0.15	4,761	N to NW	SE	3.676	1.0	6.0	2.4
March ..	29.951	513 13/38	0.13	4,951	N to NNW	SE	3.060	1.2	5.9	2.4
April ..	29.971	533 27/26	0.13	4,825	N to NW	NW & SE	1.951	0.9	6.2	1.7
May ..	29.997	484 20/36	0.12	4,701	N to NW	N to NW	1.378	0.4	6.0	2.4
June ..	29.967	569 27/20	0.12	4,429	NNW to NW	N to NW	0.921	0.4	6.1	2.4
July ..	29.939	499 19/35	0.13	4,795	NNW to NW	N to NNW	0.938	0.4	5.9	2.2
August ..	29.914	612 19/26	0.14	5,054	N to NW	N to NW	1.267	0.4	5.9	2.1
September ..	29.851	516 26/15	0.18	5,648	N to NNW	NW	1.969	0.7	6.1	1.6
October ..	29.831	461 8/12	0.20	6,084	N to NW	NW & SE	3.052	0.6	6.4	1.1
November ..	29.817	508 18/15	0.19	5,704	N to NW	SE	3.882	0.9	6.4	1.5
December ..	29.813	562 1/34	0.17	5,681	N to NW	SE	4.385	0.7	6.4	1.2
Year { Totals	29.899	612	0.15	5,215	N to NW	NNW & SE	31.317	8.6	6.1	23.4
Year { Averages	—	—	—	—	—	—	—	—	—	—
Year { Extremes	—	19/8/26	—	—	—	—	—	—	—	—

TEMPERATURE AND SUNSHINE.

Month.	Mean Temperature (Fahr.).			Extreme Shade Temperature (Fahr.).			Extreme Range.	Extreme Temperature (Fahr.).		Mean Hours of Sunshine.
	Mean Max.	Mean Min.	Mean.	Highest.	Lowest.	Highest in Sun.		Lowest on Grass.		
									69	
No. of yrs. over which observations extend.	69	69	69	93	93	93	50	72	19(a)	
January ..	70.9	52.8	61.8	105.0 (b)	40.0	3/72	65.0	160.0 (c)	30.6 19/97	235.6
February ..	71.1	53.3	62.2	104.4 12/99	39.0 29/87	65.4	165.0 24/98	28.3 —/87	195.3	
March ..	67.9	50.9	59.4	99.0 7/61	35.2 31/26	63.8	150.0 7/05	27.5 30/02	190.2	
April ..	62.6	47.8	55.2	90.0 1/59	30.0 25/56	60.0	142.0 18/93	25.0 —/86	142.7	
May ..	57.5	43.9	50.7	77.8 5/21	29.2 29/02	48.6	128.0 (d)	20.0 19/02	142.5	
June ..	52.7	41.0	46.9	75.0 7/74	28.0 22/79	47.0	122.0 12/94	21.0 6/87	118.1	
July ..	52.1	39.6	45.0	72.0 22/77	27.0 18/66	45.0	121.0 12/93	18.7 16/86	129.1	
August ..	55.0	41.2	48.1	77.0 3/76	30.0 10/73	47.0	129.0 —/87	20.1 7/09	156.3	
September ..	62.6	43.2	51.0	81.7 23/26	30.0 12/41	51.7	138.0 23/93	18.3 16/26	173.4	
October ..	62.6	45.6	54.1	92.0 24/14	32.0 12/89	60.0	156.0 9/93	23.8 (e)	191.3	
November ..	65.0	48.3	57.1	98.3 26/37	35.2 5/13	63.1	154.0 19/92	26.0 1/08	218.2	
December ..	69.0	51.2	60.1	105.2 30/97	38.0 13/06	67.2	161.5 10/39	27.2 —/86	217.4	
Year { Averages	62.2	46.6	54.4	105.2	27.0	78.2	165.0	18.3	2116.3f	
Year { Extremes	—	—	—	105.2	27.0	78.2	165.0	18.3	—	

(a) Early records discarded owing to faulty instrument. (b) 27/49 and 1/00. (c) 5/86 and 13/05.
 (d) —/89 and —/93. (e) 1/86 and —/99. (f) Total for year.

HUMIDITY, RAINFALL AND DEW.

Month.	Vapour Pressure (Inches).	Rel. Hum. (%).					Rainfall (Inches).			Dew. Mean No. of Days Dew.	
		Mean 9 a.m.	Mean 9 a.m.	Highest Mean.	Lowest Mean.	Mean Monthly.	Mean No. of Days Rain.	Greatest Monthly.	Least Monthly.		Greatest in One Day.
No. of yrs. over which observations extend.	53	53	53	53	97	96	97	97	73	30	
January ..	0.328	59	72	46	1.84	10	5.91 1893	0.03 1841	2.96 30/16	0.6	
February ..	0.355	63	77	52	1.53	9	9.15 1854	0.07 1847	4.50 27/54	1.5	
March ..	0.329	67	77	58	1.76	10	7.60 1854	0.02 1843	3.27 11/32	5.0	
April ..	0.299	73	84	58	1.96	12	8.50 1925	0.07 1904	5.02 20/09	8.9	
May ..	0.264	78	89	65	1.83	13	6.37 1905	0.10 1843	3.22 14/58	12.9	
June ..	0.240	80	91	68	2.25	14	8.15 1889	0.22 1852	4.11 13/89	8.7	
July ..	0.230	80	94	72	2.15	15	6.02 1922	0.30 1850	2.51 15/22	8.0	
August ..	0.239	76	92	64	1.84	14	10.16 1858	0.23 1854	4.35 12/58	8.1	
September ..	0.252	67	85	58	2.07	16	7.14 1844	0.39 1847	2.75 18/44	5.2	
October ..	0.271	63	73	51	2.32	15	6.67 1906	0.26 1850	2.58 4/06	2.8	
November ..	0.292	60	72	50	2.44	14	8.94 1849	0.16 1868	3.07 7/40	1.1	
December ..	0.316	57	67	45	2.00	12	9.00 1875	0.11 1842	2.82 21/29	0.4	
Year { Totals	0.285	69	81	61	2.08	154	—	—	—	64.5	
Year { Averages	—	—	—	—	—	—	—	—	—	—	
Year { Extremes	—	—	—	—	—	—	10.16 8/1858	0.02 2/1843	5.02 20/4/00	—	

(a) 4.18 on 28/54 also.

§ 3. Standard Times in Australia.

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 November, 1892, an intercolonial conference of surveyors was held in Melbourne to consider, among other things, the advantages of introducing the system of standard time. In this system it was proposed to make the initial meridian that of Greenwich, and to change local standard time by whole hours according to the longitude east or west of that of Greenwich. Thus for every difference of 15° in longitude a change of one hour would be required. The minutes and seconds would then be identical everywhere.

To give effect to this proposal it was suggested that Australia should be divided into three zones, the standard times for which should be respectively the mean solar times of the meridians of 120° , 135° and 150° E. longitude, thus giving standard times 8, 9 and 10 hours respectively, ahead of Greenwich time. It was proposed that the 120° zone should comprise Western Australia, that the 135° zone should comprise South Australia and the Northern Territory, and that the 150° zone should comprise Queensland, New South Wales, Victoria and Tasmania.

The matter was also considered by several intercolonial postal conferences, and eventually in 1894 and 1895 legislation was enacted by each of the colonies in accord with the recommendations of the surveyors' conference of 1892.

In 1898 the South Australian legislature amended its earlier provision, and adopted the mean solar time of the meridian $142^\circ 30'$ E. longitude as the standard time for that colony, thus reducing the difference between the standard time of Adelaide and that of the capitals of the eastern colonies from an hour to half-an-hour, and forfeiting the great advantage of the system, namely, that the minutes and seconds should be identical throughout the world.

Particulars concerning these enactments are as follows:—

STANDARD TIMES IN AUSTRALIA.

State.	Date when Act came into Operation.	Meridian Selected.	Time Ahead of Greenwich. Hours.
New South Wales ..	1st February, 1895 ..	150° E.	10
Victoria ..	1st February, 1895 ..	150° E.	10
Queensland ..	1st January, 1895 ..	150° E.	10
South Australia ..	1st February, 1895 ..	135° E.	9
South Australia ..	1st May, 1899 ..	$142^\circ 30'$ E.	$9\frac{1}{2}$
Western Australia ..	1st December, 1895 ..	120° E.	8
Tasmania ..	1st September, 1895 ..	150° E.	10

The standard time in the Australian Capital Territory is the same as in New South Wales.

Consequent upon the opening of the Trans-Australian Railway an arrangement has been made by which the change of time between South Australia and Western Australia (namely, $1\frac{1}{2}$ hours) is divided into two changes of 45 minutes each. Going east from Kalgoorlie the first change is made at Rawlinna, 235.18 miles out, where the time is put forward by 45 minutes. The second change of the same amount is made at Tarcoola, 794.05 miles out. Thenceforward South Australian standard time is kept. The advantage of standard time has thus been still further sacrificed, as there is not now even a whole half-hour difference; the essential idea of standard zone time has to this extent, therefore, been abandoned. The State Observatories at Sydney, Melbourne, Adelaide and Perth derive time by astronomical observation. By arrangement with the Australian Broadcasting Commission observatory time-signals are broadcast in the several States at intervals during the day. In addition, the Amalgamated Wireless (Australasia) Ltd. re-broadcasts the daily time-signals of certain oversea stations.

CHAPTER III. GENERAL GOVERNMENT.

§ 1. Scheme of Parliamentary Government.

1. *General.*—A brief account of the general legislative powers of the Commonwealth and States is given in preceding issues of the Official Year Book (see No. 13, pp. 927-951, and No. 22, p. 64).

2. *Powers and Functions of the Governor-General and of the State Governors.*—A detailed statement of the powers and functions of the Governor-General and of the State Governors will be found in preceding issues of the Official Year Book (see No. 18, pp. 78-80).

3. *Governor-General and State Governors.*—The present Governor-General is General the Right Honorable Alexander Gore Arkwright, Baron Gowrie, V.C., P.C., G.C.M.G., C.B., D.S.O. He assumed office on the 23rd January, 1936.

The following is a list of the Governors of the various States of the Commonwealth:—

New South Wales	..	Captain the Rt. Hon. LORD WAKEHURST, K.C.M.G.
Victoria	..	Major-General SIR WINSTON JOSEPH DUGAN, K.C.M.G., C.B., D.S.O.
Queensland	..	Colonel the Rt. Hon. SIR LESLIE ORME WILSON, G.C.S.I., G.C.M.G., G.C.I.E., D.S.O.
South Australia	..	SIR CHARLES MALCOLM BARCLAY-HARVEY, K.C.M.G.
Western Australia	..	Lieut.-Governor—The Hon. SIR JAMES MITCHELL, K.C.M.G.
Tasmania	..	SIR ERNEST CLARK, K.C.B., K.C.M.G., C.B.E.

4. *The Cabinet and Executive Government.*—(i) *General.* In both the Commonwealth and the State Legislatures the forms of government have been founded on their prototypes in the Imperial Government, and the relations established between the Ministry and the representatives of the people are in accordance with those prevailing in Great Britain. The executive powers in the Commonwealth are vested in the Governor-General in Council, and in the State Governments in the Governor in Council. The Executive Council in the Commonwealth and in the States is practically co-extensive with a group of departmental chiefs, who are usually spoken of as the Cabinet, and who change with the rise and fall of party majorities. In the Commonwealth Government, however, as well as in the States of Victoria and Tasmania, the Cabinet on leaving office remain members of the Executive Council, though they no longer attend its meetings, and it is in fact an essential feature of the Cabinet system of Government that they should not do so, except to assist the Governor in transacting purely formal business, or to advise on non-political questions.

(ii) *The Executive Council.* This body is composed of the Governor and the Ministers of State holding office for the time being. The latter are sworn both as Executive Councillors and as Ministers controlling the different administrative departments. The meetings are official in character: they are presided over by the Governor-General (or Governor) and are attended by the clerk, who keeps a formal record of the proceedings. At these meetings the decisions of the Cabinet are put into official form and made effective, appointments are confirmed, resignations accepted, proceedings ordered, and notices and regulations published.

(iii) *The Appointment of Ministers and of Executive Councillors.* Although it is technically possible for the Governor to make and unmake cabinets at his pleasure, under all ordinary circumstances his apparent liberty in choosing his Executive Council is virtually restricted by the operation of constitutional machinery. When a Ministry is defeated in Parliament or at the polls, the procedure both in the Commonwealth and the State Parliaments generally, though not invariably, follows that prevailing in the Imperial Parliament. 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 is necessary to add that subsequent amending legislation has, in most of the States, obviated the necessity of responsible Ministers vacating their seats on appointment to office.

(iv) *Ministers in Upper and Lower Houses.* The subjoined table shows the number of Ministers with seats in the Upper or Lower Houses of each Parliament in September, 1940 :—

COMMONWEALTH PARLIAMENTS—MINISTERS IN UPPER OR LOWER HOUSES, 1940.

Ministers with Seats in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
The Upper House ..	4	2	4	(a)	2	1	2	15
The Lower House ..	12	13	8	10	4	7	7	61
Total ..	16	15	12	10	6	8	9	76

(a) Abolished in 1922.

(v) *The Cabinet.* (a) *General.* The meetings of this body are private and deliberative. The actual Ministers of the day are alone present, no records of the meetings transpire, and no official notice is taken of the proceedings. The members of the Cabinet, being the leaders of the party in power in Parliament, control the trend of legislation, and must retain the confidence of the people and also of the Governor-General (or Governor), to whom they act as an advising body. They also in effect wield, by virtue of their seats on the Executive Council, the whole executive force of the community. In summoning, proroguing, or dissolving Parliament, the Governor-General (or Governor) is usually guided by the advice tendered him by the Cabinet, though legally in no way bound to accept such advice.

(b) *Commonwealth Ministers of State.* A statement showing the names of Ministers of State who have held office from the inauguration of the Commonwealth Government to 1925 will be found in Official Year Book No. 18, pp. 82 and 83.

(c) *State Ministries.* A list of the members of the Ministry in each State in September, 1940, will be found in § 3 of this Chapter.

5. *Number and Salary of Members of the Legislatures.*—The following table shows the number and annual salary of members in each of the legislative chambers in September, 1940 :—

MEMBERS OF COMMONWEALTH AND STATE PARLIAMENTS, AND ANNUAL SALARIES, 1940.

Members in—	C'wealth.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
MEMBERS.								
Upper House ..	36	60	34	(a)	20	30	18	198
Lower House ..	75	90	65	62	39	50	30	411
Total ..	111	150	99	62	59	80	48	609

ANNUAL SALARY.

	£	£	£	£	£	£	£	
Upper House ..	1,000	..	200	(a)	400	600	(b)370-500	..
Lower House ..	1,000	875	500	650	400	600	(b)400-500	..

(a) Abolished in 1922.

(b) According to area of electorate and distance from the Capital.

The use of the expressions "Upper House" and "Lower House" in the statement above, though not justified constitutionally, is convenient, inasmuch as the legislative chambers are known by different names in the Commonwealth and in some of the States

6. *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 Act. In the States, laws are enacted in the name of the Sovereign by and with the consent of the Legislative Council (except in Queensland) and Legislative Assembly or House of Assembly. The Governor-General

or the State Governor acts as Viceroy as regards giving the Royal Assent to or vetoing Bills passed by the Legislatures, or reserving them for the special consideration of the Sovereign. In the States, the Councils and Assemblies 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 Constitution. 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. **Qualifications for Membership and for Franchise.**—The conspectus in § 4 of "General Government" in Official Year Book No. 13 contains particulars, as in 1920, relating to the legislative chambers in the Commonwealth and State Parliaments, and shows concisely the qualifications necessary for membership and for the franchise in each House. (These are, in the main, applicable in 1940, but it must be remembered that Queensland abolished the Upper House in 1922.) It has further to be remembered that in 1925 the Commonwealth Parliament passed an Act removing the disqualification on racial grounds from (a) natives of British India and (b) persons who have become naturalized. Disqualification of persons otherwise eligible, either as members or voters, is generally on the usual grounds of being of unsound mind or attainted of treason, being convicted of certain offences, and, as regards membership, on the grounds of holding a place of profit under the Crown, being pecuniarily interested in a Government contract except as a member of an incorporated company of more than twenty-five persons, or being an undischarged bankrupt.

2. **The Commonwealth Government.**—The Senate consists of 36 members, six being returned by each of the original federating States. Members of this Chamber are elected for a term of six years, but by a provision in the Constitution half the members retire at the end of every third year, although they are eligible for re-election. In accordance with the Constitution, the total number of members of the House of Representatives must be as nearly as possible double that of the Senate. In the House of Representatives the States are represented on a population basis, and the numbers in September, 1940, were as follows:—New South Wales, 28; Victoria, 20; Queensland, 10; South Australia, 6; Western Australia, 5; Tasmania, 5; Northern Territory, 1—total, 75. The member representing the Northern Territory may join in the debates but is not entitled to vote, except on a motion for the disallowance of any ordinance of the Territory or on any amendment of any such motion. 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. In elections for Senators, the whole State constitutes the electorate. For the purpose 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. In both Houses members are elected by universal adult suffrage. Further information regarding the Senate and the House of Representatives is given in earlier issues of the Official Year Book.

3. **Commonwealth Elections.**—There have been fifteen complete Parliaments since the inauguration of Federation. The fifth Parliament, which was opened on the 9th July, 1913, was dissolved on the 30th July, 1914, in somewhat unusual circumstances. Under Section 57 of the Constitution, it is provided that, should the Senate fail to pass, or pass with amendments, any proposed law previously passed by the House of Representatives, and should the latter House, after an interval of three months, again pass the proposed law, with or without the amendments of the Senate, and the Senate for a second time reject it or pass it with amendments to which the lower House will not agree, then the Governor-General may dissolve the two Houses simultaneously. For the first time in the history of the Commonwealth this deadlock between the Senate and the House of Representatives occurred in the second session of the fifth Parliament, and, in accordance with the section of the Constitution referred to above, both Houses were dissolved by the Governor-General. Until 1927 the Parliament met at Melbourne; it now meets at Canberra, the first meeting at Parliament House, Canberra, being opened by H.R.H. the Duke of York, on the 9th May, 1927. The first session of the fifteenth Parliament

opened on the 30th November, 1937. Particulars regarding Commonwealth elections since 1925 will be found in the following table:—

COMMONWEALTH ELECTIONS.

Date.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted.		
	Males.	Fem.	Total.	Males.	Fem.	Total.	Males.	Fem.	Total.
THE SENATE.									
14th November, 1925	1,656,286	1,645,730	3,302,016	1,515,668	1,499,345	3,014,953	91.51	91.11	91.31
17th November, 1928	1,723,552	1,721,214	3,444,766	1,617,752	1,606,748	3,224,500	93.86	93.35	93.61
12th October, 1929	1,773,014	1,769,936	3,542,950	*	*	*			
19th December, 1931	1,827,079	1,822,875	3,649,954	1,741,163	1,727,140	3,468,303	95.30	94.75	95.02
15th September, 1934	1,954,339	1,948,338	3,902,677	1,862,749	1,845,829	3,708,578	95.31	94.74	95.03
23rd October, 1937	2,043,212	2,036,826	4,080,038	1,963,979	1,957,358	3,921,337	96.12	96.10	96.11

* No election.

**THE HOUSE OF REPRESENTATIVES.
(CONTESTED ELECTORATES.)**

14th November, 1925	1,635,842	1,632,897	3,268,739	1,499,006	1,488,194	2,987,200	91.63	91.14	91.39
17th November, 1928	1,450,202	1,463,951	2,914,153	1,362,675	1,366,137	2,728,812	93.96	93.32	93.64
12th October, 1929	1,557,525	1,560,505	3,118,030	1,479,100	1,478,447	2,957,547	94.96	94.74	94.85
19th December, 1931	1,724,730	1,733,343	3,458,073	1,643,604	1,642,870	3,286,474	95.30	94.78	95.04
15th September, 1934	1,930,418	1,934,021	3,864,439	1,843,949	1,833,774	3,677,723	95.52	94.82	95.17
23rd October, 1937	1,928,786	1,919,234	3,848,020	1,854,770	1,844,499	3,699,269	96.16	96.11	96.13

The percentage of electors who exercised the franchise at each election rose from 53.04 for the Senate and 55.69 for the House of Representatives in 1901 to 77.69 and 78.30 respectively in 1917. The next election in 1919 showed a considerable falling off, and in 1922 the decrease was still more marked, the respective percentages for that year being 57.95 and 59.36, or very little more than those for 1901. Compulsory voting was introduced prior to the election in 1925, and an exceedingly heavy vote (over 91 per cent.) was cast in that year. At each succeeding election increases in percentage have been recorded.

4. **Commonwealth Referenda.**—According to Section 128 of the Constitution, any proposed law for the alteration of the Constitution must, in addition to being passed by an absolute majority of each House of Parliament, be submitted to a referendum of the electors in each State, and must further be approved by a majority of the States and of the electors who voted before it can be presented for Royal Assent. So far eighteen proposals have been submitted to referendum and the consent of the electors has been received in three cases only, the first in relation to the election of Senators in 1906, and the other two in respect of State Debts—one in 1910 and the other in 1928. Details of the various referenda and the voting thereon were given in previous issues of the Official Year Book (see No. 18, p. 87, and No. 31, p. 67).

5. **The Parliament of New South Wales.**—(i) *Constitution.* The Parliament of New South Wales consists of two Chambers, the Legislative Assembly and the Legislative Council. The Assembly consists of ninety 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. 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, the Council was reconstituted and became a House of sixty members to serve without remuneration for a term of twelve years, with one-quarter of the members retiring every third year. The electorate comprises members of both Chambers, who vote as a single electoral body at simultaneous sittings of both Chambers. At the first elections in 1933, four groups of fifteen members were elected to serve respectively twelve years, nine years, six years, and three years. Any person resident for at least three years in the Commonwealth and entitled to vote at the election of members of the Legislative Assembly is eligible for election as a member of the Council, if nominated by two electors, an elector being a member of either of the two Houses for the time being.

(ii) *Particulars of Elections.* Since the introduction of responsible government in New South Wales there have been thirty-one complete Parliaments, the first of which

opened on the 22nd May, 1856, and was dissolved on the 19th December, 1857, while the thirty-first was dissolved on the 24th February, 1938. The thirty-second Parliament opened on the 12th April, 1938. 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 the later appeals to the people. Particulars of voting at elections from 1925 to 1938 are given below :—

LEGISLATIVE ASSEMBLY ELECTIONS, NEW SOUTH WALES.

Year.	Electors Qualified to Vote.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1925	678,749	660,331	1,339,080	489,126	435,853	924,979	72.06	66.00	69.07
1927	714,886	694,607	1,409,493	591,820	558,957	1,150,777	83.79	81.25	82.54
1930	724,471	716,314	1,440,785	682,747	673,676	1,356,423	95.09	94.79	94.94
1932	739,009	725,999	1,465,008	690,094	676,993	1,367,087	96.42	96.37	96.39
1935	769,220	759,493	1,528,713	654,383	640,369	1,294,752	96.09	95.60	95.85
1938	803,517	804,316	1,607,833	608,727	606,767	1,215,494	96.15	95.41	95.78

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, and, as the table above shows, the percentage of electors who voted in contested electorates rose to over 96 in 1932.

The franchise was extended to women (Women's Franchise Act) in 1902, and was exercised for the first time in 1904.

6. **The Parliament of Victoria.**—(i) *Constitution.* Both of the Victorian legislative Chambers are elective bodies, but there is a considerable difference in the number of members of each House, as well as in the qualifications necessary for members and electors. The number of members in the Upper House is thirty-four, and in the Lower House, sixty-five. In the Legislative Council the tenure of the seat is for six years, but one member for each of the seventeen provinces retires every third year. Members of the Legislative Assembly are elected for the duration of Parliament, which is limited to three years. Single voting is observed in elections held for either House, plurality of voting having been abolished for the Legislative Assembly in 1899 and for the Legislative Council in 1937; an elector, however, qualified in more than one district, may select the one for which he desires to record his vote. A preferential system of voting (see Official Year Book No. 6, p. 1182) was adopted for the first time in Victoria at the election held in November, 1911. Compulsory voting was first observed at elections for the Legislative Assembly, 1927, and for the Legislative Council, 1937.

(ii) *Particulars of Elections.* Since the introduction of responsible government in Victoria there have been thirty-three complete Parliaments, the first of which opened on the 21st November, 1856, and closed on the 9th August, 1859, while the thirty-third was dissolved on the 13th February, 1940. The thirty-fourth Parliament was opened on the 1st May, 1940. Particulars of voting at elections during the years 1922 to 1940 are given in the subjoined table :—

VICTORIAN ELECTIONS.

LEGISLATIVE COUNCIL.

Year.	Electors Enrolled.	Electors Enrolled In Contested Electorates.	Electors who Voted.	Percentage of Electors who Voted in Contested Electorates.
1922	353,440	161,731	47,008	29.07
1925	399,510	172,875	56,033	32.41
1928	444,278	268,164	85,372	31.84
1931	470,349	239,975	93,244	38.86
1934	469,395	160,980	47,375	29.43
1937	447,694	265,194	208,925	78.78

VICTORIAN ELECTIONS—*continued.*

LEGISLATIVE ASSEMBLY.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1924	433,357	467,070	900,427	190,153	180,810	370,963	63.02	55.72	59.24
1927	480,485	512,726	993,211	377,941	402,458	780,399	92.02	91.51	91.76
1929	496,996	532,174	1,029,170	308,532	330,836	639,368	94.11	93.36	93.72
1932	510,809	544,492	1,055,301	335,512	351,530	687,042	94.60	93.82	94.20
1935	532,619	566,632	1,099,251	415,081	438,389	853,470	95.00	93.82	94.39
1937	550,618	585,978	1,136,596	383,507	413,923	797,430	94.22	93.72	93.96
1940	565,002	597,965	1,162,967	377,644	408,715	786,359	93.65	93.19	93.41

The franchise was extended to women by the Adult Suffrage Act 1908, while voting at elections was made compulsory for the Legislative Assembly in 1925 and for the Legislative Council in 1935.

7. *The Parliament of Queensland.*—(i) *Constitution.* As pointed out previously the Legislative Council in Queensland was abolished in 1922, the date of Royal Assent to the Act being the 23rd March, 1922. The Legislative Assembly is composed of sixty-two members, and the State is divided into that number of electoral districts. The Electoral Districts Act of 1931, assented to on the 1st October, 1931, provided that from and after the end of the twenty-fifth Parliament (dissolved on the 19th April, 1932) the number of members and electoral districts should be reduced from seventy-two to sixty-two. A system of optional preferential voting is in operation. (See Official Year Book No. 6, p. 1183.)

(ii) *Particulars of Elections.* Since the establishment of responsible government in Queensland there have been twenty-seven complete Parliaments, the last of which was dissolved on the 5th March, 1938. 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 the 29th May, 1860, and delivered the Opening Address.

At the elections held in May, 1915, the principle of compulsory voting was introduced for the first time in Australia. Of the number of electors enrolled at the 1938 elections, 92.51 per cent. went to the polls. Statistics regarding elections during the years 1923 to 1938 are given below:—

QUEENSLAND LEGISLATIVE ASSEMBLY ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1923	257,001	219,476	476,477	194,287	174,980	369,267	80.72	83.96	82.23
1926	253,571	224,526	478,097	209,139	191,916	401,055	89.77	90.13	89.94
1929	270,327	239,672	509,999	228,601	209,647	438,248	89.69	91.45	90.52
1932	274,986	250,958	525,944	236,266	220,628	456,894	92.59	93.14	92.86
1935	303,018	272,270	575,288	245,331	225,427	470,758	92.55	92.89	92.71
1938	318,402	288,157	606,559	280,841	258,196	539,037	92.09	92.97	92.51

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.

8. The Parliament of South Australia.—(i) *Constitution.* In this State there is a Legislative Council composed of twenty members and a House of Assembly with thirty-nine members, both Chambers being elective. The State is divided into five districts, which return four members each to the Legislative Council, two of whom retire alternately. For the House of Assembly, thirty-nine districts return one member each. Prior to 1938 there were forty-six members representing nineteen districts. A system of preferential voting is in operation but voting is not compulsory.

(ii) *Particulars of Elections.* Since the inauguration of responsible government in South Australia there have been twenty-eight complete Parliaments, the first of which was opened on the 22nd April, 1857. The twenty-eighth Parliament opened on the 6th July, 1933, and its duration was extended from three to five years by the Constitution (Quinquennial Parliament) Act 1933. It was dissolved on the 11th February, 1938, and the twenty-ninth Parliament was opened on the 19th May, 1938. Quinquennial Parliaments were repealed by the Constitution Act Amendment Act (No. 2), 1939, and the three-year term was reverted to. Particulars of voting at the last six elections are given below :—

SOUTH AUSTRALIAN ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
LEGISLATIVE COUNCIL.									
1921	69,986	23,062	93,048	38,597	11,309	49,906	64.23	53.96	61.57
1924	67,429	22,018	89,447	36,626	10,492	47,118	65.79	54.94	63.02
1927	100,376	37,395	137,771	46,686	17,742	64,428	67.55	59.91	65.26
1930	(a)	(a)	133,274	(a)	(a)	100,040	(a)	(a)	75.06
1933	(a)	(a)	133,152	(a)	(a)	25,309	(a)	(a)	64.21
1938	92,109	37,026	129,135	67,691	23,474	91,165	73.49	63.40	70.60
HOUSE OF ASSEMBLY.									
1921	134,091	137,931	272,022	91,451	77,600	169,051	70.10	57.64	63.77
1924	141,944	147,899	289,843	87,712	73,453	161,165	69.65	56.05	62.71
1927	152,997	156,591	309,588	110,127	104,611	214,738	80.64	74.31	77.43
1930	(a)	(a)	325,244	(a)	(a)	222,819	(a)	(a)	71.36
1933	(a)	(a)	338,576	(a)	(a)	182,693	(a)	(a)	59.45
1938	(a)	(a)	364,884	(a)	(a)	223,136	(a)	(a)	63.31

(a) Not available.

South Australia was the first of the States to grant women's suffrage (under the Constitution Amendment Act 1894), the franchise being exercised for the first time at the Legislative Assembly election on the 25th April, 1896.

9. The Parliament of Western Australia.—(i) *Constitution.* In this State both Chambers are elective. For the Legislative Council there are thirty 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 fifty members, one member being returned by each of the fifty electoral districts. Members of the Legislative Assembly are elected for three years.

(ii) *Particulars of Elections.* Since the establishment of responsible government in Western Australia there have been sixteen complete Parliaments, the first of which was opened on the 30th December, 1890, while the seventeenth Parliament was elected on

the 18th March, 1939. The preferential system of voting in use in Western Australia is described in Official Year Book No. 6, p. 1184. Particulars relating to more recent Assembly and Council elections are given in the tables following.

WESTERN AUSTRALIAN ELECTIONS.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
LEGISLATIVE COUNCIL.									
1928	54,822	19,076	73,898	24,877	8,151	33,028	51.99	46.75	50.59
1930	54,651	18,927	73,578	20,198	6,252	26,450	51.58	48.50	50.81
1932	57,454	19,889	77,343	17,145	5,508	22,653	56.29	48.29	54.16
1934	62,168	22,323	84,491	31,590	10,189	41,779	53.39	47.23	51.75
1936	63,407	21,987	85,394	18,479	6,394	24,873	45.03	40.03	43.62
1938	62,992	23,419	86,411	19,132	6,971	26,103	52.64	45.57	50.54

LEGISLATIVE ASSEMBLY.

1924	101,717	88,152	189,869	55,591	43,800	99,391	66.00	59.00	62.32
1927	113,072	97,877	210,949	76,307	66,199	142,506	74.32	72.42	73.42
1930	122,576	107,500	230,076	75,206	63,807	139,013	75.44	73.30	74.44
1933	124,776	112,419	237,195	96,210	89,802	186,012	90.23	91.00	90.60
1936	130,065	117,400	247,465	71,734	64,575	136,309	71.95	68.22	70.13
1939	138,240	127,747	265,987	104,228	101,510	205,738	89.01	91.07	90.01

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.

(iii) *Secession Referendum.* On the 8th April, 1933, the people of Western Australia voted overwhelmingly in favour of the State withdrawing from the Federal Commonwealth, the voting being:—In favour, 138,653; not in favour, 70,706.

10. **The Parliament of Tasmania.**—(i) *Constitution.* In Tasmania there are two legislative Chambers—the Legislative Council and the House of Assembly, both bodies being elective. The Council consists of eighteen members, elected for six years and returned from fifteen districts, Hobart returning three, Launceston two, and the remaining thirteen districts sending one member each. Three members retire annually, and the Council cannot be dissolved as a whole. There are five House of Assembly districts, corresponding to the Commonwealth electoral divisions, each returning six members, who are elected under a system of proportional representation which first came into force at the 1909 elections (see Official Year Book No. 6, p. 1185). The life of the Assembly was extended from three to five years by the Constitution Act 1936.

In 1924 and again in 1925 the House of Assembly contested, with at least temporary success, the power of the Legislative Council to amend money bills. The matter was settled by the Constitution Act 1926, which provides that all money bills shall originate in the Assembly, that all money votes shall be recommended by the Governor, and that the Council may amend bills other than those for appropriating public moneys or fixing a rate for income or land tax. The Council has no power to insert a provision for the appropriation of money or to impose or increase any burden on the people.

(ii) *Particulars of Elections.* The first Tasmanian Parliament opened on 2nd December, 1856, and closed on 8th May, 1861. There have been twenty-five complete Parliaments since the inauguration of responsible government. Particulars of the voting at the last six elections for the House of Assembly are given hereunder :—

TASMANIAN ELECTIONS, HOUSE OF ASSEMBLY.

Year.	Electors Enrolled.			Electors who Voted.			Percentage of Electors who Voted in Contested Electorates.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
1922	54,958	55,591	110,549	38,457	31,295	69,752	69.96	56.30	63.09
1925	56,667	58,234	114,901	41,322	35,959	77,281	72.92	61.81	67.25
1928	55,058	56,898	111,956	46,769	44,910	91,679	84.94	78.94	81.90
1931	59,024	59,706	118,730	56,674	56,105	112,779	96.02	93.97	94.99
1934	63,841	63,840	127,681	60,623	59,999	120,622	94.96	93.98	94.47
1937	66,223	65,778	132,001	62,880	61,580	124,460	94.95	93.62	94.29

The present members of the Legislative Council have been elected at various dates and the following particulars are given of the last contested elections in 1939 :—Number of electors on the roll, 12,023 ; number of votes recorded, 10,112 ; percentage of persons who voted to the number on the roll, 84.11.

The suffrage was granted to women under the Constitution Amendment Act 1903 and compulsory voting came into force on the passing of the Electoral Act in 1928.

§ 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 late Marquis of Linlithgow, then Earl of Hopetoun, Governor-General. It was opened on the 9th May following 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., being Prime Minister.

The following table gives 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

(a) On this occasion, the Governor-General, acting on the advice of the Ministry, and under Section 57 of the Constitution, granted a dissolution of both the Senate and the House of Representatives, this being the only occasion on which a dissolution of both Houses has occurred.

2. **Governors-General and Ministries.**—The following statements show the names of the several Governors-General, and the Ministries which have directed the administration of the affairs of the Commonwealth since its inception :—

(a) GOVERNORS-GENERAL.

- Rt. Hon. EARL OF HOPETOUN (afterwards MARQUIS OF LINLITHGOW), K.T., G.C.M.G., G.C.V.O. From 1st January, 1901, to 9th January, 1903.
 Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 17th July, 1902, to 9th January, 1903 (Acting).
 Rt. Hon. HALLAM, BARON TENNYSON, G.C.M.G. From 9th January, 1903, to 21st January, 1904.
 Rt. Hon. HENRY STAFFORD, BARON NORTHCOLE, 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, G.C.B., G.C.M.G., G.C.V.O., &c. From 9th September, 1908, to 31st July, 1911.
 Rt. Hon. THOMAS, BARON DENMAN, 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 LEFPE, G.C.M.G. From 6th October, 1920, to 8th October, 1925.
 Rt. Hon. JOHN LAWRENCE, BARON STONEHAVEN, G.C.M.G., D.S.O. From 8th October, 1925, to 22nd January, 1931.
 Lieut.-Colonel the Rt. Hon. ARTHUR HERBERT TENNYSON, BARON SOMERS, K.C.M.G., D.S.O., M.C. From 3rd October, 1930, to 22nd January, 1931 (Acting).
 Rt. Hon. SIR ISAAC ALFRED ISAACS, 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. From 23rd January, 1936.

(b) 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 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.

(c) MENZIES GOVERNMENT,* from 14th March, 1940.

DEPARTMENTS.	MINISTERS.
Prime Minister, Minister for Defence Co-ordination, Minister for Information and Minister for Munitions	The Rt. Hon. ROBERT GORDON MENZIES, K.C.
Minister for Commerce and Minister for the Navy	The Hon. ARCHIE GALBRAITH CAMERON.
Attorney-General and Minister for Industry	The Rt. Hon. WILLIAM MORRIS HUGHES, K.C.
Minister for the Army	Senator the Hon. PHILIP ALBERT MARTIN MCBRIDE.
Minister for the Minister for Commerce	Senator the Hon. GEORGE MCLEAY.
Minister for Trade and Customs	The Hon. HAROLD VICTOR CAMPBELL THORBY.
Postmaster-General and Minister for Health	The Hon. PERCY CLAUDE SPENDER, K.C.
Treasurer	Senator the Hon. HATTIL SPENCER FOUL.
Minister for the Interior	The Hon. SIR FREDERICK HAROLD STEWART.
Minister for Supply and Development and Minister for Social Services	The Hon. JOHN MCEWEN.
Minister for External Affairs	The Hon. ARTHUR WILLIAM FADDEN.
Minister for Air and Civil Aviation, Minister assisting the Treasurer and Minister assisting the Minister for Supply and Development	Senator the Hon. HERBERT BRAYLEY COLLETT, C.M.G., D.S.O., V.D.
Vice-President of the Executive Council, Minister assisting the Minister for Repatriation and Minister in Charge of War Service Homes	The Hon. HORACE KEYWORTH NOCK.
Minister assisting the Prime Minister, Minister in Charge of External Territories and Minister assisting the Minister for the Interior	

* As at 21st September, 1940, the date of the General Election.

3. **State Ministries.**—The names of the members of the Ministries in each State in September, 1940, are shown in the following statement. The date on which each Ministry was sworn in is stated in parenthesis :—

STATE MINISTERS, 1940.

NEW SOUTH WALES (5th August, 1939).

<p><i>Premier</i>— THE HON. A. MAIR.</p> <p><i>Deputy Premier and Minister for Transport</i>— LIEUT.-COL. THE HON. M. F. BRUXNER, D.S.O.</p> <p><i>Attorney-General and Vice-President of the Executive Council</i>— THE HON. SIR HENRY MANNING, K.B.E., K.C., M.L.C.</p> <p><i>Minister for Education</i>— THE HON. D. H. DRUMMOND.</p> <p><i>Secretary for Mines and Minister for Forests</i>— THE HON. R. S. VINCENT.</p> <p><i>Secretary for Public Works and Minister for Local Government</i>— THE HON. L. O. MARTIN.</p>	<p><i>Minister for Labour and Industry and Social Services</i>— THE HON. G. C. GOLLAN.</p> <p><i>Secretary for Lands</i>— THE HON. C. A. SINCLAIR.</p> <p><i>Minister for Agriculture</i>— MAJOR THE HON. A. D. REID, M.C.</p> <p><i>Colonial Treasurer</i>— THE HON. A. RICHARDSON.</p> <p><i>Assistant Ministers</i>— THE HON. H. L. PRIMROSE. THE HON. M. E. MANFRED, M.L.C.</p> <p><i>Minister of Justice</i>— THE HON. V. H. TREATT, M.M.</p> <p><i>Colonial Secretary</i>— THE HON. A. U. TONKING.</p> <p><i>Minister for Health</i>— CAPT. THE HON. H. P. FITZSIMONS.</p>
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VICTORIA (2nd April, 1935).

<p><i>Premier, Treasurer, and Solicitor-General</i>— THE HON. A. A. DUNSTAN.</p> <p><i>President of the Board of Land and Works, Commissioner of Crown Lands and Survey, and Minister of Forests</i>— THE HON. A. E. LIND.</p> <p><i>Minister of Water Supply, and Minister-in-Charge of Electrical Undertakings</i>— THE HON. F. E. OLD.</p> <p><i>Minister of Agriculture, Minister of Mines, and a Vice-President of the Board of Land and Works</i>— THE HON. E. J. HOGAN.</p> <p><i>Chief Secretary and Attorney-General</i>— THE HON. H. S. BAILEY.</p> <p><i>Minister of Labour</i>— THE HON. E. J. MACKRELL.</p>	<p><i>Minister of Transport, and a Vice-President of the Board of Land and Works</i>— THE HON. H. J. T. HYLAND.</p> <p><i>Minister of Public Instruction and Minister of Public Health</i>— THE HON. SIR JOHN HARRIS, K.B.E., M.L.C.</p> <p><i>Commissioner of Public Works, Minister-in-Charge of Immigration, and a Vice-President of the Board of Lands and Works</i>— THE HON. SIR GEORGE GOUDIE, M.L.C.</p> <p><i>Ministers without Portfolios</i>— THE HON. G. J. TUCKETT, M.L.C. THE HON. H. PYE, M.L.C. THE HON. N. A. MARTIN.</p>
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QUEENSLAND (17th June, 1932).

<p><i>Premier and Chief Secretary</i>— THE HON. W. FORGAN SMITH.</p> <p><i>Treasurer</i>— THE HON. F. A. COOPER.</p> <p><i>Secretary for Health and Home Affairs</i>— THE HON. E. M. HANLON.</p> <p><i>Secretary for Agriculture and Stock</i>— THE HON. F. W. BULCOCK.</p> <p><i>Attorney-General</i>— THE HON. J. MULLAN.</p>	<p><i>Secretary for Public Works and Secretary for Public Instruction</i>— THE HON. H. A. BRUCE.</p> <p><i>Secretary for Labour and Industry</i>— THE HON. T. A. FOLEY.</p> <p><i>Minister for Transport</i>— THE HON. J. LARCOMBE.</p> <p><i>Secretary for Mines</i>— THE HON. D. A. GLEDSON.</p> <p><i>Secretary for Public Lands</i>— THE HON. E. J. WALSH.</p>
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STATE MINISTERS—*continued.*

SOUTH AUSTRALIA (5th November, 1938).

Premier, Treasurer, and Minister of Immigration—

THE HON. T. PLAYFORD.

Chief Secretary, Minister of Mines, and Minister of Health—

THE HON. A. L. MCEWIN, M.L.C.

Attorney-General, Minister of Education, and Minister of Industry and Employment—

THE HON. S. W. JEFFRIES.

Commissioner of Crown Lands, Minister of Repatriation, and Minister of Irrigation—

THE HON. R. J. RUDALL.

Commissioner of Public Works, Minister of Railways, Minister of Marine, and Minister of Local Government—

THE HON. M. McINTOSH.

Minister of Agriculture and Minister of Afforestation—

THE HON. A. P. BLESING, M.L.C.

WESTERN AUSTRALIA (18th April, 1939).

Premier, Treasurer, and Minister for Forests—

THE HON. J. C. WILLOCK.

Minister for Works, Water Supplies, and Employment—

THE HON. H. HILLINGTON.

Minister for Lands and Agriculture—

THE HON. F. J. S. WISE.

Minister for Labour and Industrial Development—

THE HON. A. R. G. HAWKE.

Minister for Mines and Health—

THE HON. A. H. PANTON.

Chief Secretary and Minister for Education—

THE HON. W. H. MITSON, M.L.C.

Minister for Justice and Railways—

THE HON. E. NULSEN.

Minister for the North-west—

THE HON. A. A. M. COVERLEY.

Honorary Minister—

THE HON. E. H. GRAY, M.L.C.

TASMANIA (18th December, 1939).

Premier and Minister for Education—

THE HON. R. COSGROVE.

Treasurer—

THE HON. E. DWYER-GRAY.

Minister for Lands, Works, and Mines—

THE HON. T. H. DAVIES, D.S.O., M.C.

Minister for Agriculture, Forestry, and Agricultural Bank—

THE HON. T. G. de L. D'ALTON.

Chief Secretary and Minister for Transport—

THE HON. E. BROOKER.

Attorney-General—

THE HON. J. McDONALD, M.L.C.

Honorary Ministers—

THE HON. J. F. GAHA, M.L.C.
(*Minister for Health*).

THE HON. J. L. MADDEN.

THE HON. G. G. BECKER.

4. *The Course of Legislation.*—The actual legislation by the Commonwealth Parliament up to the end of the 1939 session is indicated in alphabetical order in "Vol. XXXVII. of the Acts of the Parliament of the Commonwealth of Australia, passed during the year 1939, with Tables, Appendix and Indexes." A "Chronological Table of Acts passed from 1901 to 1939, showing how they are affected by subsequent legislation or

lapse of time" is also given, and further "A Table of Commonwealth Legislation," for the same period, "in relation to the several provisions of the Constitution," is furnished. Reference should be made to these for complete information. In previous issues of the Official Year Book an analytic table was included showing the nature of Commonwealth legislation in force at the end of the latest year available. A classification of legislation, according to its relation to the several provisions of the Constitution, up to the end of the year 1928 will be found in No. 22, pp. 76-84.

§ 4. Cost of Parliamentary Government.

The following statement shows the cost of parliamentary government in the Commonwealth and in each State, as well as the cost per head of population, for the year ended 30th June, 1939. 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 interests, and carried out at the request of the Government.

COST OF PARLIAMENTARY GOVERNMENT, 1938-39.

Particulars.	C'wth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
	£	£	£	£	£	£	£	£
1. <i>Governor-General or Governor—</i>								
Governor's salary	10,000	5,000	5,000	3,000	5,000	(a)2,000	3,000	33,000
Other salaries	2,132	3,306	760	1,793	1,530	855	829	11,205
Other expenses, including maintenance of house and grounds	b 36,707	5,825	6,332	4,409	616	2,307	2,738	58,934
Total	48,839	14,131	12,092	9,202	7,146	5,162	6,567	103,139
2. <i>Executive Council—</i>								
Salaries of Officers	(c)	445	589	30	..	250	(d)	1,314
Other expenses	(e)	47	40	59	..	..	(d)	146
Total	(c)	492	629	89	..	250	(d)	1,460
3. <i>Ministry—</i>								
Salaries of Ministers	19,325	23,420	11,250	11,754	7,750	8,160	6,500	88,159
Travelling expenses	3,520	..	(e)	..	..	3,451	1,787	8,758
Other	569	1,457	(e)	..	..	..	699	2,725
Total	23,414	24,877	11,250	11,754	7,750	11,611	8,986	99,642
4. <i>Parliament—</i>								
A. <i>Upper House :</i>								
President and Chairman of Committees	2,000	2,050	1,149	..	800	1,800	300	8,099
Allowance to members	36,170	..	5,981	..	6,800	16,940	7,675	73,566
Railway passes	5,760	11,666	(f)9,000	..	1,226	4,274	1,144	33,070
Postage for members	1,850	..	238	..	56	140	(e)	2,284
B. <i>Lower House :</i>								
Speaker and Chairman of Committees	2,000	2,790	2,288	1,694	1,395	1,800	350	12,317
Allowance to members	74,901	68,668	27,863	34,250	12,943	28,058	11,825	258,508
Railway passes	12,000	18,554	(g)	12,828	2,399	7,050	1,717	54,539
Postage for members	3,858	2,685	1,212	2,537	299	350	(e)	10,941
Carried forward, Parliament	138,539	106,413	47,731	51,309	25,909	60,412	23,011	453,324

COST OF PARLIAMENTARY GOVERNMENT—*continued.*

Particulars.	C'wth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
	£	£	£	£	£	£	£	£
4. <i>Parliament—continued.</i>								
Brought forward ..	138,539	106,413	47,731	51,309	25,909	60,412	23,011	453,324
C. <i>Both Houses:</i>								
Standing Committee on Public Works—								
Remuneration of members ..	..	..	1,491	..	1,900	..	285	3,676
Salaries of staff and contingencies ..	..	697	735	..	1,213	..	50	2,695
Printing—								
<i>Hansard</i>	9,666	4,976	4,815	2,812	3,104	2,435	..	27,808
Other	12,334	9,204	5,985	1,235	8,465	1,222	3,331	41,776
Parliamentary reporting staff—								
Salaries	11,396	8,909	5,875	3,076	5,816	5,198	..	40,270
Contingencies	194	183	70	..	375	108	..	930
Library—								
Salaries	6,444	3,165	2,120	1,122	874	50	..	13,775
Contingencies	3,592	1,080	750	715	453	215	156	6,961
Salaries of other officers and staff	36,440	28,077	12,161	7,982	6,994	6,855	3,165	101,674
Other	24,006	687	..	..	542	280	..	25,515
D. <i>Miscellaneous:</i>								
Fuel, light, heat, power, and water	3,080	1,614	1,488	800	1,719	103	..	8,814
Posts, telegraphs, telephones	2,456	4,141	..	904	683	298	..	8,482
Furniture, stores, and stationery	3,717	2,321	..	371	11,246	368	..	16,723
Other	77,084	5,442	150	3,456	3,093	1,888	641	129,098
Total	328,948	176,909	85,406	73,782	72,386	79,432	30,639	847,502
5. <i>Electoral—</i>								
Salaries	79,808	2,479	1,454	2,839	2,872	3,030	(d)	92,482
Cost of elections, contingencies, etc.	28,596	2,500	2,355	6,655	3,277	12,439	1,636	57,458
Total	108,404	4,979	3,809	9,494	6,149	15,469	1,636	149,940
6. <i>Royal Commissions, Select Committees, etc.,</i> including fees and other expenses of Commissioners, fees of counsel, costs incurred by Ministers, cost of overtime worked by Departments preparing information, bonuses, etc.	6,850	11,321	1,311	2,621	3,952	1,869	1,442	29,366
Total	6,850	11,321	1,311	2,621	3,952	1,869	1,442	29,366
GRAND TOTAL	516,455	232,709	114,497	106,942	97,383	113,793	49,270	1,231,049
<i>Cost per head of population</i>	1s. 6d.	1s. 8d.	1s. 3d.	2s. 1d.	3s. 3d.	4s. 11d.	4s. 2d.	3s. 7d.

(a) Salary of Lieut.-Governor. (b) Including rent of buildings at Melbourne, £2,639; interest and sinking fund on loans, £5,079; and non-recurring works, £16,074. (c) Included under Governor-General. (d) Duties performed by Chief Secretary's Department. (e) Not available separately. (f) Both Houses. (g) Included with Upper House. (h) Includes interest and sinking fund, Parliament House, Canberra, £41,444; and maintenance of members' rooms in capital cities, £8,940.

Figures showing total cost and cost per head during each of the last five years are given in the next table.

COST OF PARLIAMENTARY GOVERNMENT.

Year.	C'wlth.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
TOTAL.								
1934-35 ..	£ 535,162	£ 223,513	£ 126,742	£ 126,741	£ 81,471	£ 92,884	£ 40,277	£ 1,226,790
1935-36 ..	443,844	189,903	108,448	98,407	78,394	113,083	40,358	1,072,437
1936-37 ..	553,537	198,961	139,162	108,808	86,756	102,817	49,709	1,239,750
1937-38 ..	564,096	260,873	133,879	130,417	109,937	106,808	48,909	1,354,919
1938-39 ..	516,455	232,709	114,497	106,942	97,383	113,793	49,270	1,231,049

PER HEAD OF POPULATION.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1934-35 ..	1 7	1 8	1 5	2 8	2 9	4 2	3 6	3 8
1935-36 ..	1 4	1 5	1 2	2 0	2 8	5 1	3 6	3 2
1936-37 ..	1 8	1 6	1 6	2 3	2 11	4 7	4 3	3 8
1937-38 ..	1 8	1 11	1 5	2 7	3 9	4 8	4 2	3 11
1938-39 ..	1 6	1 8	1 3	2 1	3 3	4 11	4 2	3 7

§ 5. Government Employees.

The proportion of Government employees in Australia is high compared with most countries, inasmuch as Australian Governments undertake many services such as railways, tramways, the provision of water, electric light, etc., which in other countries are left to private enterprise. At the 30th June, 1939, the number of persons so employed amounted to 388,857. Included in this total are temporary, exempt, part-time and relief workers as well as employees of statutory bodies administering works and services on behalf of the Governments. The staffs of the Commonwealth and the State Banks have also been included. Details of employment by the various Governments are as follows:—

GOVERNMENT EMPLOYEES AT 30th JUNE, 1939.

Employed by—	Permanent.		Temporary.		Total.
	Full-Time.	Part-Time.	Full-Time.	Part-Time.	
Commonwealth	57,779	118	26,157	10,424	94,478
New South Wales	77,516	435	30,568	8,886	117,405
Victoria	59,363	766	20,461	1,933	82,523
Queensland	34,132	281	3,686	448	38,547
South Australia	15,834	782	5,995	405	23,016
Western Australia	15,375	193	6,004	4,746	26,318
Tasmania	4,406	9	1,263	892	6,570
Australia	264,405	2,584	94,134	27,734	388,857

Particulars are not available in all cases regarding the sexes of part-time workers, but with their exclusion and that of relief workers, the remainder—consisting of permanent, temporary and exempt employees—was composed of 301,177 males and 48,823 females, or about one female to every six males.

§ 6. Consular Representatives of Foreign Countries in Australia.

The following tabular statement shows the number of consular representatives of foreign countries in each State at 31st January, 1940—

CONSULAR REPRESENTATIVES IN AUSTRALIA AT 1st JANUARY, 1940.

Country.	Number of Consular Representatives in—						
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total, Aust.
Argentine Republic .. ..	..	2	..	..	..	..	2
Belgium	3	1	1	1	1	1	8
Bolivia .. ..	..	..	1	..	..	..	1
Brazil .. ..	..	1	..	..	..	..	1
Chile	2	1	..	..	..	..	3
China	3	1	..	..	..	..	4
Colombia	1	1	..	..	..	..	2
Costa Rica	1	..	..	..	..	..	1
Czechoslovakia	1	1	1	1	1	..	5
Denmark	2	2	3	2	2	1	12
Dominican Republic .. ..	..	..	..	1	..	..	1
Ecuador	3	..	1	..	..	..	4
Estonia	1	..	..	..	..	..	1
Finland	1	1	1	1	1	..	5
France	4	1	1	1	1	1	9
Greece	2	2	1	..	2	..	7
Honduras	2	..	..	..	..	..	2
Italy	2	1	3	2	1	1	10
Japan	3	2	1	1	1	..	8
Latvia	1	1	1	1	..	..	4
Liberia .. ..	..	..	..	1	..	..	1
Netherlands	4	1	4	1	1	1	12
Nicaragua	1	..	..	..	..	..	1
Norway	3	2	4	3	4	2	18
Panama	1	1	1	..	..	..	3
Paraguay	1	..	..	..	1	..	2
Peru	1	1	..	1	..	..	3
Poland	1	1	..	..	..	..	2
Portugal	1	1	1	1	1	..	5
Rumania	2	..	..	..	..	..	2
Salvador .. ..	..	1	..	..	..	..	1
Spain .. ..	..	1	..	..	1	..	2
Sweden	3	2	3	3	1	1	13
Switzerland	1	1	1	..	..	..	3
Thailand	1	..	..	..	..	..	1
United States of America	8	3	1	1	1	..	14
Venezuela	1	..	..	..	..	..	1
Yugoslavia	1	1	..	..	1	..	3
Total	62	34	30	22	21	8	177a

(a) In addition, Northern Territory has a Consul for the Netherlands.

Countries having Consuls-General in Sydney are Belgium, Chile, China, Costa Rica, Denmark, Ecuador, France, Greece, Honduras, Italy, Japan, Netherlands, Nicaragua, Norway, Paraguay, Poland, Sweden, Thailand and United States of America.

The Consuls-General in London for Latvia, Mexico, Poland and Turkey have jurisdiction over the Commonwealth and its Territories.

Particulars of the names and addresses of the various Consular representatives, as well as their rank and year of appointment, are contained in a publication issued by the Department of External Affairs, Canberra, entitled "List of Consular Representatives in Australia."

CHAPTER IV. LAND TENURE AND SETTLEMENT.

§ 1. Introduction.

1. **General.**—A comprehensive description of the land tenure systems of the several States was given in Official Year Book No. 4 (pp. 235–333), while later alterations were referred to in subsequent issues. In this chapter a summary is given of the principal features of existing land legislation. In previous issues an account of the various tenures under which Crown lands may be taken up was given. (See Official Year Book No. 22, pp. 133–195; also par. 2 hereunder for a conspectus of legislation at present in force.) Special sections are devoted to closer settlement, the settlement of returned soldiers on the land and advances to settlers. Particulars as to the areas of land alienated in each State and similar matter are also included.

2. **State Land Legislation.**—The legislation in force relating to Crown lands, Closer Settlement, Returned Soldiers' Settlement and other matters dealt with in this chapter is summarized in the following conspectus:—

STATE LAND LEGISLATION.

New South Wales.	Victoria.	Queensland.
CROWN LANDS ACTS.		
Crown Lands Act 1913–1938: Western Lands Act 1901–1937: Prickly Pear Act 1924–1934.	Land Acts 1928–1935: Land (Crown Leases Adjustment) Act 1936.	Land Acts 1910–1937: Upper Burnett and Callide Land Settlement Acts 1923–1932: Prickly Pear Land Acts 1923– 1936: Sugar Workers' Selec- tions Acts 1923–1936: Stock Routes Improvement and Animal and Vegetable Pests Destruction Acts, 1936–1938.
CLOSER SETTLEMENT ACTS.		
Closer Settlement Act 1904–1938.	Closer Settlement Acts 1928– 1937.	Closer Settlement Acts 1906– 1934.
MINING ACTS.		
Mining Act 1906–1935: Mining Leases (Validation) Act 1935.	Mines Acts 1928–1937: Mines (Petroleum) Act 1935: Mines Act 1937.	Mining Acts 1898–1930: Mining for Coal and Mineral Oil Act 1912: Petroleum Acts 1923– 1929: Miners' Homestead Leases Act 1913–1930: Coal Mining Acts 1925–1938.
SOLDIERS' SETTLEMENT ACTS.		
Returned Soldiers' Settlement Act 1916–1938.	Closer Settlement Acts 1928– 1934.	Discharged Soldiers' Settlement Acts 1917–1932.
ADVANCES TO SETTLERS ACTS.		
Government Savings Bank Act 1906–1932: Returned Soldiers' Settlement Act 1916–1938: Rural Bank Agency Act 1934: Farmers' Relief Act 1932– 1939: Rural Reconstruction Act 1939.	State Savings Bank Acts 1915– 1922: Primary Products Ad- vances Acts 1910–1922: Closer Settlement Acts 1928–1934: Fruit and Vegetable Act 1928: Cultivation Advances Acts 1931–1934: Farmers Advances Act 1935.	State Advances Acts 1916–1934: Rural Development Co- ordination of Advances Act 1938: Farmers' Assistance (Debts Adjustment) Acts 1935– 1938: Income (State Develop- ment) Tax Act 1938: Wire and Wire-Netting Advances Act 1927: Wire and Wire- netting Advances Act 1933: Marsupial Proof Fencing Acts 1898–1913.

STATE LAND LEGISLATION—*continued.*

South Australia.	Western Australia.	Tasmania.
CROWN LANDS ACTS.		
Crown Lands Act 1929-1939; Pastoral Act 1936-1939.	Land Act 1933-1939.	Crown Lands Act 1935.
CLOSER SETTLEMENT ACTS.		
Crown Lands Act 1929-1939.	Closer Settlement Act 1927.	Closer Settlement Act 1929-1939.
MINING ACTS.		
Mining Act 1930-1931.	Mining Act 1904-1937: Sluicing and Dredging for Gold Act 1899; Petroleum Act 1936; Mines Regulation Act 1906.	Mining Act 1929: Aid to Mining Act 1927: Mines and Works Regulation Act 1915.
SOLDIERS' SETTLEMENT ACTS.		
Discharged Soldiers' Settlement Act 1934-1935.	Discharged Soldiers' Settlement Act 1918.	Closer Settlement Act 1929-1939.
AGRICULTURAL GRADUATES SETTLEMENT ACTS.		
Agricultural Graduates Act 1922- 1938.		
ADVANCES TO SETTLERS ACTS.		
Irrigation Act 1930-1936: Dis- charged Soldiers' Settlement Act 1934-1935: State Bank Act 1925-1936: Advances to Settlers Act 1930: Agri- cultural Graduates Act 1922- 1938: Loans for Fencing and Water Piping Act 1938.	Agricultural Bank Act 1934: Rural Relief Fund Act 1935.	State Advances Act 1935: Closer Settlement Act 1929: Un- employed (Assistance to Primary Producers) Relief Act 1930-1934: Farmers Debt Adjustment Act 1936.

3. **Northern Territory Land Legislation.**—In the Northern Territory of Australia the legislation relating to Crown lands is embodied in the Crown Lands Ordinance 1931-1939: that relating to mining in the Northern Territory Mining Act 1903, the Mining Ordinance 1927-1938, the Gold Dredging Act 1899, the Tin Dredging Ordinance 1911-1920, the Mineral Oil and Coal Ordinance 1922-1923, the Mining Development Ordinance 1939, and the Mines Regulation Ordinance 1939: and that relating to advances to settlers in the Encouragement of Primary Production Ordinance 1931-1938.

4. **Australian Capital Territory Land Legislation.**—In the Australian Capital Territory the Ordinances relating to Crown lands are the Leases Ordinance 1918-1937, the City Area Leases Ordinance 1936-1938, the Church Lands Leases Ordinance 1924-1932, and the Leases (Special Purposes) Ordinance 1925-1936.

5. **Administration and Classification of Crown Lands.**—In each of the States there is a Lands Department under the direction of a responsible Cabinet Minister who is charged generally with the administration of the Acts relating to the alienation, occupation and management of Crown lands. The administrative functions of most of the Lands Departments are to some extent decentralized by the division of the States into what are usually termed Land Districts, in each of which there is a Lands Office, under the management of a Lands officer, who deals with applications for selections and other matters generally appertaining to the administration of the Acts within the particular district. In some of the States there is also a local Land Board or a Commissioner for each district or group of districts. In the Northern Territory the Administrator, under the control of the Minister for the Interior, 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.

Crown lands are generally classified according to their situation, the suitability of the soil for particular purposes, and the prevailing climatic and other conditions. The modes of tenure under the Acts, therefore, as well as the amount of purchase money or rent, and the conditions as to improvements and residence, vary considerably. The administration of special Acts relating to Crown lands is in some cases in the hands of a Board under the general supervision of the Minister.

In each of the States and in the Northern Territory 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.

6. **Classification of Tenures.**—The tabular statement which follows shows the several tenures under which Crown lands may be acquired or occupied in each State. In the Northern Territory, leases (excepting pastoral and "miscellaneous") are granted in perpetuity, pastoral and "miscellaneous" leases being restricted to periods of not more than 42 and 21 years respectively. The Lands Ordinance provides also for the grant in fee-simple of town lands, agricultural lands, garden lands and tropical lands, and for the issue of grazing, occupation and "miscellaneous" licences. The mining leases and holdings are, generally speaking, similar to those of the States. In the Australian Capital Territory leases only are issued.

STATE CROWN LANDS : TENURES.

New South Wales.

Victoria.

Queensland.

FREE GRANTS AND RESERVATIONS.

Free Grants : Reservations.

Free Grants : Reservations.

Free Grants : Reservations.

UNCONDITIONAL PURCHASES OF FREEHOLD.

Auction Sales : After-auction Purchases : Special Purchases : Improvement Purchases.

Auction Sales.

CONDITIONAL PURCHASES OF FREEHOLD

Residential Conditional Purchases : Non-residential Conditional Purchases : Additional Conditional Purchases : Conversions of various Leasehold Tenures into Conditional Purchases : Purchases of Town Leases, Suburban Holdings, Returned Soldiers' Special Holdings, Residential Leases, Week-end Leases.

Residential Selection Purchase Leases : Non-residential Selection Purchase Leases : Licences of Auriferous worked-out Lands : Conditional Purchase Leases of Swamp or Reclaimed Lands : Selection Purchase Leases of Mallee Lands : Murray River Settlements : Special Settlement Areas : Conversions into Selection Purchase Leases.

STATE CROWN LANDS : TENURES—*continued.*

New South Wales.	Victoria.	Queensland.
LEASES AND LICENCES UNDER LAND ACTS.		
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CLOSER SETTLEMENT.		
Sales by Auction and Tender: After-auction Sales and Tenders: Settlement Purchases.	Sales of Land: Conditional Purchase Leases: Conditional Purchase Leases in Mountainous Areas.	Perpetual Lease Selections: Settlement Farm Leases: Perpetual Town, Suburban and Country Leases.
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LEASES AND LICENCES UNDER LAND ACTS.		
Perpetual Leases : Special Perpetual Leases (Free Period) : Perpetual Leases of Homestead Blocks : Miscellaneous Leases : Licences : Pastoral Leases : Irrigation Blocks : Town Allotments in Irrigation Areas : Forest Leases.	Pastoral Leases : Special Leases : Leases of Town and Suburban Lands : Cropping Leases.	Grazing Leases : Pastoral Leases : Leases of Land covered with Button Grass, etc. : Leases of Mountainous Land : Miscellaneous Leases : Temporary Licences : Occupation Licences : Residences Licences : Business Licences : Forest Leases, Licences and Permits.
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Holdings under Miners' Rights : Search Licences : Occupation Licences : Gold Leases : Mineral Leases : Coal Leases : Oil Leases : Dredging Leases : Business Areas : Residence Areas : Miscellaneous Leases (Salt and Gypsum).	Holdings under Miners' Rights : Gold Mining Leases : Mineral Leases : Business Areas : Residence Areas : Miners' Homestead Leases.	Holdings under Miners' Rights : Prospectors' Licences : Gold Mining Leases : Mineral Leases.
SETTLEMENT OF DISCHARGED SOLDIERS AND SAILORS.		
Perpetual Leases : Pastoral Leases : Agreements to Purchase : Miscellaneous Leases.	Ordinary Tenure : Special Tenure.	Free Grants : Ordinary Tenure : Special Tenure.
AGRICULTURAL GRADUATES SETTLEMENT.		
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§ 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 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 the year 1938–39 the total area for which free grants were prepared was 35 acres. During the same period 1,095 acres were dedicated and permanently reserved, the number of separate dedications being 66.

On the 30th June, 1939, the total area reserved, including temporary reserves, was 16,059,119 acres, of which 5,236,610 acres were for travelling stock, 3,679,116 acres pending classification and survey, 1,378,074 acres for forest reserves, 853,153 acres for water and camping, 1,228,438 acres for mining, and the remainder for temporary commons, railways, recreation reserves and parks, reserves for aborigines, and miscellaneous purposes. A large proportion of the total area reserved is occupied under annual, special, scrub or forestry leases or on occupation licences or permissive occupancy, and is included under the appropriate leasehold tenures described in the following sections.

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, and may except any area of Crown lands from occupation for mining purposes under any miner's right.

(iii) *Areas Granted and Reserved.* During the year 1938, 91 acres were granted without purchase, and reservations of both a permanent and temporary nature, comprising a net area of 90,879 acres, were made. At the end of 1938, the total area reserved was 8,257,049 acres, consisting of roads, 1,794,218 acres; water reserves, 313,295 acres; agricultural colleges, etc., 88,644 acres; permanent forests and timber reserves under Forests Acts, 4,121,582 acres and 723,975 acres respectively; forests and timber reserves under Land Acts, 330,027 acres; reserves in the Mallee, 410,000 acres; and other reserves, 475,308 acres.

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 Act, land to be used for the purpose of any undertaking under that Act may be vested in fee-simple in the Irrigation Commission.

(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 the same for not more than 21 years with the approval of the Minister.

Under the State Forests and National Parks Act, 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 the year 1938 the area granted in fee-simple without payment was 25 acres, the area set apart as reserves 658,717 acres, and reserves cancelled 976,828 acres. The total area reserved including roads at the end of 1938 was 21,051,415 acres, made up as follows—Timber reserves, 3,221,625 acres; State forests and national parks, 3,460,229 acres; for use of aborigines, 5,595,735 acres; streets, surveyed roads and surveyed stock routes, 2,947,198 acres; and general, 5,826,628 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 land 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 aborigines, military defence, forest reserves, railway stations, park lands or any other purpose that he may think fit.

(iii) *Areas Granted and Reserved.* During the year 1938-39 free grants were issued for a total area of 331 acres. During the same year reserves comprising 2,718,897 acres were proclaimed. At the 30th June, 1939, the total area of surveyed roads, railways and other reserves was 19,219,229 acres, including 16,726,400 acres in the north-west of the State set apart as an aboriginal reserve in 1921.

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 from year to year. 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, 1939, a few small areas of land were granted in fee-simple, and approximately 6,159,084 acres were reserved for various purposes. The area reserved included 5,793,400 acres which were added to the Central Australian Native Reserve. At the 30th June, 1939, the total area reserved was 48,441,428 acres, comprising State forests, 3,311,000 acres, timber reserves, 1,768,000 acres, and other reserves, 43,362,428 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 of 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 His 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.

(iii) *Areas Granted or Reserved.* The total area reserved at the end of 1938 was 1,950,000 acres, exclusive of 18,100 acres of land occupied by Commonwealth and State Departments.

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 land so resumed.

(ii) *Areas Reserved.* The total area of reserves at the 30th June, 1939, was 71,829 square miles, comprising aboriginal native, 67,244 square miles; mission station, 2,586 square miles; and other reserves, 1,999 square miles.

§ 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.* Under 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. The minimum upset price per acre is the same as in the case of land sold by auction. Areas not exceeding 5 acres in extent may be sold to recognized religious bodies and public authorities at prices determined by the local land board.

(iv) *Improvement Purchases.* The owner of improvements in land in authorized occupation by residence under any Mining or 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 $\frac{1}{2}$ acre within a town or village, or 2 acres elsewhere, and no person may purchase more than one such area within 3 miles of a similar prior purchase by him.

(v) *Areas Sold.* During the year ended 30th June, 1939, the total area sold was 6,427 acres, of which 282 acres were sold by auction and 122 acres as after-auction purchases, while 28 acres were sold as improvement purchases and 5,995 acres as special purchases including unnecessary alienated roads, 5,708 acres. The amount realized for the sale of the whole area was £109,523.

2. *Victoria.*—(i) *General.* Lands specially classed for sale by auction may be sold by auction in fee-simple, not exceeding 100,000 acres in any one year, at an upset price not less than £1 per acre. The purchaser must pay the survey fee at the time of the sale, together with a deposit of 12 $\frac{1}{2}$ 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, areas specially classed for sale, isolated pieces of land not exceeding 50 acres in area, and sites for churches or charitable purposes, if not more than 3 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.

(ii) *Areas sold at Auction and by Special Sales.* During the year 1938, a total of 4,984 acres was disposed of under this tenure, 3,951 acres being country lands, while 1,033 acres of town and suburban lands were sold by auction.

3. *Queensland.*—(i) *General.* 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 but this provision was repealed by the Act of 1932.

(ii) *Areas Sold, etc.* During the year 1938, twelve unconditional selections comprising 1,010 acres were made freehold.

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.

(ii) *Areas Sold, etc.* During the year ended 30th June, 1939, the area of town lands and special blocks sold by auction was 84 acres. In addition, 5,798 acres were sold at fixed prices, and the purchases of 65,343 acres on credit were completed, making a total of 71,225 acres.

5. *Western Australia.*—(i) *Sales by Auction.* Town, suburban and village lands must be sold by auction after being surveyed into lots and notified in the *Gazette*. 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, 1939, the area of town and suburban allotments sold by auction was 601 acres in 238 allotments.

6. *Tasmania.*—(i) *Sales by Auction.* Town lands may be sold by auction for cash or on credit. No town land, the price of which is less than £15, may be sold on credit.

(ii) *After-Auction Sales.* Town lands, not within 5 miles of any city, which, after having been offered at auction, have not been sold, may be sold at the upset prices by private contract.

(iii) *Sales of Land in Mining Towns.* Any person being the holder of a residence licence or 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 not be less than £10, exclusive of the value of improvements, cost of survey, and of grant deed. The area which may be so purchased may, with the consent of the Commissioner, exceed one-quarter of an acre, but shall not in any case exceed one-half of 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 the 30th June, 1939, the total number of conditional purchases in existence was 49,689, covering an area of 16,760,067 acres. The following table gives particulars of conditional purchases, including non-residential conditional purchases and special area conditional purchases, for the year ended 30th June, 1939, together with the total area for which deeds had been issued :—

CONDITIONAL PURCHASES : NEW SOUTH WALES.

Year ended 30th June—	Applications Received. (a)		Applications Confirmed.(a)		Areas for which Deeds have been Issued.	
	Number.	Area.	Number.	Area.	During the Year.	To end of Year.
1939	127	Acres. 17,987	60	Acres. 9,972	Acres. 924,929	Acres. 28,310,056

(a) Exclusive of 509 conversions from other tenures comprising 94,478 acres.

3. **Victoria.**—Exclusive of selection in the Mallee country, the total area purchased conditionally in 1938 was 64,003 acres, all with residence. The number of selectors was 232. The total area of Mallee country purchased conditionally in the same year was 2,341 acres, all with residence, the number of selectors being 7.

In addition the final payments were made during the year on conditional purchases comprising 814 acres in country other than Mallee and 1,428 acres of Mallee lands.

4. **Queensland.**—(i) *General.* From 1917 until the passing of The Land Acts Amendment Act of 1929 the law prohibited land being made available for selection with the right to acquire the freehold title. The 1929 measure, however, amended the law in this respect but a further amendment which took effect on the 1st December, 1932, precludes land being made available under any freehold tenure.

(ii) *Areas Sold, etc.* The following selections were made freehold during the year 1938:—Agricultural Farms, 231,081 acres; Agricultural Homesteads, 3,848 acres; Prickly-Pear Selections, 36,889 acres; and Prickly-Pear Development Selections, 2,590 acres.

5. **South Australia.**—The land allotted under agreements to purchase during the year 1938-39 was 39,539 acres, comprising Eyre's Peninsula Railway lands 3,005 acres, Murray Railway lands 25 acres, closer settlement lands 20,536 acres, soldiers' acquired lands 5,023 acres, surplus lands 1,659 acres, agricultural graduates lands 5,279 acres, and other Crown lands 4,012 acres.

6. **Western Australia.**—During the year ended the 30th June, 1939, the number of holdings conditionally alienated was 824, the total area involved being 607,559 acres, comprising conditional purchases by deferred payments with residence and without residence of 560,497 and 3,045 acres respectively, and free homestead farms 44,017 acres. Under the heading "Deferred payments (with residence)" are included conditional purchases of grazing lands.

In addition, Crown grants were issued during the year for the following selections, the prescribed conditions having been complied with:—Free homestead farms 17,582 acres and conditional purchases 222,971 acres.

7. **Tasmania.**—During the year 1938, conditional purchases of 15,103 acres were completed. The total area sold conditionally was 16,770 acres, comprising selections for purchase 16,540 acres, and town and suburban allotments 230 acres. The numbers of applications received and confirmed during the year were 96 and 67 respectively.

§ 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 is given in preceding issues of the Official Year Book (see No. 22, pp. 149-63).

2. **New South Wales.**—On the 30th June, 1939, the area of leases and licences under the control of the Department of Lands, the Water Conservation and Irrigation Commission, and the Western Lands Commission, comprised 111,347,567 acres of Crown lands, compared with 111,506,050 acres at the close of the previous year.

The following table shows the areas which were granted under lease or licence during the year 1938-39, and those held under various descriptions of leases and licences at the end of that year:—

AREAS TAKEN UP AND OCCUPIED UNDER LEASE OR LICENCE: NEW SOUTH WALES, 1938-39.(a)

Particulars.	Area taken up during the year.	Area occupied at end of the year.
<i>Areas taken up under Crown Lands Act.</i>		
	Acres.	Acres.
Occupation licences—ordinary .. .. .	..	1,123,381
preferential .. .. .	..	498,079
Conditional leases	14,452	11,729,690
Conditional purchase leases .. .. .	..	175,143
Settlement leases .. .. .	..	2,803,126
Improvement leases	10,700	136,007
Annual leases	41,017	562,615
Scrub leases .. .. .	..	100,600
Snow leases	13,150	436,317
Special leases	113,987	989,203
Inferior land leases .. .. .	..	26,493
Residential leases (on gold and mineral fields)	191	4,009
Church and school lands .. .. .	..	11
Permissive occupancies	265,325	1,708,635
Prickly-pear leases	10,900	172,534
Crown leases	142,706	7,114,437
Homestead farms	9,504	4,458,350
Homestead selections and grants	3,009	1,668,824
Suburban holdings	586	53,304
Week-end leases	3	220
Leases of town lands	4	61
Returned soldiers' special holdings .. .. .	..	15,146
Irrigation areas	6,040	272,267
<i>Areas taken up under Western Lands Act.</i>		
Conditional leases .. .. .	..	98,673
Perpetual leases .. .. .	..	44,913,257
Other long-term leases	49,963	32,080,974
Permissive occupancies	92,003	206,211
Total	773,540	111,347,567

(a) Exclusive of mining leases and forest leases and occupation permits.

3. **Victoria.**—During 1938 Crown lands taken up under leases and licences comprised 85 acres of auriferous lands (licences), together with numerous grazing licences of a temporary nature. The area of Crown lands occupied under leases and licences in 1938 was 8,102,288 acres (an increase of 2,628,188 acres compared with the previous year) comprising grazing licences (exclusive of Mallee) 5,991,475 acres, Mallee lands 2,000,757 acres, auriferous lands (licences) 23,059 acres, swamp lands (leases) 5,665 acres, perpetual leases (other than Mallee) 4,977 acres and perpetual leases (Mallee) under Land Act 1928, 76,355 acres.

4. **Queensland.**—The total area taken up under lease or licence during the year 1938, including land in the Dawson Valley Irrigation Area, was 29,663,119 acres, made up as follows:—Pastoral leases 12,859,560 acres; occupation licences 580,440 acres; grazing farms (all classes), 691,247 acres; grazing homesteads (all classes), 15,032,768 acres; perpetual lease selections 98,018 acres; perpetual lease prickly-pear selections 5,255 acres; perpetual lease prickly-pear development selections 30,084 acres; settlement farm leases 1,002 acres; auction perpetual leases—town 122 acres, suburban 68 acres, and country 526 acres; special leases 29,095 acres; leases of reserves 47,814 acres; and forest grazing leases 287,120 acres.

The total area of 29,663,110 acres taken up in 1938 includes 18,783 acres under grazing farm tenure and 14,497,605 acres under grazing homestead tenure. surrendered and re-opened under a scheme for the relief of north-western grazing selectors.

The gross area held at the end of the year 1938 under pastoral tenure was 389,753 square miles.

The total areas occupied under lease or licence will be found in a table at the end of this chapter.

5. **South Australia.**—The total area leased during 1938–39 under the different forms of lease tenure was 2,232,358 acres, made up as follows:—Perpetual leases—irrigation and reclaimed lands 543 acres, surplus lands 5,813 acres, and other Crown lands 120,518 acres; pastoral leases 1,901,600 acres; and miscellaneous leases—grazing and cultivation 203,884 acres.

The total areas held under lease are given in the table at the end of this chapter.

6. **Western Australia.**—The number of leases issued by the Lands Department during the year ended 30th June, 1939, was 775 and the total area of leases issued 1,863,270 acres, comprising pastoral leases 1,680,406 acres, special leases (including leases under Section 116 of Land Act 1933 for grazing purposes) 173,216 acres, leases of reserves 8,987 acres, and residential leases 661 acres.

The total areas leased are given in the table at the end of this chapter.

7. **Tasmania.**—The area of pastoral leases issued during the year 1938 was 100,900 acres.

The total areas leased are given in the table at the end of this chapter.

8. **Northern Territory.**—The total area held under lease, licence and permit at the 30th June, 1939, was 213,899 square miles, comprising pastoral leases 162,793 square miles, pastoral permits 696 square miles, grazing licences 47,150 square miles, agricultural leases 262 square miles, and miscellaneous leases, including water leases, 2,998 square miles.

9. **Australian Capital Territory.**—The number of leases granted under the City Area Leases Ordinance 1936–1938 to the 30th June, 1939 (excluding leases surrendered and determined), was 439, representing a capital value of £209,763. During the year 66 new leases were granted.

Fourteen leases have been granted under the Church Lands and Special Purposes Ordinances for church and scholastic purposes. In addition a lease in perpetuity has been granted under the Church of England Land Ordinance 1926 for church purposes.

§ 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).

2. **New South Wales.**—The following table gives particulars of operations on Crown lands for the year 1938–39:—

AREAS TAKEN UP UNDER MINING ACTS: NEW SOUTH WALES, 1938–39.

Purposes for which Issued or Occupied.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres
Gold-mining	2,295	17,490
Mining for other minerals	9,009	174,691
Authorities to prospect	14,622	17,450
Other purposes	230	7,405
Total	26,246	217,036

The area of land held under lease only at the 30th June, 1939, was 188,592 acres.

3. **Victoria.**—During the year 1938, 265 leases, licences, etc. (including 172 for gold-mining) were issued covering an area of 102,129 acres, the rent, fees, etc., for which amounted to £2,118. The area occupied at the end of the year was 275,909 acres, comprising 101,643 acres for gold, 156,955 acres for oil, 12,968 acres for coal (including State Coal Mine area of 7,575 acres and State Electricity Commission area of 2,800 acres) and 4,343 acres for miscellaneous purposes.

4. **Queensland.**—During the year 1938, the number of miners' rights issued was 4,904, and of business licences 6. The following table gives particulars regarding the areas of lands taken up under lease or licence and the total areas occupied for the year 1938. In addition, an area estimated at 25,000 acres was at the end of 1938 held under miners' rights and dredging claims.

AREAS TAKEN UP UNDER MINING ACTS : QUEENSLAND, 1938.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining	790	6,375
Mining for other minerals	597	23,694
Miners' homestead leases	5,490	382,063
Petroleum-prospecting permits	31,334	128,365
Coal prospecting areas	668	668
Mineral oil prospecting areas	320	320
Total	39,199	541,485

The area of land held under lease only at the 31st December, 1938, was 412,132 acres.

5. **South Australia.**—The following table gives particulars of operations for the year 1938-39.

AREAS TAKEN UP UNDER MINING ACTS : SOUTH AUSTRALIA, 1938-39.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining leases	15	1,046
Mineral and miscellaneous	1,383	54,285
Claims	2,738	6,327
Search licences and permits	23,040	39,040
Occupation licences .. .. .	..	47
Total	27,176	100,745

6. **Western Australia.**—The following table gives particulars of operations for the year 1938, the figures being exclusive of holdings under miners' rights and mineral oil licences. Of the areas shown as taken up in 1938, the area under lease was 6,480 acres for gold-mining, 205 for mining for other minerals, 466 for miners' homesteads, and 125 for miscellaneous—a total of 7,276 acres. The balance was taken up under licences.

AREAS TAKEN UP UNDER MINING ACTS : WESTERN AUSTRALIA, 1938.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining	48,026	58,246
Mining for other minerals	15,677	57,919
Other purposes	677	39,087
Total	64,380	155,252

7. Tasmania.—During the year 1938, the number of leases issued was 178, of which 17 were for gold-mining, covering 666 acres; and 48 for tin, covering 2,333 acres. The following table gives particulars for the year 1938:—

AREAS TAKEN UP UNDER MINING ACTS: TASMANIA, 1938.

Particulars.	Areas Taken up during Year.	Total Areas Occupied at End of Year.
	Acres.	Acres.
Gold-mining	306	2,491
Mining for other minerals	3,698	28,067
Licences to search for coal or oil	1,180	1,180
Other purposes	141	3,155
Total	5,325	34,893

8. Northern Territory.—At the 30th June, 1939, there existed 15 mineral leases comprising 272 acres, and 39 gold-mining leases, comprising 1,422 acres. There were also 237 gold-mining lease applications for 6,948 acres, 167 mineral lease applications for 5,439 acres, 58 gold reef claims for 420 acres, 29 mineral reef claims for 490 acres, 18 machinery and tailings areas for 75 acres, and other areas held under mining lease amounted to 173 acres. In addition 2 exclusive prospecting licences covering 10 square miles, and 1 mineral oil and coal licence covering 1,000 square miles were issued.

9. Summary.—The following table shows the areas under leases and licences for mining purposes and the total areas occupied for the years 1923, 1928 and 1936 to 1938:—

CROWN LANDS, LEASES AND LICENCES FOR MINING PURPOSES.

Year.	N.S.W. (a)	Victoria.	Q'land.(b)	S. Aust.(b)	W. Aust.(c)	Tas. (b)	Total.(d)
AREAS FOR WHICH LEASES AND LICENCES ISSUED DURING YEAR.							
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1923	28,492	9,207	67,754	610,377	37,567	47,535	800,932
1928	(e) 944,119	8,302	1,793,028f	196,521	47,975	23,910	3,013,855
1936	72,892	117,510	169,387	(a) 28,395	76,749	16,525	481,458
1937	25,295	299,112	108,319	(a) 25,613	67,947	8,154	534,440
1938	26,246	102,129	39,199	(a) 27,176	64,380	5,325	264,455
TOTAL AREAS OCCUPIED AT END OF YEAR.							
1923	299,688	47,361	444,586	653,899	127,829	77,627	1,659,990
1928	310,497	39,904	2,810,262	242,688	132,536	54,362	3,590,249
1936	260,733	214,404	567,909	(a) 127,556	155,443	45,025	1,371,070
1937	207,287	426,583	524,089	(a) 84,770	155,169	44,271	1,442,169
1938	217,036	275,909	541,485	(a) 100,745	155,252	34,893	1,325,320

(a) Year ended 30th June following. (b) Exclusive of lands held under miners' rights only
(c) Exclusive of holdings under miners' rights and mineral oil licences. (d) Exclusive of Northern Territory. (e) Includes one area of 900,000 acres. (f) Mainly Petroleum-prospecting permits.

§ 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 preceding issues of the Official Year Book (see No. 22, pp. 163-6).

2. **New South Wales.**—Since the inception of closer settlement in 1905, 1,854 estates totalling 4,145,032 acres have been purchased by the Crown for purposes of closer settlement of civilians and returned soldiers. The total area set apart and the number of farms made available to 30th June, 1939, are as follows :—

CLOSER SETTLEMENT AREAS (a) : NEW SOUTH WALES.

To 30th June—	Areas.			Values.		Total.
	Acquired Lands.	Adjoining Crown Lands.	Total.	Cost of Acquired Lands.	Value of Adjoining Crown Lands.	
	Acres.	Acres.	Acres.	£	£	
1939..	4,145,032	205,541	4,350,573	15,107,573	355,637	15,463,210

(a) Includes 70 long-term leases resumed for closer settlement, but excludes areas acquired for village sites, 3,665 acres.

The following table gives particulars regarding the disposal of the farms by closer settlement purchase at the 30th June, 1939 :—

CLOSER SETTLEMENT ALLOTMENTS : NEW SOUTH WALES.

At 30th June—	Farms Allotted to Date.			Total Amount received in respect of Closer Settlement Farms.
	Number.	Area.	Capital Value.	
	No.	Acres.	£	
1939	9,004	4,166,414	14,034,575	11,549,954

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. As separate details are not now available, the following statement shows the operations under the provisions of the Closer Settlement Acts to the 30th June, 1938 :—

**CLOSER SETTLEMENT : VICTORIA.
(INCLUDING IRRIGATED AREAS.)**

To 30th June—	Total Area Acquired.	Total Cost of Purchases. (a)	How Made Available for Settlement.						Total Receipts (Land and Advances).	Repayments of Principal (Land and Advances).	Area Available for Settlement at 30th June.
			Farm Allotments.	Workmen's Homes Allotments.	Agricultural Labourers' Allotments.	Town Allotments. (b)	Roads and Reserves.	Number of Farms, etc.			
	Acres.	£	Acres.	Acres.	Acres.	Acres.	Acres.	No.	£	£	Acres.
1938	1,402,568	10,244,023	1,162,676	790	3,484	36,599	14,775	8,722	14,297,492	4,779,268	1,006

(a) Includes value of Crown Lands taken over. (b) Includes all land sold other than under Conditional Purchase Lease.

In the foregoing table the area and cost of land acquired for closer settlement purposes include, in addition to 133,128 acres purchased for £1,246,722 and transferred subsequently to discharged soldiers, a total area of 512,757 acres costing £4,125,822 which was purchased originally for the settlement of discharged soldiers.

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." The total area acquired to 31st December, 1934, was 970,778 acres, costing £2,292,881. At the same date the area allotted amounted to 915,690 acres distributed over 3,048 selections, consisting of 2,155 agricultural farms, 257 unconditional selections, 544 perpetual lease selections, 9 prickly-pear selections, 6 perpetual lease prickly-pear selections and 77 settlement farm leases. An area of 13,038 acres was sold by auction.

5. South Australia.—The following table shows the area of land acquired for the purposes of closer settlement, and the manner in which it had been dealt with to the 30th June, 1939:—

CLOSER SETTLEMENT: SOUTH AUSTRALIA.

To 30th June—	Area of Lands Repurchased (exclusive of land afterwards set apart for other purposes).	Agreements with Covenants to Purchase.	Total Area Leased as Homestead Blocks.		Perpetual Leases.	Miscellaneous Leases.	Sold.	Remainder Un-occupied (including roads and land in course of allotment).
			Right of Purchase.	Perpetual Lease.				
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1939	822,920	489,634	233	1,294	53,777	14,239	216,617	17,105

The total area repurchased at 30th June, 1939, was 917,472 acres at a cost of £2,884,631. Included in these figures are 64,766 acres purchased for £282,762 and afterwards set apart for discharged soldiers, 3,214 acres reserved for forest and waterworks purposes, the purchase-money being £16,135, and also 26,563 acres of swamp and other lands which were purchased for £111,580 in connexion with reclamation of swamp-lands on the River Murray. Of the total area, 805,824 acres have been allotted to 2,767 persons, the average area to each being 294 acres.

6. Western Australia.—The total area acquired for closer settlement up to the 30th June, 1939, was 905,713 acres, costing £1,180,443. Of this area, 21,088 acres have been set aside for roads, reserves, etc., leaving a balance of 884,625 acres available for selection. Particulars of operations under the Act for the year ending 30th June, 1939, are as follows:—Area selected during the year 74,274 acres; number of farms, etc., allotted to date 1,620; total area occupied to date 754,942 acres; balance available for selection 129,683 acres; and total revenue £946,030.

7. Tasmania.—Up to the 30th June, 1939, 37 areas had been opened up for closer settlement. The total purchase-money paid by the Government was £308,210 and the total area acquired amounted to 102,335 acres, including 12,053 acres of Crown Lands. The number of farms allotted was 331.

8. Summary.—The following table gives particulars of operations under the Closer Settlement Acts at the 30th June, 1939:—

CLOSER SETTLEMENT: TOTAL AREAS ACQUIRED AND ALLOTTED AT 30th JUNE, 1939.

Particulars.	N.S.W.	Victoria. (a)	Q'land. (b)	S. Aust.	W. Aust.	Tas.	Total.
Area acquired (c) acres	44,350,573	41,402,568	970,778	822,929	905,713	102,335	8,554,896
Purchase-price (e) £	15,107,573	10,195,818	2,292,881	2,474,104	1,180,443	368,210	31,619,029
Farms, etc., } No. (d)	9,004	8,722	3,048	2,767	1,620	331	25,492
alotted } acres	44,166,414	41,300,078	915,690	805,824	754,942	102,335	8,045,283

(a) As at 30th June, 1938. (b) As at 31st December, 1934. (c) Includes Crown lands—New South Wales, 205,541 acres; Victoria, 70,433 acres; Tasmania, 12,053 acres. (d) Includes 1,710,272 acres in New South Wales and 133,128 acres in Victoria subsequently transferred to soldier settlement and their subdivisions into allotments. (e) Private lands only. (f) Area sold by auction, etc., 86,596 acres. (g) Area acquired. Area actually allotted not available.

§ 8. Settlement of Returned Soldiers and Sailors.

1. **General.**—Information in regard to the methods adopted in each State for providing land for the settlement of returned soldiers and sailors, together with the conditions under which such land could be acquired, is given in earlier issues of the Official Year Book (see No. 13, pp. 1016–23, and No. 18, pp. 187–9). Later modifications have been made with a view to simplifying procedure and liberalizing the conditions under which holdings may be acquired.

Particulars respecting the position of soldier settlement in each State at the latest available date are given in the paragraphs immediately following.

2. **New South Wales.**—At the 30th June, 1939, the area set apart for soldiers was 9,755,264 acres, of which 1,710,272 acres comprised acquired land purchased at a cost of £8,113,956. The number of settlers to whom farms, etc., had been allotted up to the 30th June, 1939, was 9,692. Five thousand and eleven soldiers have either transferred or abandoned their farms, leaving 4,681 in occupation of 7,174,591 acres, of which 5,806,063 acres were Crown lands (including 3,456,263 acres in the Western Division taken up under the Western Lands Act), 1,282,481 acres acquired lands, and 86,047 acres within Irrigation Areas. These totals exclude 703 discharged soldiers who purchased privately-owned land with their own capital and were granted advances for the purchase of stock and plant or for effecting improvements.

3. **Victoria.**—At the 30th June, 1938, the area acquired or set apart for soldier settlement was 2,482,286 acres consisting of 1,763,241 acres of private land purchased at a cost of £13,361,266, 133,128 acres costing £1,246,722 taken over from Closer Settlement, and 585,917 acres of Crown lands valued at £447,622. Subsequently 512,757 acres valued at £4,125,822 were transferred to Closer Settlement. Up to the 30th June, 1938, the number of settlers to whom farms, etc., had been allotted was 12,126, and the number of farms, etc., allotted was 9,784 (including 955 farms originally purchased for closer settlement purposes) containing 2,365,518 acres. In addition, 802 share farmers and holders of leasing agreements and private land had received assistance. The number of farms, etc., occupied at the 30th June, 1938, was 8,426 (including 1,001 originally purchased for closer settlement) containing 1,734,370 acres. Later particulars cannot be given, as separate details are not available.

4. **Queensland.**—At the 30th June, 1929, the area acquired or set apart for soldier settlement was 577,633 acres, of which 41,101 acres comprised private land, purchased at a cost of £270,480. The number of farms occupied was 1,148, containing 440,992 acres. Some of these selections were acquired under the ordinary provisions of the Land Act, and do not include areas specially set apart for soldiers.

As special records are not now kept respecting the areas held by discharged soldier settlers later information cannot be given.

5. **South Australia.**—At the 30th June, 1939, the area of land acquired or set apart for soldier settlement was 1,336,612 acres, of which 1,202,653 acres comprised private land purchased at a cost of £3,863,572. These figures are exclusive of mortgages discharged, £494,770 on 360,403 acres representing 300 farms, etc., and 314 settlers. The number of soldiers to whom assistance had been granted under the Discharged Soldiers' Settlement Acts up to the 30th June, 1939, was 4,185, and the area of farms, etc. (including mortgages discharged), on which assistance had been granted was 2,746,744 acres. At the 30th June, 1939, farms, etc., occupied numbered 1,795 containing 1,155,089 acres.

6. **Western Australia.**—At the 30th June, 1939, the area of land acquired or set apart for soldier settlement was 14,287,643 acres, of which 345,110 acres comprised private land purchased at a cost of £605,076. Up to the 30th June, 1939, assistance had been given to 5,213 returned soldiers, and the Agricultural Bank held 3,177 properties as security for advances. The area held, including pastoral leases, was approximately 25,830,000 acres, and advances approved amounted to £6,728,228. The number of farms, etc., occupied by returned soldiers at the 30th June, 1939, was 1,771.

7. Tasmania.—At the 30th June, 1939, the area acquired or set apart for soldier settlement was 342,405 acres, of which 273,040 acres comprised private land purchased at a cost of £2,064,822. Up to the 30th June, 1939, the number of settlers to whom farms, etc., had been allotted was 2,380, and the number of farms, etc., allotted was 1,567 containing 342,405 acres. The number of farms, etc., occupied at the 30th June, 1939, was 1,514 containing 302,146 acres.

8. Summary.—The following table gives a summary of the area acquired, the purchase-price thereof, the number of settlers assisted, and the number and area of farms occupied in all the States to the 30th June, 1939:—

SOLDIER SETTLEMENT: AREAS ACQUIRED, SETTLERS ASSISTED AND FARMS OCCUPIED, 30th JUNE, 1939.

Particulars.	New South Wales.	Victoria. (a)	Queensland. (b)	Sth. Australia.	Western Australia.	Tasmania.	Total.
Area acquired or set apart—							
(i) Private land acquired acres	61,710,272	41,896,369	41,101	1,202,653	345,110	273,040	5,168,545
(ii) Crown lands set apart acres	8,044,992	585,917	536,532	133,959	13,942,533	69,365	23,313,298
Total land acquired or set apart acres	9,755,264	42,482,286	577,633	1,336,612	14,287,643	342,405	28,781,843
Price paid by Government for private lands £	68,113,956	14,607,988	270,480	3,863,572	605,076	2,064,822	29,525,894
Number of settlers to whom farms, etc., had been allotted up to the 30th June, 1939	9,692	12,126	(f)	(g) 4,185	(g) 5,213	2,380	(f)
Farms, etc., occupied at the 30th June, 1939	No. 4,681	(d) 8,426	1,148	(h) 1,795	1,771	1,567	19,388
	acres 7,174,591	(d) 11,734,379	410,992	(h) 1,155,089	(f)	302,146	(f)

(a) At 30th June, 1938; later information not available. (b) At 30th June, 1929; later information not available. (c) Included with closer settlement. (d) Including 512,757 acres costing £4,125,822 subsequently transferred to closer settlement, or its subdivision into farms, etc. (e) Excludes mortgages discharged, £494,770 on 360,403 acres representing 300 farms, etc., and 314 settlers. (f) Not available. (g) Number of soldiers to whom assistance had been granted under the Discharged Soldiers' Settlement Acts. (h) Including mortgages discharged.

9. Losses on Soldier Settlements.—(i) *General.* At the Premiers' Conference in Melbourne in 1917, it was agreed that the States should undertake the work of settling on the land returned soldiers and munition and war workers, and that the Commonwealth should raise the necessary loans for the States for this purpose.

The original arrangement provided that the Commonwealth should take the responsibility of finding up to £500 per settler as working capital for improvements, implements, seed, etc., an amount which was subsequently increased to £625, together with £375 per settler for resumption and works incidental to land settlement approved by the Commonwealth. Loans were to be advanced to the settlers by the States at reasonable rates of interest not exceeding 3½ per cent. in the first year, increasing by ½ per cent. each subsequent year to the full rate of interest at which the money had been raised, plus working expenses, the difference between these rates and the cost of the money to the Government to be borne equally by the Commonwealth Government and the State Government. This provision respecting interest loss was not ultimately carried out as passed, the Commonwealth Government assuming responsibility for more than one-half of the interest loss, viz., a rebate of interest equal to 2½ per cent. per annum during a period of five years from the date of payment to the State of each instalment of loan money.

(ii) *Report by Mr. Justice Pike.* In addition to this expected loss of interest other losses have occurred in connexion with soldier settlement, and in 1927 Mr. Justice Pike, of the Land Valuation Court of New South Wales, was commissioned to report, not only on the losses, but on the principles on which financial responsibility should be divided. His report in 1929, to which reference should be made for fuller information, found that in all the negotiations concerning soldier settlement on the land the States insisted on

undivided control, and that financial responsibility went along with control except so far as the Commonwealth definitely promised to give assistance. The undertaking of the Commonwealth to share equally with the States the cost of lower interest rates to soldier settlers was made the basis of a practical compromise, and the report recommended that the total loss should be shared equally between the two parties.

The gross losses were assessed at £23,525,522 distributed amongst the States as follows :—New South Wales, £7,003,950; Victoria, £7,721,891; Queensland, £1,853,315; South Australia, £3,565,829; Western Australia, £2,059,368; and Tasmania, £1,321,169. Other concessions granted by the Commonwealth Government increased its proportion of the losses to £12,333,000.

§ 9. Tenure of Land by Aliens.

Information regarding the terms and conditions under which land can be held by aliens is contained in earlier issues of the Official Year Book (see No. 18, pp. 190-1).

§ 10. 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 will be found in preceding issues of the Official Year Book (see No. 22, pp. 179-186).

In this section are summarized the loans and advances made by the various Government lending agencies in the States including the transactions in lands acquired under closer and soldier settlement schemes. The balances owing on former Crown lands sold on the conditional purchase, etc., system, however, are not included.

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.

2. New South Wales.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1939 :—

ADVANCES TO SETTLERS: NEW SOUTH WALES.

Advances.	Advances made during 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.	
			Number of Loans Current.	£
Department of Lands—	£	£		
Closer and Soldier Land Settlement	436,055	15,094,273	8,596	12,237,548
Soldier Settlers	438	3,195,589	2,231	1,041,120
Wire Netting	9,176	1,423,005	3,912	404,006
Prickly Pear	8,713	125,091	450	19,637
Rural Bank—				
Rural Bank Department	905,861	34,115,741	16,028	15,436,045
Government Agency Department—				
Necessitous Farmers	103,331	5,942,461	2,894	1,054,937
Unemployment Relief and Dairy Promotion	32,768	1,276,727	4,146	830,150
Farmers' Relief Agency(b)	872,866	4,047,848	4,488	2,254,368
Shallow Boring	27,455	788,052	1,112	251,632
Irrigation Areas	107,293	(c)	(c)	1,606,454
Government Guarantee Agency	10,220	23,279	14	10,700
Closer Settlement Agency	2,495	8,075	14	8,028
Total	2,516,677	66,040,141	43,885	35,154,625

(a) In addition, the sum of £1,907,709 has been expended on developmental works on soldiers' settlements. (b) Includes Debt Adjustment Advances (Commonwealth Moneys); amount outstanding, £1,411,400. (c) Not available.

3. Victoria.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1939:—

ADVANCES TO SETTLERS: VICTORIA.

Advances.	Advances made during 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.	
			Number of Persons.	£
	£	£		
Crédit Foncier—				
Civilians	165,296	10,857,320	4,424	4,161,625
Discharged Soldiers	2,133	841,950	403	377,806
Treasurer—				
Cool Stores, Canneries, etc. .. .. .	..	615,582	(a) 18	315,698
Department of Lands and Survey—				
Closer Settlement Settlers and				
Soldier Settlers	4,330	646,903,470	10,402	614,048,993
Cultivators of Land	230,073	1,791,356	2,305	439,879
Wire Netting	15,260	551,042	(d)	234,580
Total	417,092	61,560,720	17,042	19,578,581

(a) Companies and Co-operative Societies. (b) Represents Consolidated Debts of settlers (Section 30, Act 4091). (c) Debts adjusted by Closer Settlement Commission under Section 32 of the Closer Settlement Act, 1932. (d) Not available.

4. Queensland.—The following table gives particulars of advances to 30th June, 1939. The figures are exclusive of transactions in land:—

ADVANCES TO SETTLERS: QUEENSLAND.

Advances.	Advances made during 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.	
			Number of Persons.	£
	£	£		
Bureau of Rural Development	310,317	8,052,306	4,620	1,674,784
Discharged Soldiers' Settlement(a)	3,289	2,452,187	1,535	528,407
Water Facilities .. .. .	..	58,079	268	35,716
Wire Netting, etc.	24,944	1,004,983	3,248	459,287
Seed Wheat	7,372	(b) 117,732	(c)	13,875
Drought Relief .. .. .	..	294,458	(c)	89,275
Income (Unemployment Relief and State Development) Tax Acts(d)	32,863	904,737	4,742	587,002
Irrigation	1,194	54,914	68	28,923
Other	78	1,843	42	664
Total	380,057	12,941,239	(e)	3,417,933

(a) Includes advances to group settlements through the Lands Department, as well as advances through the Bureau of Rural Development. (b) Includes accrued interest. (c) Not available. (d) Largely for rural development (ringbarking, clearing, fencing, etc.). (e) Incomplete.

5. South Australia.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1939 :—

ADVANCES TO SETTLERS : SOUTH AUSTRALIA.

Particulars.	Advances made during 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.		Arrears of Interest at 30th June, 1939.
			Number of Persons.	£	
	£	£			£
Department of Lands—					
Advances to soldier settlers ..	63,820	4,718,042	1,042	2,808,132	590,449
Advances to blockholders ..	..	41,451	4	14	..
Advances for sheds and tanks ..	..	75,693	292	45,644	15,755
Advances under Closer Settlement Acts ..	45,671	2,461,983	1,363	1,393,226	93,203
Advances under Agricultural Graduates Settlement Act ..	10,439	56,200	33	53,052	490
Farmers Assistance Board—					
Advances in drought-affected areas ..	293	2,602,051	761	500,307	94,757
Advances under Farmers Relief Acts ..	264,283	3,970,721	707	570,015	7,070
Irrigation Branch—					
Advances to civilians ..	2,841	260,818	400	111,210	43,527
Advances to soldier settlers ..	2,107	1,070,639	753	935,779	213,005
State Bank of South Australia (C. F. Department)					
Advances to settlers for improvements ..	63,262	5,023,486	1,842	944,977	27,008
Advances under Vermin and Fencing Acts ..	11,986	898,364	1,204	296,565	91,932
Advances under Loans to Producers Act ..	7,721	1,364,817	(a)	(a)	(a)
	2,246	325,519	329	252,477	10,718
Total	474,669	22,878,784	..	8,001,398	1,187,914

(a) Not available pending reconciliation.

6. Western Australia.—The following table gives particulars respecting advances, etc., under State Authorities to 30th June, 1939 :—

ADVANCES TO SETTLERS : WESTERN AUSTRALIA.

Particulars.	Advances made during year 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.	
			Number of Persons.	£
	£	£		
Development loans ..	(a) 441,684	10,166,176	6,569	5,482,783
Soldier settlement loans ..	28,907	66,080,258	3,177	4,117,553
Cropping advances ..	(c) 114,122	13,555,545	1,549	559,223
Group Settlement Advances ..	6,396	6,265,609	1,692	1,319,476
Repurchased Estates—				
Under A.L.P. Act 1909 ..	..	575,368	276	57,611
Soldier Settlement ..	..	605,076	610	108,387
Wire and Wire Netting Advances ..	541	422,757	2,860	435,793
Total	591,650	37,670,789	16,733	12,080,826

(a) Includes £327,988 transferred capital to Agricultural Bank from Industries Assistance Board.
 (b) Includes capitalization of interest to principal. (c) Includes drought relief advances and outstanding and bad debts.

7. **Tasmania.**—The following table gives particulars respecting advances under State Authorities to 30th June, 1939. Although not regarded as an outstanding by the State Authority 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: TASMANIA.

Advances.	Advances made during year 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.	
			Number of Persons.	£
Agricultural Bank—	£	£		
State Advances Act and Rural Credits	127,431	910,852	1,585	374,940
Orchardists' Relief, 1926 .. .. .	..	46,832	49	1,830
Unemployed (Assistance to Primary Producers) Relief Act, 1930-1931 .. .. .	..	114,302	880	61,873
Bush Fire Relief Act, 1934 .. .. .	..	14,855	256	5,870
Flood Sufferers' Relief Act, 1929 .. .. .	..	35,523	102	6,910
Crop Losses, 1934-35 .. .. .	..	10,086	200	3,747
Minister for Agriculture—				
Soldier Settlers—				
Advances	23,961	807,554	1,265	91,166
Purchase of Estates, etc.(a)	7,820	2,427,565	(b) 1,526	1,456,709
Closer Settlers—				
Advances	9,157	71,630	207	36,568
Purchase of Estates, etc.(a)	6,494	473,761	(b) 306	382,946
Total	174,863	4,912,960	..	2,422,559

(a) Not regarded as an outstanding by the State. (b) Number of leaseholders and includes those to whom advances have been made.

8. **Northern Territory.**—During the financial year 1938-39 the amount of £1,109 was advanced, the total amount advanced to 30th June, 1939, being £24,967 (approximately). The balance outstanding from 38 settlers, at 30th June, 1939, including interest, was £6,856.

9. **Summary of Advances.**—The following table gives a summary for each State and the Northern Territory to the 30th June, 1939. With the exception of Queensland, where the figures are incomplete, 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—

ADVANCES TO SETTLERS: AUSTRALIA.

State.	Advances made during year 1938-39.	Total Advances at 30th June, 1939.	Amount outstanding at 30th June, 1939.	
			Number of Persons.	£
	£	£		
New South Wales	2,516,677	66,040,141	43,885	35,154,625
Victoria	417,092	61,560,720	17,642	19,578,581
Queensland	380,057	12,941,239	..	3,417,933
South Australia	474,669	22,878,784	..	9,189,312
Western Australia	591,650	37,670,789	16,733	12,080,826
Tasmania	174,863	4,912,960	..	2,422,559
Northern Territory	1,109	24,967	38	6,856
Total	4,556,117	206,029,600	..	81,850,692

§ 11. Alienation and Occupation of Crown Lands.

1. **General.**—The figures given 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 in summarized form the position in regard to the tenure of land in each State, in the Northern Territory, and in the Australian Capital Territory during the latest year for which information is available. Particulars for each year from 1928 onward will be found in *Production Bulletin*, No. 33, Part I, page 9. The area unoccupied includes roads, permanent reserves, forests, etc. In some cases, lands which are permanently reserved from alienation are occupied under leases and 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.**—Of the total area of New South Wales, 24.4 per cent. had been alienated at the 30th June, 1939, 10.2 per cent. was in process of alienation, 57.4 per cent. was held under leases and licences, and the remaining 8.0 per cent. was unoccupied or held by the Crown.

The following table gives particulars for the year ended 30th June, 1939:—

ALIENATION AND OCCUPATION OF CROWN LANDS: NEW SOUTH WALES. 30th JUNE, 1939.

Particulars.	Acres.	Particulars.	Acres.		
1. Alienated.					
Granted and sold prior to 1862 ..	7,146,570	3. Held under Leases and Licences.			
Sold by auction and other sales, 1862 to date ..	15,099,789				
Conditionally sold, 1862 to date	28,310,056				
Granted under Volunteer Land Regulations, 1867 to date ..	172,198				
Granted for public and religious purposes ..	261,353				
	50,989,975				
Less lands resumed or reverted to Crown ..	2,686,616				
Total ..	48,303,359				
2. In Process of Alienation.					
Conditional purchases ..	16,760,067			4. Unoccupied (a). Particulars of Lord Howe Island not being available the area, 3,220 acres, is included under unoccupied, (Approximate)	
Closer settlement purchases ..	2,917,506				
Soldiers' group purchases ..	416,713				
Other forms of sale ..	130,777				
Total ..	20,219,063				
		Homestead Selections and Grants ..	1,668,824		
		Alienable leases, long term and perpetual ..	26,513,383		
		Other Long-term Leases ..	78,521,761		
		Short-term Leases and Temporary Tenures ..	4,643,599		
		Forest Leases and Occupation Permits ..	2,175,304		
		Mining Leases and Permits ..	188,592		
		Total ..	113,711,463		

Area of State—198,037,100 acres.

(a) Of this area only 3,211,095 acres are available for selection, the balance being reservations for roads and for various public purposes, water frontages, and river and lake surfaces.

3. **Victoria.**—The total area of the State of Victoria is 56,245,800 acres, of which 48.7 per cent. had been alienated up to the end of the year 1938; 10.4 per cent. was in process of alienation under deferred payments and closer settlement schemes; 14.9 per cent. was occupied under leases and licences; while 26.0 per cent. was unoccupied or held by the Crown.

The following table shows the distribution :—

ALIENATION AND OCCUPATION OF CROWN LANDS: VICTORIA,
31st DECEMBER, 1938.

Particulars.	Acres.	Particulars.	Acres.
1. <i>Alienated</i>	27,403,171	3. <i>Leases and Licences held—</i>	
2. <i>In Process of Alienation—</i>		Under Lands Department—	
Exclusive of Mallee and Closer		Perpetual Leases	81,332
Settlement Lands	1,154,614	Other Leases and Licences	28,708
Mallee Lands (exclusive of		Temporary (Yearly) Graz-	
Closier Settlement Lands) ..	4,122,732	ing Licences	7,992,248
Closier Settlement Lands ..	585,919	Under Mines Department ..	275,909
Village Settlements	64	Total	8,378,197
Total	5,863,329	4. <i>Occupied by the Crown or</i>	
		<i>Unoccupied (a)</i>	14,601,103

Total area of State—56,245,800 acres.

(a) These Crown lands comprise reservations for roads and for various public purposes, 7,671,087 acres; water frontages, beds of rivers, lakes, etc., and unsold land in cities, towns and boroughs 4,086,119 acres; and other lands (unoccupied) 2,843,357 acres.

4. Queensland.—The total area of this State is 429,120,000 acres, of which, on the 31st December, 1938, 4.8 per cent. was alienated; 1.7 per cent. was in process of alienation; and 79.1 per cent. was occupied under leases and licences. The remainder, 14.4 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, 1938.

Particulars.	Acres.	Particulars.	Acres.
1. <i>Alienated—</i>		3. <i>Occupied under Leases and</i>	
By Purchase	20,288,383	<i>Licences—</i>	
Without Payment	91,928	Pastoral Leases	240,320,640
Total	20,380,311	Occupation Licences	7,697,040
		Grazing Selections and Settle-	
2. <i>In Process of Alienation</i> ..	7,491,924	ment Farm Leases	82,166,004
		Leases—Special Purposes ..	1,157,113
		Under Mines Department ..	412,132
		Perpetual Lease Selections,	
		Perpetual Lease Prickly-	
		pear Selections and Irriga-	
		tion Leases	6,170,482
		Auction Perpetual Leases ..	26,540
		Prickly-pear Leases	127,680
		Forest Grazing Leases	1,287,520
		Total	339,383,151
		4. <i>Reserves, Surveyed Roads and</i>	
		<i>Surveyed Stock Routes (a)</i> ..	21,051,415
		5. <i>Unoccupied</i>	40,813,109

Total area of State—429,120,000 acres.

(a) Includes reserves of a total area of 18,104,217 acres.

5. South Australia.—The area of the State of South Australia is 243,244,800 acres and at the 30th June, 1939, 5.1 per cent. was alienated; 1.1 per cent. in process of alienation; 52.8 per cent. occupied under leases and licences; and 41.0 per cent. unoccupied or occupied by the Crown.

The subjoined table shows the distribution :—

**ALIENATION AND OCCUPATION OF CROWN LANDS: SOUTH AUSTRALIA,
30th JUNE, 1939.**

Particulars.	Acres.	Particulars.	Acres.
1. Alienated—		3. Held under Lease and Licence—	
Sold	12,288,345	Right of Purchase Leases ..	851,779
Granted for Public Purposes ..	183,932	Perpetual Leases, including Irrigation Leases ..	16,378,112
		Pastoral Leases	108,772,629
		Other Leases and Licences ..	2,309,308
		Mining Leases and Licences ..	100,745
Total	12,472,277	Total	128,412,573
2. In Process of Alienation ..	2,634,064	4. Area Unoccupied (a) ..	99,725,886

Total area of State—243,244,800 acres.

(a) Includes surveyed roads, railways and other reserves, 19,219,229 acres; salt water lakes and lagoons, 7,680,000 acres; and fresh water lakes, 224,000 acres.

6. Western Australia.—The total area of Western Australia is 624,588,800 acres, of which, at the 30th June, 1939, 2.9 per cent. was alienated; 2.4 per cent. was in process of alienation; while 32.9 per cent. was occupied under leases and licences issued either by the Lands or the Mines Departments. The balance of 61.8 per cent. was unoccupied.

The following table shows the distribution :—

**ALIENATION AND OCCUPATION OF CROWN LANDS: WESTERN AUSTRALIA,
30th JUNE, 1939.**

Particulars.	Acres.	Particulars.	Acres.
1. Alienated	17,887,032	3. Leases and Licences in Force—	
2. In Process of Alienation—		(i) Issued by Lands Department—	
Midland Railway Concessions ..	54,800	Pastoral Leases ..	201,554,546
Free Homestead Farms ..	594,986	Special Leases ..	697,376
Conditional Purchases ..	5,662,177	Leases of Reserves ..	1,195,254
Selections from the late W. A. Company	5,297	Residential Lots ..	6,174
Selections under the Agricultural Lands Purchase Act ..	441,802	(ii) Issued by Mines Department—	
Homestead or Grazing Leases ..	8,102,193	Gold-mining Leases ..	28,832
Poison Land Leases or Licences ..	16,089	Mineral Leases ..	38,615
Town and Suburban Lots ..	3,172	Miners' Homestead Leases	31,074
		(iii) Issued by Forests Department—	
Total	14,880,516	Timber Permits ..	2,153,446
		Total	205,705,517
		4. Area Unoccupied (a) ..	386,115,735

Total area of State—624,588,800 acres.

(a) Includes reservations for roads and for various public purposes, 48,441,428 acres.

7. Tasmania.—At the end of the year 1938, 35.0 per cent. of the total area had been alienated; 2.6 per cent. was in process of alienation; 16.1 per cent. was occupied under leases and licences for either pastoral, agricultural, timber, or mining purposes, or for closer or soldier settlement; the remainder (46.3 per cent.) was unoccupied or occupied or reserved by the Crown.

The following table shows the distribution :—

**ALIENATION AND OCCUPATION OF CROWN LANDS : TASMANIA,
31st DECEMBER, 1938.**

Particulars.	Acres.	Particulars.	Acres.
1. Alienated	5,878,009	3. Leases and Licences—continued.	
2. In Process of Alienation	433,285	(i) Issued by Lands Department—continued.	
3. Leases and Licences—		Soldier Settlement ..	106,000
(i) Issued by Lands Department—		Short-Term Leases ..	131,000
Islands	105,686	Other	21,000
Ordinary Leased Land .. .	1,925,550	(ii) Issued by Mines Department	
Land Leased for Timber	290,058		
Closer Settlement .. .	80,000	Total	2,694,187
		4. Area Occupied by the Crown or Unoccupied (a)	7,772,519

Total area of State—16,778,000 acres.

(a) Includes reservations for roads and for various public purposes, 1,970,080 acres.

8. Northern Territory.—The area of the Northern Territory is 335,116,800 acres, of which, at the 30th June, 1939, only 0.1 per cent. was alienated; 54.6 per cent. was held under leases and licences; while the remaining 45.3 per cent. was unoccupied.

The following shows the mode of occupancy of areas at the 30th June, 1939 :—

**ALIENATION AND OCCUPATION OF CROWN LANDS : NORTHERN TERRITORY,
30th JUNE, 1939.**

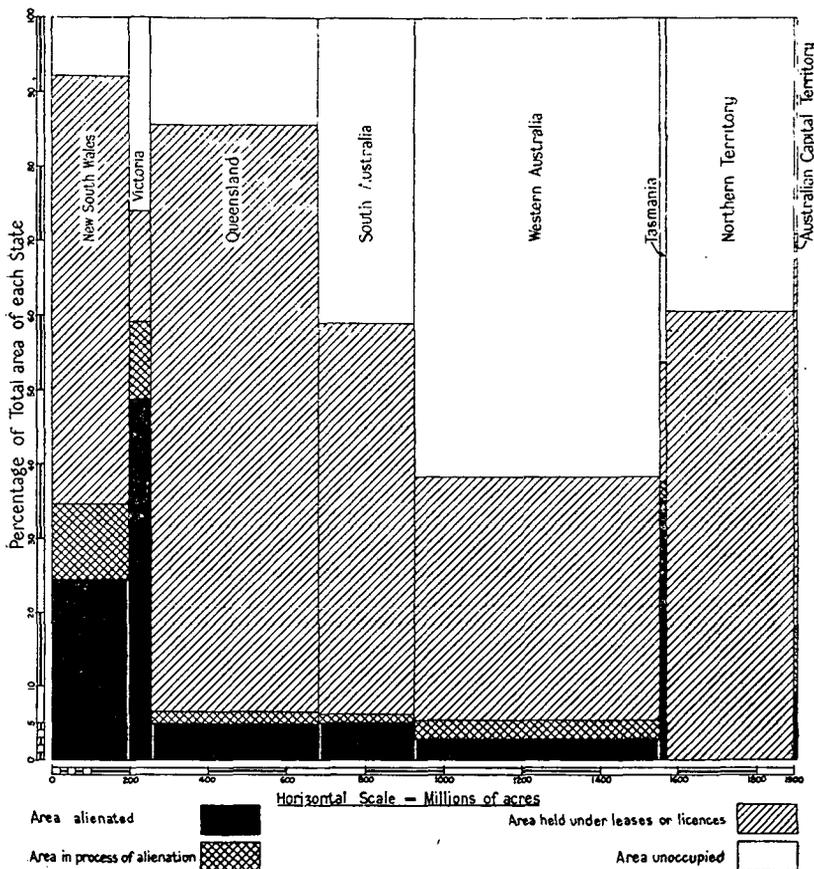
Particulars.	Acres.
1. Alienated	477,352
2. Leased—	
Pastoral Leases	104,187,529
Other leases, licences, reserves and mission stations	78,678,493
Total	182,866,013
3. Unoccupied	151,773,425
4. Total area	335,116,800

9. Australian Capital Territory.—Particulars of the alienation and occupation of Crown lands in the Territory (exclusive of Jervis Bay area) for the year 1938 are as follows :—Alienated 53,946 acres; in process of alienation 52,100 acres; leased 320,366 acres; and unoccupied 156,379 acres. The area of acquired lands was 213,854 acres. The total area of the Territory (exclusive of Jervis Bay area, 18,000 acres) is approximately 582,800 acres.

Alienated land at the end of 1938 comprised 9.0 per cent. of the total area, land in process of alienation 8.7 per cent., land held under lease 53.3 per cent., and unoccupied land 29.0 per cent. of the total area.

10. Diagram showing Condition of Public Estate.—The following diagram shows the condition of the public estate at the end of the year 1938. The square itself represents the total area of Australia, while the relative areas of individual States are shown by the vertical rectangles. The areas alienated from the State; those in process of alienation under various systems of deferred payments; and the areas held under leases or licences are indicated by the differently-shaded areas as described in the reference given below the diagram, while the areas unoccupied are left unshaded.

TENURE OF LAND



§ 12. Number and Area of Rural Holdings.

The statistics relating to Pastoral and Agricultural Production, and Farnyard, Dairy and Bee Products contained in Chapters XIII, XIV, and XV, are tabulated from data collected from all rural holdings of one acre and over in each State. The following table gives particulars of the number and total area of such holdings for the past ten years. Figures are not available for the Northern Territory.

RURAL HOLDINGS : NUMBER AND AREA.

Year.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australian Capital Territory.	Total.
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NUMBER OF RURAL HOLDINGS.

	No.	No.	No.	No.	No.	No.	No.	No.
1929-30 ..	76,158	74,161	(a)	30,246	21,101	11,623	..	(a)
1930-31 ..	74,717	74,537	(a)	30,449	21,918	11,461	..	(a)
1931-32 ..	74,106	74,996	(a)	30,648	21,959	11,481	..	(a)
1932-33 ..	74,778	75,392	(a)	30,724	22,066	11,335	..	(a)
1933-34 ..	74,981	75,386	(a)	30,986	22,639	11,731	..	(a)
1934-35 ..	75,800	74,473	(a)	31,123	22,874	11,754	186	(a)
1935-36 ..	75,631	73,772	(a)	31,262	22,652	11,857	202	(a)
1936-37 ..	76,239	72,845	(a)	31,321	21,763	11,735	202	(a)
1937-38 ..	75,923	72,792	(a)	31,277	21,682	11,680	202	(a)
1938-39 ..	75,365	72,452	42,261	31,280	21,052	11,680	204	254,294

TOTAL AREA OF RURAL HOLDINGS.

	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.	'000 acres.
1929-30 ..	172,536	38,338	(a)	132,675	229,884	6,547	320	(a)
1930-31 ..	171,772	37,806	(a)	129,569	223,081	6,559	331	(a)
1931-32 ..	172,307	37,276	(a)	129,369	230,857	6,492	356	(a)
1932-33 ..	171,930	37,704	(a)	132,673	227,616	6,595	370	(a)
1933-34 ..	171,641	38,778	(a)	134,847	217,979	6,675	373	(a)
1934-35 ..	171,631	38,861	(a)	137,918	214,455	6,813	369	(a)
1935-36 ..	172,457	39,129	(a)	138,330	218,079	6,931	383	(a)
1936-37 ..	173,880	39,826	(a)	136,978	215,210	6,851	385	(a)
1937-38 ..	174,137	40,388	(a)	142,836	215,911	6,755	382	(a)
1938-39 ..	174,660	40,791	308,082	144,682	211,720	6,778	371	887,084

(a) Not available.

CHAPTER V.

TRANSPORT AND COMMUNICATION.

A. SHIPPING.

§ 1. 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.

On the arrival at, or departure from, a port in Australia, whether from or for an oversea country or from 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. Similar documents furnish information regarding oversea migration and interstate migration by sea. This arrangement has been in operation since the 1st July, 1924.

From the 1st July, 1914, the Trade and Shipping of Australia has been recorded for the fiscal years ending 30th June.

In the following tables, commencing with the year 1935-36, a change has been made in the classification of sailing vessels with auxiliary engines. Particulars of these vessels, previously included in the columns headed "Steam", are now included in those headed "Sailing", as this classification is considered more correct, in view of the fact that the main method of propulsion of these vessels is sail.

§ 2. Oversea Shipping.

1. **Total Movement.**—The following table gives the number and net tonnage of oversea steam and sailing vessels entering Australian ports during the years 1928-29 to 1938-39:—

OVERSEA SHIPPING : VESSELS ENTERED, AUSTRALIA.

Year.	Steam.		Sailing.		Total.	
	Vessels.	Net Tons.	Vessels.	Net Tons.	Vessels.	Net Tons.
1928-29	1,564	5,521,725	18	29,858	1,582	5,551,583
1929-30	1,499	5,413,192	23	31,254	1,522	5,444,446
1930-31	1,517	5,562,230	17	19,287	1,534	5,581,517
1931-32	1,497	5,653,731	22	33,167	1,519	5,686,898
1932-33	1,531	5,891,878	23	41,446	1,554	5,933,324
1933-34	1,356	5,308,584	24	43,987	1,380	5,352,571
1934-35	1,559	5,951,226	23	43,024	1,582	5,994,250
1935-36	1,550	6,199,583	(a) 65	(a) 38,093	1,615	6,237,676
1936-37	1,542	6,245,767	99	28,423	1,641	6,274,190
1937-38	1,800	7,096,656	105	31,748	1,905	7,128,404
1938-39	1,725	6,684,031	151	26,968	1,876	6,710,999

(a) See last paragraph, § 1. above.

The average tonnage per vessel entered has risen from 3,509 tons per vessel in 1928-29 to 3,577 tons in 1938-39.

Particulars regarding the total oversea movement of shipping for each year from 1822 to 1920-21 will be found in Official Year Book No. 15, p. 507.

2. **Total Oversea Shipping, States.**—The following table gives the numbers and net tonnages of vessels which entered and cleared the various States direct from and to oversea countries during the year 1938-39:—

**SHIPPING ENTERED FROM AND CLEARED TO OVERSEA COUNTRIES DIRECT,
1938-39.**

State or Territory.	Entered.		Cleared.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales ..	622	2,309,151	590	2,060,010
Victoria ..	188	686,021	195	756,745
Queensland ..	292	945,827	291	1,008,882
South Australia ..	133	464,065	103	612,051
Western Australia ..	493	2,097,664	550	2,278,467
Tasmania ..	27	130,480	10	39,106
Northern Territory ..	121	77,791	133	79,452
Total ..	1,876	6,710,999	1,938	6,834,713

3. **Shipping Communication with various Countries.**—Records of the number and tonnage of vessels arriving from and departing to particular countries, as they are invariably made, may be misleading for the reason that the tonnage of a vessel can be recorded against one country only, notwithstanding that the same vessel on the same voyage may carry cargo or passengers to or from Australia from or to several countries. For instance, a mail steamer on a voyage from the United Kingdom to Australia, through the Suez Canal, may call at Marseilles, Genoa, Port Said, Aden and Colombo, yet can be credited only to the United Kingdom, the country where the voyage commenced, to the exclusion of all of the others from the records. Also a number of vessels touch at New Zealand ports on their voyages to and from the United States of America and Canada, but their tonnages are not included in the records of Australian shipping trade with New Zealand. Similarly, the record of shipping engaged in trade between Australia and the United Kingdom via South African ports does not show tonnage to and from South Africa, the whole of it being included in the figures for United Kingdom. In view of this defect, statistics relating to the direction of the shipping to and from Australia are restricted to the following tables in which countries situated on the main trade routes are grouped together. This grouping into larger geographical divisions to some extent avoids the limitations referred to, except, as already pointed out, in the case of Africa and New Zealand.

DIRECTION OF OVERSEA SHIPPING : AUSTRALIA.

Countries.	Cargo and Ballast.	1935-36.	1936-37.	1937-38.	1938-39.
NET TONNAGE ENTERED.					
United Kingdom and European Countries	Cargo	1,812,263	1,679,282	1,791,963	1,877,700
	Ballast	281,157	232,995	361,870	118,833
New Zealand	Cargo	557,091	732,104	774,280	767,492
	Ballast	134,200	169,170	204,025	242,454
Asiatic Countries and Islands in the Pacific	Cargo	1,721,540	1,832,771	2,051,105	2,205,542
	Ballast	353,102	230,813	280,938	255,851
Africa	Cargo	34,983	59,136	55,213	44,688
	Ballast	172,302	194,360	290,795	124,458
North and Central America	Cargo	1,161,903	1,134,797	1,233,213	1,058,600
	Ballast	6,240	5,941	55,975	37
South America	Cargo	2,895	2,821	5,372	10,017
	Ballast	..	..	23,655	5,327
	Cargo	5,290,675	5,440,911	5,911,146	5,964,039
	Ballast	947,001	833,279	1,217,258	746,960
Total		6,237,676	6,274,190	7,128,404	6,710,999

NET TONNAGE CLEARED.

United Kingdom and European Countries	Cargo	2,719,463	2,735,452	3,003,968	2,777,790
	Ballast	16,709	3,170	27,338	13,440
New Zealand	Cargo	537,359	832,200	918,096	901,142
	Ballast	73,948	39,789	37,522	37,079
Asiatic Countries and Islands in the Pacific	Cargo	1,695,483	1,473,801	1,543,996	1,686,804
	Ballast	526,048	587,925	818,775	742,254
Africa	Cargo	50,108	43,172	112,057	171,881
	Ballast	344	2,880	50,070	6,036
North and Central America	Cargo	591,144	519,017	498,384	439,524
	Ballast	87,944	91,991	80,854	46,383
South America	Cargo	4,719	8,184	1,998	12,380
	Ballast	3,615	..	..	..
	Cargo	5,598,276	5,611,826	6,078,499	5,989,521
	Ballast	708,608	725,755	1,014,559	845,192
Total		6,306,884	6,337,581	7,093,058	6,834,713

4. Nationality of Oversea Shipping.—The greater part of the shipping visiting Australia is of British nationality. The proportion of British tonnage increased slightly during 1938-39, whilst the percentage of vessels arriving with cargo increased by nearly 6 per cent.

Particulars of the nationality of oversea shipping for the last five years are given in the following table :—

OVERSEA SHIPPING: NATIONALITY OF VESSELS ENTERED, AUSTRALIA.

Nationality.	Net Tonnage.				
	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
BRITISH—					
Australian	310,186	314,439	326,652	363,086	330,590
United Kingdom	3,137,192	3,334,332	3,447,244	4,021,272	3,744,224
Canadian	76,101	95,889	41,694	30,910	19,901
New Zealand	321,481	322,296	523,436	505,976	563,495
Other British	215,597	276,162	242,843	236,907	228,951
Cargo	3,323,552	3,732,921	3,944,272	4,297,122	4,378,589
Ballast	737,005	610,197	637,597	861,029	508,482
Total British	4,060,557	4,343,118	4,581,869	5,158,151	4,887,071
Per cent. on total	67.74	69.63	73.03	72.36	72.82
FOREIGN—					
Danish	48,613	54,689	53,233	55,753	55,441
Dutch	176,424	150,012	173,011	199,913	290,605
French	137,142	102,031	82,636	102,952	108,120
German	134,231	126,500	152,506	180,314	140,954
Italian	62,205	39,465	43,222	70,451	68,256
Japanese	461,400	464,311	344,304	318,499	329,884
Norwegian	420,539	462,884	439,845	482,470	324,649
Swedish	141,205	134,502	104,281	116,036	123,737
American, U.S.	240,474	233,047	199,794	216,083	175,126
Other Foreign	105,400	127,117	99,489	227,782	207,156
Cargo	1,522,508	1,557,754	1,496,639	1,614,024	1,585,450
Ballast	411,185	336,804	195,682	356,229	238,478
Total Foreign	1,933,693	1,894,558	1,692,321	1,970,253	1,823,928
Per cent. on total	32.26	30.37	26.97	27.64	27.18
Cargo	4,846,060	5,290,675	5,440,911	5,911,146	5,964,039
Per cent. on total	80.85	84.82	86.72	82.92	88.87
Ballast	1,148,190	947,001	833,279	1,217,258	746,960
Per cent. on total	19.15	15.18	13.28	17.08	11.13
Grand Total	5,994,250	6,237,676	6,274,190	7,128,404	6,710,999

The Australian tonnage which entered Australia from overseas during the year 1938-39 represented 4.93 per cent. of the total tonnage entered and was mainly confined to the New Zealand and Pacific Island trade.

§ 3. Shipping of Ports.

The total shipping tonnage—oversea, interstate and coastwise—which entered the more important ports of Australia during the year 1938-39, together with similar information in regard to some of the ports of New Zealand and of the United Kingdom for the year 1938, will be found in the next table:—

SHIPPING OF PORTS: AUSTRALIA, NEW ZEALAND AND THE UNITED KINGDOM.

Port.	Net Tonnage Entered.	Port.	Net Tonnage Entered.
AUSTRALIA—		ENGLAND AND WALES—	
Sydney (N.S.W.) ..	11,650,317	London	30,776,918
Melbourne (Vic.) ..	8,646,893	Liverpool (including	
Adelaide (S.A.) ..	5,524,403	Birkenhead) ..	17,627,805
Newcastle (N.S.W.) ..	5,099,481	Southampton ..	13,468,875
Brisbane (Qld.) ..	4,916,463	Tyne Ports	9,130,122
Fremantle (W.A.) ..	4,012,219	Cowes (including coast of	
Townsville (Qld.) ..	1,473,008	Isle of Wight) ..	7,812,746
Kembla (N.S.W.) ..	1,225,258	Cardiff	7,319,932
Hobart (Tas.)	1,153,143	Hull	6,279,805
Whyalla (S.A.)	1,036,798	Plymouth	6,018,318
Geelong (Vic.)	837,878	Dover	3,983,753
Pirie (S.A.)	814,862	Bristol	3,931,515
Cairns (Qld.)	789,636	Manchester (including	
Burnie (Tas.)	784,873	Runcorn)	3,857,452
Rockhampton (Qld.) ..	595,226	Swansea	3,377,269
Mackay (Qld.)	545,650	Sunderland	3,038,837
Gladstone (Qld.) ..	526,492	Middlesbrough ..	2,984,012
Albany (W.A.)	510,807	Harwich	2,790,985
Launceston (Tas.) ..	507,531	Blyth	2,665,141
Lincoln (S.A.)	492,868	Portsmouth	2,610,865
Devonport (Tas.) ..	476,071	Newport	2,330,773
Bowen (Qld.)	336,175	SCOTLAND—	
Thursday Island (Qld.) ..	303,369	Glasgow	6,573,762
NEW ZEALAND—		Greenock (including Port	
Wellington	3,961,790	Glasgow)	3,435,708
Auckland	3,212,383	Leith	2,217,628
Lyttleton	2,181,290	NORTHERN IRELAND—	
Dunedin	1,189,924	Belfast	7,561,260

Figures relating to ports of the United Kingdom have been obtained from the British Board of Trade's *Annual Statement of the Navigation and Shipping of the United Kingdom*, 1938, and those relating to New Zealand from the *New Zealand Official Year Book*, 1940.

§ 4. 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 1934 to 1938, so far as such information can be ascertained from the Shipping Registers of the various States. The Merchant Shipping Act, under which vessels are registered in Australia, does not, however, make it compulsory to register vessels under 15 tons burthen 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 IN AUSTRALIA.

Year.	Steam.		Motor. (a)			Sailing.			Total.			
	No.	Tonnage.		No.	Tonnage.		No.	Tonnage.		No.	Tonnage.	
		Gross.	Net.		Gross.	Net.		Gross.	Net.		Gross.	Net.
1934	21	642	389	5	92	91	26	734	480
1935	16	425	302	2	25	23	18	450	325
1936	2	719	192	16	600	407	2	15	13	20	1,334	612
1937	9	210	153	1	2	2	10	212	160
1938	11	721	394	..	..	..	11	721	394

(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 registers of the States and of the Northern Territory on the 31st December, 1938:—

VESSELS ON THE STATE REGISTERS, 31st DECEMBER, 1938.

State or Territory.	Steam and Motor.		Sailing.				Barges, Hulks, Dredges, &c., not Self-propelled.		Total.	
	No.	Net Tons.	Propelled by Sail Only.		Fitted with Auxillary Power.		No.	Net Tons.	No.	Net Tons.
			No.	Net Tons.	No.	Net Tons.				
New South Wales	344	57,810	204	6,763	312	15,807	45	11,164	905	91,544
Victoria	164	166,852	48	665	60	1,406	55	23,015	327	191,938
Queensland	42	6,875	88	1,189	69	2,836	27	3,941	226	14,841
South Australia	71	10,556	17	341	47	2,185	42	6,742	177	19,824
Western Australia	37	5,390	257	3,991	36	777	19	4,277	349	14,435
Tasmania	43	4,226	63	2,257	64	1,842	1	382	171	8,707
Northern Territory	..	..	15	145	5	88	..	..	20	233
Total	701	251,709	692	15,351	593	24,941	189	49,521	2,175	341,522

3. **World's Shipping Tonnage.**—The table hereunder shows the number and gross tonnage of steam and motor, and of sailing vessels owned by the most important maritime countries, together with the proportion of the grand total owned by each country:—

WORLD'S SHIPPING TONNAGE, 1st JULY, 1939.

Country Where Owned.	Steamers and Motorships.		Sailing Vessels and Barges.		Total.		Percentage on Total.	
	No.	Gross Tonnage.	No.	Gross Tonnage.	No.	Gross Tonnage.	No.	Gross Tonnage.
United Kingdom	6,722	17,891	287	93	7,009	17,984	22.5	25.9
Australia and New Zealand	524	670	10	4	534	674	1.7	1.0
Canada (a)	792	1,224	79	81	871	1,305	2.8	1.9
Other British	939	1,217	135	35	1,074	1,252	3.4	1.8
Total, British Empire	8,977	21,002	511	213	9,488	21,215	30.4	30.6
Belgium	200	408	..	..	200	408	0.7	0.6
Denmark	705	1,175	4	1	709	1,176	2.3	1.7
France	1,231	2,934	51	19	1,282	2,953	4.1	4.2
Germany	2,459	4,483	7	10	2,466	4,493	7.9	6.5
Greece	607	1,781	..	..	607	1,781	1.9	2.5
Holland	1,523	2,970	9	3	1,532	2,973	4.9	4.3
Italy	1,227	3,425	108	24	1,335	3,449	4.3	4.9
Japan	2,337	5,630	..	..	2,337	5,630	7.5	8.1
Norway	1,987	4,834	3	1	1,990	4,835	6.4	7.0
Russia	699	1,306	17	10	716	1,316	2.3	1.9
Spain	777	902	47	12	824	914	2.6	1.3
Sweden	1,231	1,577	7	5	1,238	1,582	4.0	2.3
United States of America (b)	2,958	11,490	417	513	3,375	12,003	10.8	17.3
Other Foreign Countries	2,845	4,592	242	119	3,087	4,711	9.9	6.8
Total, Foreign Countries	20,786	47,507	912	717	21,698	48,224	69.6	69.4
Grand Total	29,763	68,509	1,423	930	31,186	69,439	100.0	100.0

(a) Including Great Lakes shipping.

(b) Including Philippine Islands and Great Lakes shipping.

The foregoing figures have been compiled from *Lloyd's Register of Shipping*, and only vessels of 100 tons or upwards have been included.

§ 5. 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 voyage proceeding from one State to another. (It should be mentioned that these vessels, except under special circumstances, do not now 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 United Kingdom—*via* another State, is recorded in the second State as from 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 United Kingdom *via* other 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* other States” or “Interstate” according to the direction of the movement. The significance of the record of these movements will be more clearly seen 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* the States of South Australia and Victoria. From the terminal port the vessel will commence the outward voyage, and retrace its inward track.

ITINERARY OF AN OVERSEA VESSEL ON AUSTRALIAN COAST.

Particulars.	Recorded as—	
	For the State and for Australia.	For the States.
Inward Voyage—		
Enters Fremantle from United Kingdom	Oversea direct	
Clears Fremantle for Adelaide	Interstate direct
Enters Adelaide from United Kingdom Oversea <i>via</i> States
<i>via</i> Fremantle	Interstate direct
Clears Adelaide for Melbourne Oversea <i>via</i> States
Enters Melbourne from United Kingdom	Interstate direct
<i>via</i> Adelaide Oversea <i>via</i> States
Clears Melbourne for Sydney	Interstate direct
Enters Sydney from United Kingdom Oversea <i>via</i> States
<i>via</i> Melbourne
Outward Voyage—		
Clears Sydney for United Kingdom <i>via</i> Oversea <i>via</i> States
Melbourne	Interstate direct
Enters Melbourne from Sydney Oversea <i>via</i> States
Clears Melbourne for United Kingdom <i>via</i>	Interstate direct
Adelaide Oversea <i>via</i> States
Enters Adelaide from Melbourne	Interstate direct
Clears Adelaide for United Kingdom <i>via</i> Oversea <i>via</i> States
Fremantle	Interstate direct
Enters Fremantle from Adelaide
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 oversea 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.

It should be remembered, however, that all oversea vessels do not follow the same itinerary as the vessel in the table above.

2. Vessels and Tonnage Entered.—(*Interstate direct.*) The following table gives the number and tonnage of vessels recorded as having entered each State from any other State during each of the years 1934-35 to 1938-39. The shipping of the Murray River, between the States of New South Wales, Victoria and South Australia, is not included:—

INTERSTATE SHIPPING: NUMBER AND TONNAGE OF VESSELS ENTERED.

State or Territory.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
NUMBER.					
New South Wales ..	1,945	1,862	2,076	2,179	2,183
Victoria ..	1,908	1,966	2,146	2,255	2,243
Queensland ..	587	567	599	652	639
South Australia ..	842	865	924	988	1,036
Western Australia ..	347	358	366	383	382
Tasmania ..	1,035	1,065	1,216	1,261	1,301
Northern Territory ..	27	22	29	25	39
Total ..	6,691	6,705	7,356	7,743	7,823
NET TONNAGE.					
New South Wales ..	5,334,778	5,105,740	5,693,751	5,977,315	6,204,907
Victoria ..	4,002,750	4,361,171	4,640,688	4,743,317	4,751,032
Queensland ..	1,410,487	1,495,200	1,616,188	1,674,662	1,730,478
South Australia ..	2,761,195	2,898,358	3,043,302	3,176,924	3,322,512
Western Australia ..	1,855,563	1,916,546	1,869,071	1,978,260	2,019,125
Tasmania ..	1,101,544	1,335,725	1,559,603	1,562,790	1,769,829
Northern Territory ..	59,011	66,710	71,057	72,996	102,910
Total ..	16,585,328	17,179,450	18,493,660	19,186,264	19,900,793

3. Oversea Vessels Moving Interstate.—(*Oversea via States.*) To ascertain the aggregate movement of shipping between the States during the year 1938-39 including the total interstate movements of oversea vessels, the figures in the following table

which give the number and tonnage of vessels entered from or cleared for oversea countries via other Australian States, must be added to those in the preceding table:—

SHIPPING ENTERED AND CLEARED FROM AND TO OVERSEA COUNTRIES VIA OTHER AUSTRALIAN STATES, 1938-39.

State or Territory.	Entered.		Cleared.		Total.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales ..	514	2,727,784	522	2,869,826	1,036	5,597,610
Victoria	548	3,100,032	495	2,885,923	1,043	5,985,955
Queensland .. .	287	1,807,393	279	1,651,147	566	3,458,540
South Australia ..	333	1,974,741	316	1,934,301	649	3,909,042
Western Australia ..	41	134,579	11	38,226	52	172,805
Tasmania .. .	56	330,278	133	831,284	189	1,161,562
Northern Territory ..	1	1,260	..	..	1	1,260
Total ..	1,780	10,076,067	1,756	10,210,707	3,536	20,286,774

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.

4. **Total Interstate Movement of Shipping.**—(i) *Australia.* The appended table shows the total interstate movement of shipping including oversea vessels moving interstate for each of the years 1934-35 to 1938-39:—

TOTAL INTERSTATE MOVEMENT OF SHIPPING: AUSTRALIA.

Year.	Entered.		Cleared.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
1934-35	8,279	25,369,207	8,288	25,460,522
1935-36	8,502	26,857,399	8,508	26,860,842
1936-37	9,061	27,773,851	9,106	27,792,951
1937-38	9,523	29,185,209	9,540	29,136,482
1938-39	9,603	29,976,860	9,669	30,000,369

(ii) *States.* The following table shows the number and tonnage of vessels which entered and cleared each State from and for other States during 1938-39, including the interstate movements of oversea vessels:—

INTERSTATE SHIPPING OF EACH STATE, 1938-39.

State or Territory.	Entered.		Cleared.	
	Vessels.	Net Tonnage.	Vessels.	Net Tonnage.
New South Wales	2,697	8,932,691	2,744	9,172,226
Victoria	2,791	7,851,064	2,794	7,723,250
Queensland	926	3,537,871	936	3,454,685
South Australia	1,369	5,297,253	1,393	5,264,516
Western Australia	423	2,153,704	374	2,048,062
Tasmania	1,357	2,100,107	1,389	2,237,660
Northern Territory	40	104,170	39	99,970
Total	9,603	29,976,860	9,669	30,000,369

5. **Vessels engaged Solely in Interstate Trade.**—The following table gives the number and net tonnage of vessels engaged solely in interstate trade which entered the ports of each state direct from other states during the year 1938-39 :—

VESSELS SOLELY IN INTERSTATE TRADE : NUMBER AND TONNAGE OF VESSELS ENTERED, 1938-39.

State or Territory.	Vessels Entered.	
	No.	Net Tonnage.
New South Wales	1,716	3,746,563
Victoria	1,887	2,801,494
Queensland	471	1,065,840
South Australia	784	1,831,039
Western Australia	118	430,062
Tasmania	1,183	1,072,697
Northern Territory	17	35,114
Total	6,176	10,982,809

The figures in the table above have been compiled direct from the shipping returns, and are comparable with those published since 1936-37. Previous to that year, however, the figures were derived from calculations based on an assumption which did not hold in all cases.

6. **Interstate and Coastal Services.**—The subjoined table gives particulars, so far as they are available, of all steamships engaged in regular interstate or coastal services at the end of each of the years 1934 to 1938 :—

INTERSTATE AND COASTAL STEAMSHIP SERVICES IN AUSTRALIA.

Particulars.	1934.	1935.	1936.	1937.	1938.
Number of companies operating ..	31	30	29	30	30
Number of steamships	155	156	160	162	167
Tonnage { Gross	302,897	324,891	352,661	353,280	366,182
Net	168,056	180,468	197,256	197,130	200,131
Horse-power (Nominal)	33,510	36,037	37,188	37,887	39,598
Number of passengers for which licensed (a) { 1st class	3,914	4,311	4,450	4,410	3,909
2nd class and steerage	1,755	1,920	1,695	1,801	1,719
Complement of Crew { Masters and officers	505	513	547	545	557
Engineers	419	548	579	585	606
Crew	4,045	4,264	4,458	4,515	4,663

(a) Exclusive of purely day passenger accommodation.

§ 6. Tonnage of Cargo.

1. **Oversea and Interstate Cargo.**—(i) *Australia.* The table hereunder shows the aggregate tonnage of oversea cargo discharged and shipped and the tonnage of interstate cargo shipped in all ports for the years 1934-35 to 1938-39. Cargo which was stated in cubic feet has been converted to tons measurement on the basis of 40 cubic feet to the ton.

CARGO MOVEMENT.

Year.	Oversea Cargo.				Interstate Cargo.	
	Discharged.		Shipped.		Shipped.	
	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.	Tons Weight.	Tons Meas.
1934-35	2,969,914	1,722,485	5,220,757	857,976	5,244,386	1,346,422
1935-36	3,531,839	1,948,508	5,214,194	893,509	5,540,938	1,502,813
1936-37	3,655,623	2,024,051	5,027,746	933,416	6,501,393	1,596,869
1937-38	4,365,946	2,279,653	5,730,665	1,088,575	7,032,080	1,876,938
1938-39	4,208,109	2,191,351	5,138,471	1,092,687	7,221,040	1,730,647

(ii) *Principal Ports.* The following table shows the tonnage of Oversea and Interstate Cargo discharged and shipped at principal ports, 1938-39:—

TONNAGE OF CARGO DISCHARGED AND SHIPPED AT PRINCIPAL PORTS, 1938-39.

Port.	Discharged.			Shipped.		
	Oversea.	Interstate.	Total.	Oversea.	Interstate.	Total.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
Sydney	2,020,945	1,169,400	3,190,345	1,345,609	870,397	2,216,006
Newcastle	205,770	1,744,625	1,950,395	482,113	2,255,620	2,737,733
Kembla	64,780	928,397	993,177	180,775	269,258	450,033
Other .. ..	..	..	..	29,118	13,106	42,224
Total, New South Wales	2,291,495	3,842,422	6,133,917	2,037,615	3,408,381	5,445,996
Melbourne	1,835,592	2,365,227	4,200,819	754,876	1,044,425	1,799,301
Geelong	221,705	162,509	384,214	95,771	75,723	171,494
Other	17,046	6,443	23,489	8,139	3,283	11,422
Total, Victoria	2,074,343	2,534,179	4,608,522	858,786	1,123,431	1,982,217
Brisbane	411,000	520,075	931,075	315,681	208,868	524,549
Cairns	15,538	47,656	63,194	139,806	100,489	240,295
Townsville	64,699	75,852	140,551	202,073	58,546	260,619
Other	24,085	77,291	101,376	270,496	101,514	372,010
Total, Queensland	515,322	720,874	1,236,196	928,056	469,417	1,397,473
Adelaide	532,134	823,321	1,355,455	395,607	371,416	767,023
Pirie	85,437	244,724	330,161	407,958	157,019	564,977
Walleroo	36,038	1,708	37,746	127,167	17,739	144,906
Whyalla .. ..	..	..	..	125,079	2,325,442	2,450,521
Other	26,999	6,476	33,475	206,487	17,634	224,121
Total, South Australia	680,608	1,076,229	1,756,837	1,262,298	2,889,250	4,151,548
Fremantle	593,618	314,304	907,922	555,852	78,902	634,754
Bunbury	47,944	945	48,889	190,648	26,023	216,671
Geraldton	69,169	3,833	73,002	101,997	30	102,027
Other	29,979	13,765	43,744	94,939	14,567	109,506
Total, Western Australia	740,710	332,847	1,073,557	943,436	119,522	1,062,958
Hobart	86,818	308,076	394,894	160,528	228,861	389,389
Launceston	2,191	123,734	125,925	22,094	114,521	136,615
Devonport	537	31,273	31,810	..	385,391	385,391
Other	2,472	80,815	83,287	18,163	209,429	227,592
Total, Tasmania	92,018	543,898	635,916	200,785	938,202	1,138,987
Darwin (Northern Territory)	4,964	26,424	31,388	182	3,484	3,666
Total, AUSTRALIA	6,399,460	9,076,873	15,476,333	6,231,158	8,951,687	15,182,845

2. Nationality.—The following table shows the total overseas cargo discharged and shipped according to the nationality of the vessels carrying during the years 1934-35 to 1938-39:—

TONNAGE(a) OF OVERSEA CARGO DISCHARGED AND SHIPPED.

Vessels Registered at Ports in—	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
British—					
Australia	307,440	329,208	329,990	437,346	416,335
United Kingdom	5,813,352	6,181,120	6,831,581	8,033,271	7,730,546
Canada	127,379	154,914	81,313	65,146	52,472
New Zealand	323,630	398,238	390,892	456,505	503,166
Other British	392,606	534,585	451,409	488,828	445,977
Total British	6,964,407	7,598,065	8,085,185	9,481,096	9,148,496
Per cent. on Total	64.66	65.57	69.46	70.41	72.43
Foreign—					
Denmark	154,172	160,285	159,640	209,716	184,404
France	169,802	140,435	113,584	150,424	188,692
Germany	297,020	346,544	392,269	462,246	370,014
Italy	66,319	33,520	58,491	109,570	83,779
Japan	913,552	914,856	542,761	378,065	260,174
Netherlands(b)	308,187	228,726	315,640	350,136	572,776
Norway	1,023,612	1,207,673	1,164,105	1,218,807	833,981
Sweden	408,462	390,080	310,934	316,300	354,368
United States of America	240,271	300,974	261,746	258,969	158,530
Other Foreign	225,328	266,892	236,481	529,510	475,404
Total Foreign	3,806,725	3,989,985	3,555,651	3,983,743	3,482,122
Per cent. on Total	35.34	34.43	30.54	29.59	27.57
Grand Total	10,771,132	11,588,050	11,640,836	13,464,839	12,630,618

(a) Tons weight and tons measurement combined.

(b) Includes Netherlands East Indies.

§ 7. Miscellaneous.

1. Lighthouses.—*Transport and Communication Bulletin* No. 14, published by this Bureau, contains 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 were available.

2. Distances by Sea.—A statement giving 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 is also included in *Transport and Communication Bulletin* No. 14.

3. Shipping Freight Rates.—The *Quarterly Summary of Australian Statistics* gives a list of the ruling freight rates for general merchandise both in respect of overseas and interstate shipments. The latest figures available, which give the rates current as at 30th June, 1940, show that the rate for general merchandise from Australia to United Kingdom and Continent was 94s. 6d. per ton weight or measurement, while the rates for wheat (parcels) and wool (greasy) were respectively 62s. 6d. per ton weight and 1½d. per lb.

4. **Depth of Water at Main Ports.**—A table, compiled from information supplied by the Director of Navigation, showing the depth of water at the main ports of Australia at 1st January, 1940, is included in *Transport and Communication Bulletin* No. 30.

5. **Shipping 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 casualties reported on or near the coast during the year 1939 are shown in *Transport and Communication Bulletin* No. 30. This information also was furnished by the Director of Navigation.

6. **Commonwealth Navigation and Shipping Legislation.**—(i) *General.* An account in some detail of the Commonwealth navigation and shipping legislation was published in *Official Year Book* No. 17 (pp. 1053-5).

(ii) *Recent legislation.* Under the provisions of the Navigation Act the coasting trade of the Commonwealth in passengers and cargo is reserved by Section 288 to ships licensed to engage in that trade. Licences are granted to ships complying with Australian conditions respecting wages, manning crew, accommodation and so on, stipulations which have confined the trade to Australian-owned vessels.

Provision was made in the Act for permits to be granted to unlicensed British ships to carry cargo and passengers on the coast when it was shown that the licensed service was inadequate. The permit system, however, was not entirely satisfactory and in 1926 the Act was amended to allow the Governor-General, by notice in the *Gazette*, to permit unlicensed British ships of a specified size and speed to engage in the passenger trade between particular ports. Exemptions under the Act were placed on a statutory basis by the Navigation Act of 1935 which permits unlicensed British ships of not less than 10,000 tons and a sea speed of not less than 14 knots to carry passengers between any two ports in Australia not connected by rail. In every case the voyage must be made in one ship without break of journey, transshipment, or second call at any port. On arriving at the port of destination the passenger may be taken on to the first port of call of the ship, which is either the first port of embarkation, or alternatively, a port connected with it by rail.

The Navigation Act 1935, provides that every foreign-going or Australian-trade ship and every sea-going ship registered in Australia or engaged in the coasting trade shall carry wireless equipment.

The Navigation (Maritime Conventions) Act of 1934 was an amendment of the Navigation Act to enable the Commonwealth to give effect to the provisions of a number of maritime conferences of recent years, of which the most important were those dealing with the safety of life at sea and load lines.

In an effort to protect the interests of British shipping in the Pacific against subsidized foreign competition the New Zealand Government passed an Act in October, 1936, enabling it to exclude foreign vessels from embarking passengers or cargo in a New Zealand port for any destination in Australia. On 3rd December, 1936, the British Shipping Protection Bill, designed to implement the New Zealand legislation, was introduced into the Australian Senate. After the speech on the second reading, the debate was adjourned.

7. **Ports and Harbours.**—A report in two volumes on "Transport in Australia," with special reference to Ports and Harbours facilities, was submitted to the Commonwealth Government by Sir George Buchanan, and published as two Parliamentary Papers (No. 86 printed 14th March, 1927, and No. 108 printed 9th May, 1927).

B. RAILWAYS.

§ 1. General.

1. **Introduction.**—The policy of Government ownership and control of railways has been adopted in each State and at the 30th June, 1939, only 765 route miles of the 27,998 open for general traffic in Australia were privately owned. Those owned by the State Governments amounted to 25,032 miles, and those owned by the Commonwealth,

2,201 miles. 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 are given in *Transport and Communication Bulletin* No. 30, issued by this Bureau, and also in *Official Year Book* No. 31, p. 125 *et seq.*

2. **Improvement of Railway Statistics.**—Earlier issues of the *Official Year Book* contain a summary of the report issued in 1909 by the Commonwealth Statistician to the Minister for Home Affairs on the subject of "The Desirability of Improved Statistics of Government Railways in Australia" (see *Official Year Book* No. 7, p. 598).

Considerable improvement, both as regards the volume of information and the mode of presentation thereof in the statistical tables appearing in the reports of the several Railway Commissioners, has been made during recent years.

In an endeavour to adhere more closely to the figures used by the Railways Commissioners and to obtain greater uniformity, certain changes were made in the compilation of railways statistics from and including the year 1935-36; consequently the figures for the last four years are not entirely comparable with those for previous years. The differences, however, are relatively unimportant.

3. **Railway Communication in Australia.**—An account of the progress of railway construction in Australia since the opening of the first line in 1854 will be found in *Official Year Book* No. 6, p. 681. Further information regarding railway communication in Australia and proposals for unification of gauge in the various systems are given in *Official Year Book* No. 22, pp. 259-61.

4. **Government Railways. Lines under Construction and Lines Authorized, 1939.**—

(i) *Lines under Construction.* In spite of the great extensions of State railways since the year 1875 and also the construction of various railways by the Commonwealth Government, there are still, in some of the 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 is to extend the existing lines inland in the form of light railways as settlement increases, and while it is true that lines which were not likely to be commercially successful in the immediate future have been constructed from time to time for the purpose of encouraging settlement, the general principle that the railways should be self-supporting is kept in view.

(a) *New South Wales.* In addition to that shown under (b) below, construction work continued during the year on the following railways: Sandy Hollow to Maryvale (approximately 147 miles), Sutherland to Cronulla (6.31 miles) and Bungendore to Captain's Flat (21.18 miles). Although work was delayed pending consideration of an amended design, work proceeded in other parts of the Circular Quay section of the underground railway of Sydney not affected by the amendments.

(b) *Victoria.* In this State 35.50 miles of 5 ft. 3 in. gauge lines have been partially constructed, from Nowingi to Millewa South, work thereon being temporarily suspended. Under the provisions of the Border Railways Act 1922 (Vic. 3194) the Euston to Lette (30.25 miles) railway in New South Wales territory is under construction. Traffic is being conducted as far as Kaorakee (14.25 miles), but beyond this point construction has been suspended.

(c) *Queensland.* In previous issues of the *Official Year Book* details are given of the scheme of railway construction under the provisions of the North Coast Railway Act 1910 (see *Official Year Book* No. 15, p. 551). On the 30th June, 1939, no railway construction work was in progress. The following lines are partially constructed, but work thereon is temporarily suspended:—Goondoon to Kalliwa Creek (18 miles); Yaraka to Powell's Creek (27 miles); Dajarra to Moonah Creek (41 miles); Rannes to Monto (63 miles); and Winton to 37-Mile (37 miles): a total of 186 miles.

(d) *Other.* At 30th June, 1939, no railway construction work was in progress in South Australia, Western Australia, Tasmania, nor for the Commonwealth Government.

(ii) *Lines Authorized for Construction.* (a) *New South Wales.* At the 30th June, 1939, the following lines had been authorized for construction but not commenced:—Gilgandra to Collie (21.54 miles); Jerilderie towards Deniliquin (25 miles); Rand

to Bull Plain (27.55 miles); Canowindra to Gregra (33.87 miles); St. Leonards to Eastwood (9.07 miles); Inverell to Ashford (32 miles); Gwabegar to Burren Junction (36.25 miles); Gwabegar to Pilliga (18.50 miles); Eastern Suburbs to Bondi (7.75 miles); and Western Suburbs to Western Road (5.55 miles); a total distance of 217.08 miles.

(b) *Victoria.* The following lines were authorized, but construction had not been commenced up to the end of June, 1939:—5 ft. 3 in. gauge: La La Siding to Big Pat's Creek (2.50 miles); Casterton to Nangeela (9 miles); and Orbst to Brodribb (6 miles). Under the Border Railways Act 1922, the following line has been authorized for construction in New South Wales Territory:—Mildura to Gol Gol (22 miles).

(c) *Queensland.* In addition to the new lines upon which work has been commenced, Parliament has authorized the construction of the following parts of the Great Western Railway: Section A, from Quilpie to Eromanga (120 miles); Section B, from Powell's Creek (224 miles); Section C, from 37-Mile to Springvale (324 miles); and Section D from Moonah Creek (216 miles). The following lines were also authorized for construction: Texas to Silverspur (9 miles); Mount Edwards to Maryvale (28 miles); Lanefield to Rosevale (17 miles); Gatton to Mount Sylvia (11 miles); Wandoan to Taroom (42 miles); Dirranbandi extension (52 miles); Yarraman to Nanango (16 miles); Brooloo to Kenilworth (10 miles); Dobbyn to Myally Creek (50 miles); and Peeramon towards Boongee (11 miles).

(d) *South Australia.* Parliament has authorized the construction of a line on the 3 ft. 6 in. gauge from Kielpa to Mangalo Hall (26.25 miles). The survey has been completed, but the work cannot be started without a special resolution of both Houses of Parliament.

(e) *Western Australia.* The following lines were authorized for construction up to the 30th June, 1939:—Yarramony to Merredin (85 miles); Brookton to Dale River (28 miles); Boyup Brook to Cranbrook (95.23 miles); Manjimup to Mount Barker (107 miles); Leighton to Robb's Jetty (4.62 miles); Southern Cross—Southwards (27.38 miles); Yuna to Dartmoor (52 miles); a total distance of 399.23 miles. The surveys have been completed in respect of all the above lines, except the Boyup Brook to Cranbrook, the Manjimup to Mount Barker, and the Leighton to Robb's Jetty lines.

(f) *Other.* There were no new railways authorized in Tasmania nor for the Commonwealth Government at 30th June, 1939.

5. **Grafton-South Brisbane (Uniform Gauge) Line.**—The line from Grafton (New South Wales) to Brisbane (Queensland) which was opened for traffic on 27th September, 1930, was constructed to overcome the break of gauge between Sydney and Brisbane; and was the first step towards uniform gauge railway communication between the capitals of the mainland States. To 30th June, 1939, the capital cost of construction and equipment was £4,362,500, the interest charge for the year 1938-39 being £218,125. During the same period, the working of the line, which is the responsibility of the New South Wales and Queensland Railways Commissioners, resulted in a loss of £37,802 being shown on the New South Wales section while a profit of £11,355 was shown on the Queensland section. In addition, the following amounts were paid as interest:—New South Wales, £72,179, and Queensland, £27,029, the remainder, £118,917, being borne by the Commonwealth. Figures relating to the operations, etc., of the line are incorporated as far as possible with those for New South Wales and Queensland in the tables which follow. Further particulars of the construction of the line will be found in Official Year Book, No. 31, p. 122.

6. **Mileage Open for Traffic, all Lines.**—(i) *General.* 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, and it should be understood that the private lines included in the tables below form only a small part of all private railways in Australia.

The subjoined table shows the route mileage of Commonwealth, State and private lines open for general traffic (exclusive of sidings and cross-overs) in each State for each of the years 1934-35 to 1938-39:—

GOVERNMENT AND PRIVATE RAILWAYS : MILEAGE OPEN.

State or Territory.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Miles.	Miles.	Miles.	Miles.	Miles.
New South Wales ..	6,240.53	6,204.64	6,214.42	6,204.02	6,210.72
Victoria ..	4,745.71	4,745.71	4,745.71	4,745.71	4,783.91
Queensland ..	6,836.54	6,812.80	6,795.17	6,779.04	6,750.04
South Australia ..	3,775.90	3,775.90	3,776.29	3,860.67	3,860.67
Western Australia ..	5,089.50	5,089.33	5,088.04	5,100.82	5,108.73
Tasmania ..	776.46	776.46	782.57	782.55	789.55
Northern Territory ..	489.73	489.73	489.73	489.73	489.73
Aust. Cap. Territory ..	4.94	4.94	4.94	4.94	4.94
Australia ..	27,965.31	27,899.51	27,896.87	27,973.48	27,998.29

In previous issues of the Official Year Book particulars of mileage open are given for different periods from 1855 onwards. (See No. 15, p. 537.)

(ii) *Government and Private Lines Separately.* The next table shows for each State (a) the length of lines open for traffic owned by the State Government, and by the Commonwealth Government in that State and (b) the length of private lines available for general use by the public:—

GOVERNMENT AND PRIVATE RAILWAYS : MILEAGE CLASSIFIED, 1938-39.

State or Territory.	Government Lines—		Private Lines available for General Traffic.	Total Open for General Traffic.
	State.	Commonwealth.		
	Miles.	Miles.	Miles.	Miles.
New South Wales ..	6,113.79	..	96.93	6,210.72
Victoria ..	4,758.97	..	24.94	4,783.91
Queensland ..	6,566.65	..	183.39	6,750.04
South Australia ..	2,557.38	1,252.39	50.90	3,860.67
Western Australia ..	4,377.74	453.99	277.00	5,108.73
Tasmania ..	658.00	..	131.55	789.55
Northern Territory ..	..	489.73	..	489.73
Aust. Cap. Territory ..	..	4.94	..	4.94
Australia ..	25,032.53	2,201.05	764.71	27,998.29

7. *Comparative Railway Facilities.*—The mileage of line open to the public for general traffic (including both Government and private lines) is shown in the subjoined statement in relation to both population and area at the 30th June, 1939:—

GOVERNMENT AND PRIVATE RAILWAYS : COMPARISON OF FACILITIES, 1938-39.

Particulars.	N.S.W.	Vic.	Q'ld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Mileage of Railway—									
Per 1,000 of population ..	2.26	2.54	6.64	6.48	10.98	3.34	79.13	0.41	4.02
Per 1,000 sq. miles of Territory ..	20.07	54.43	10.07	10.16	5.23	30.12	0.94	5.26	9.41

8. Classification of Lines according to Gauge, 1938-39.—The next table gives a classification according to gauge of the route mileage open of (i) Commonwealth railways, given in the State or Territory in which situated; (ii) State railways; and (iii) Private railways open to the public for general traffic. Particulars of Government railways are up to the 30th June, 1939, and of private railways open for general traffic to the 31st December, 1939, as nearly as possible.

GOVERNMENT AND PRIVATE RAILWAYS : GAUGES, 1938-39.

State or Territory in which situated.	Route mileage having a gauge of—					Total.
	5 ft. 3 in.	4 ft. 8½ in.	3 ft. 6 in.	2 ft. 6 in.	2 ft. 0 in.	
COMMONWEALTH RAILWAYS.						
South Australia ..	..	654.21	598.18	..	..	1,252.39
Western Australia ..	..	453.99	..	..	..	453.99
Northern Territory ..	..	..	489.73	..	..	489.73
Aust. Cap. Territory ..	..	4.94	..	..	..	4.94
Total ..	..	1,113.14	1,087.91	..	..	2,201.05
STATE RAILWAYS.						
New South Wales ..	..	6,113.79	..	..	..	6,113.79
Victoria ..	4,637.20	..	..	121.77	..	4,758.97
Queensland ..	..	68.82	6,467.57	..	30.26	6,566.65
South Australia ..	1,480.49	..	1,076.89	..	..	2,557.38
Western Australia ..	..	..	4,377.74	..	..	4,377.74
Tasmania ..	..	..	646.67	..	11.33	658.00
Total ..	6,117.69	6,182.61	12,568.87	121.77	41.59	25,032.53
PRIVATE RAILWAYS OPEN FOR GENERAL TRAFFIC.						
New South Wales ..	..	60.20	36.73	..	..	96.93
Victoria ..	13.94	..	(a) 11.00	..	..	24.94
Queensland ..	..	..	80.87	..	102.52	183.39
South Australia ..	..	..	50.90	..	..	50.90
Western Australia ..	..	..	277.00	..	..	277.00
Tasmania ..	..	..	125.05	..	6.50	131.55
Total ..	13.94	60.20	581.55	..	109.02	764.71
ALL RAILWAYS OPEN FOR GENERAL TRAFFIC.						
New South Wales ..	..	6,173.99	36.73	..	..	6,210.72
Victoria ..	4,651.14	..	(a) 11.00	121.77	..	4,783.91
Queensland ..	..	68.82	6,548.44	..	132.78	6,750.04
South Australia ..	1,480.49	654.21	1,725.97	..	..	3,860.67
Western Australia ..	..	453.99	4,654.74	..	..	5,108.73
Tasmania ..	..	..	771.72	..	17.83	789.55
Northern Territory ..	..	..	489.73	..	..	489.73
Aust. Cap. Territory ..	..	4.94	..	..	..	4.94
GRAND TOTAL	6,131.63	7,355.95	14,238.33	121.77	150.61	27,998.29

(a) 3 ft. 0 in. gauge.

9. Summary of Operations, 1938-39.—In the following table a summary is given of the working of all railways open for general traffic in Australia during the year ended 30th June, 1939:—

GOVERNMENT AND PRIVATE RAILWAYS : SUMMARY OF OPERATIONS, 1938-39.

Particulars.	Common-wealth Railways.	State Railways.	Private Railways. (a)	Total for Australia.
Mileage open (route) 30th June, 1939 miles	2,201.05	25,032.53	764.71	27,998.29
Capital cost £	17,032,884	300,220,948	4,749,212	322,003,044
Cost per mile £	7,739	11,993	6,210	11,501
Gross revenue £	546,487	44,233,257	765,791	45,545,535
Gross revenue per train mile d.	145.42	138.62	130.62	138.55
Working expenses £	641,749	35,316,114	489,022	36,446,885
Working expenses per train mile d.	170.77	110.68	83.41	110.88
Net revenue £	-95,262	8,917,143	276,769	9,098,650
Net revenue per train mile d.	-25.35	27.95	47.21	27.67
Train miles run miles	901,916	76,580,650	1,407,089	78,889,655
Passengers carried No.	117,139	384,723,883	1,309,350	386,150,372
Tons of goods, etc., carried tons	185,818	32,970,093	4,852,048	38,008,559
Average number of employees No. (b)	1,943	(b) 102,836	(c) 1,147	105,926
Average wage £	255	261	262	261

(a) Approximate. Complete particulars not available for all items.

(b) Exclusive of Construction Staff.

(c) Employees at 31st December, 1939.

§ 2. Government Railways.

1. Cost of Construction and Equipment.—The following table gives particulars of the mileage open and the capital cost of Government railways in Australia. The cost shown for Australia (£317,253,832) does not represent the total expenditure on construction and equipment as in three States, namely, Victoria, Queensland and Tasmania, legislation has been introduced for the purpose of reducing the capital indebtedness of the railways. Figures relating to capital cost do not include charges for works in the course of construction, surveys, discounts and flotation charges on loans allocated to the railways.

GOVERNMENT RAILWAYS : MILEAGE AND COST TO 30TH JUNE, 1939.

System.	Mileage Open.		Total Cost of Construction and Equipment.	Average Cost per Route Mile Open.	Cost per Head of Population.	Route Mileage per 1,000 of Population.
	Route.	Track.				
	Miles.	Miles.	£	£	£	Miles.
New South Wales	6,113.79	8,161.00	147,617,530	24,145	53.74	2.23
Victoria (a) ..	4,758.97	6,136.64	52,448,789	11,021	27.88	2.53
Queensland (a) ..	6,566.65	7,418.00	37,897,129	5,771	37.28	6.46
South Australia ..	2,557.38	3,086.89	29,732,889	11,626	49.91	4.29
Western Australia	4,377.74	4,923.35	26,021,781	5,944	55.91	9.41
Tasmania (a) ..	658.00	(b)	2,140,330	3,253	9.04	2.78
Commonwealth ..	2,201.05	2,316.36	17,032,884	7,739	..	..
Australia (a) ..	27,233.58	63,1042.24	317,253,832	11,649	45.58	3.91

(a) See below. (b) Not available.

(c) Excluding Tasmania.

(d) Includes Grafton-South Brisbane line, £4,362,500.

The reductions made in the capital indebtedness referred to above were:—Victoria, £25,684,423; Queensland, £28,000,000; and Tasmania, £4,378,000. After adding these figures to the capital costs of the respective States and adjusting the route mileage

for New South Wales and Queensland to exclude portions of the Grafton-South Brisbane line, the cost per route mile open in each State and for the Commonwealth railways is as follows:—New South Wales, £24,248; Victoria, £16,418; Queensland, £10,141; South Australia, £11,626; Western Australia, £5,944; Tasmania, £9,906; Commonwealth, £7,739; and for all Government railways in Australia, £13,781. The lowest average cost is in Western Australia, while the highest is in New South Wales. Very few engineering difficulties were encountered in Western Australia, and the fact that contractors were permitted to carry traffic during the term of their contract considerably reduced expenditure.

Adjusted figures for the cost per head of population for each State and for Australia are as follows:—New South Wales, £53.74; Victoria, £41.53; Queensland, £64.83; South Australia, £49.91; Western Australia, £55.91; Tasmania, £27.54; All Government railways in Australia, £53.92.

2. Expenditure on Construction and Equipment from Revenue and from Loans.—The following table gives particulars of the expenditure on construction and equipment from revenue and from loans:—

GOVERNMENT RAILWAYS: CAPITAL EXPENDITURE FROM REVENUE AND FROM LOANS.

System.	Expenditure from Revenue to 30th June, 1939.	Net Loan Expenditure.			
		1936-37.	1937-38.	1938-39.	Total to 30th June, 1939.
	£	£	£	£	£
New South Wales ..	666,864	1,864,088	2,343,455	2,002,287	151,076,256
Victoria ..	5,653,525	(a) 361,893	(a) 492,208	(a) 354,259	a 75,988,437
Queensland ..	..	505,216	630,053	489,603	65,096,856
South Australia ..	..	160,011	112,537	261,006	34,758,727
Western Australia ..	633,338	(b) 175,412	(b) 346,373	(b) 195,111	b 25,484,118
Tasmania ..	18,121	81,856	59,660	34,558	(c) 7,306,998
Commonwealth ..	2,328,048	358,241	Cr. 938	Cr. 339	11,433,205
Australia ..	9,299,896	3,506,717	3,983,348	3,336,485	d373,590,602

(a) Gross Loan Expenditure. (b) Includes expenditure on railways provided in Unemployment Relief Work programmes. (c) Includes Losses funded. (d) Includes £2,446,005 Commonwealth Loan Expenditure on Grafton-South Brisbane line.

3. Gross Revenue.—(i) *General.* The total revenue from all sources, the revenue per average mile worked and the revenue per train-mile run during the last five years were as follows:—

GOVERNMENT RAILWAYS: GROSS REVENUE.

Year.	N.S.W.(a)	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
TOTAL GROSS REVENUE.								
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1934-35 ..	16,803	9,421	7,167	2,658	3,312	400	346	40,107
1935-36 ..	17,754	9,690	6,697	2,878	3,446	449	388	41,302
1936-37 ..	18,616	10,135	7,092	3,008	3,462	479	442	43,234
1937-38 ..	20,286	9,735	7,383	3,285	3,678	464	443	45,274
1938-39 ..	19,946	9,284	7,798	3,119	3,599	487	547	44,780

(a) Includes £800,000 per annum contribution from consolidated revenue towards losses on working of country development lines. (b) Includes contributions from consolidated revenue in respect of losses on non-paying lines, 1934-35, £140,614; 1935-36, £163,859; 1936-37, £230,574 (includes £19,113 guarantees in respect of losses); and in 1937-38 and 1938-39, £10,000 guarantees in respect of losses on certain lines.

GOVERNMENT RAILWAYS: GROSS REVENUE—*continued.*

Year.	N.S.W.(a)	Vic.(b)	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
GROSS REVENUE PER AVERAGE MILE WORKED.								
	£	£	£	£	£	£	£	£
1934-35 ..	2,726	1,996	1,092	1,051	760	620	161	1,478
1935-36 ..	2,899	2,053	1,020	1,138	791	696	181	1,525
1936-37 ..	3,040	2,147	1,080	1,189	795	735	206	1,506
1937-38 ..	3,318	2,062	1,124	1,285	841	714	202	1,666
1938-39 ..	3,263	1,953	1,188	1,220	822	740	248	1,645
GROSS REVENUE PER TRAIN-MILE RUN.								
	d.	d.	d.	d.	d.	d.	d.	d.
1934-35 ..	153.48	145.54	132.73	125.59	135.44	78.00	154.75	142.63
1935-36 ..	153.82	141.88	129.78	126.46	135.70	(c)64.90	159.86	141.05
1936-37 ..	156.51	141.33	131.30	128.76	136.77	61.63	147.31	142.16
1937-38 ..	161.20	130.40	129.83	129.00	138.52	57.70	140.19	141.22
1938-39 ..	159.01	124.54	134.38	121.19	131.38	61.30	145.42	138.70

(a) Includes £800,000 per annum contribution from consolidated revenue towards losses on working of country development lines. (b) Includes contributions from consolidated revenue for losses on non-paying lines as follows:—1934-35, £140,614; 1935-36, £163,859; 1936-37, £230,574 (including £19,113 guarantees for losses); and £10,000 (guarantees for losses) in 1937-38 and 1938-39. (c) Includes steam and petrol rail car mileages excluded prior to 1935-36.

(ii) *Coaching, Goods and Miscellaneous Receipts.* (a) *Totals.* 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 live stock; and (c) rents and miscellaneous items. The subjoined table shows the gross revenue from 1934-35 to 1938-39, classified according to the three chief sources of receipts. The total of the three items specified has already been given in the preceding paragraph.

GOVERNMENT RAILWAYS: COACHING, GOODS AND MISCELLANEOUS RECEIPTS.

Year.	N.S.W. £'000.	Victoria. £'000.	Q'land. £'000.	S. Aust. £'000.	W. Aust. £'000.	Tas. £'000.	C'wealth. £'000.	Australia. £'000.
COACHING TRAFFIC RECEIPTS.								
1934-35 ..	5,868	4,088	1,946	654	731	133	136	13,556
1935-36 ..	6,187	4,130	1,974	686	742	141	141	14,001
1936-37 ..	6,394	4,232	1,934	737	742	141	158	14,338
1937-38 ..	6,844	4,119	1,995	728	717	138	167	14,708
1938-39 ..	6,877	4,286	2,057	754	704	152	194	15,024
GOODS AND LIVE STOCK TRAFFIC RECEIPTS.								
1934-35 ..	8,583	4,556	4,987	1,853	2,405	255	135	22,774
1935-36 ..	9,155	4,768	4,482	2,027	2,527	294	173	23,426
1936-37 ..	9,661	5,029	4,903	2,098	2,541	324	195	24,751
1937-38 ..	10,831	4,945	5,121	2,353	2,769	311	190	26,520
1938-39 ..	10,356	4,276	5,474	2,144	2,807	318	224	25,599
MISCELLANEOUS RECEIPTS.								
	(a)	(b)						
1934-35 ..	2,352	778	233	152	175	12	75	3,777
1935-36 ..	2,412	792	241	164	178	13	74	3,874
1936-37 ..	2,561	875	255	172	179	14	80	4,145
1937-38 ..	2,611	671	267	203	192	16	86	4,046
1938-39 ..	2,713	722	266	222	(c) 88	17	129	4,157

(a) See note (a) to Gross Revenue table above. (b) See note (b) to Gross Revenue table above. (c) Several items previously included in "Miscellaneous" now included in "Coaching" and "Goods."

(b) *Percentages.* The following table shows for each of the past two years the percentage which each class of receipts bears to the total gross revenue:—

GOVERNMENT RAILWAYS : PERCENTAGES OF RECEIPTS.

System.	1937-38.			1938-39.		
	Coaching.	Goods and Live Stock.	Miscellaneous.	Coaching.	Goods and Live Stock.	Miscellaneous.
	%	%	%	%	%	%
New South Wales ..	33.74	53.39	12.87	34.48	51.92	13.60
Victoria ..	42.31	50.79	6.90	46.17	46.06	7.77
Queensland ..	27.02	69.36	3.62	26.38	70.20	3.42
South Australia ..	22.17	71.64	6.19	24.17	68.73	7.10
Western Australia ..	19.48	75.30	5.22	19.57	78.00	2.43
Tasmania ..	29.72	66.89	3.39	31.11	65.35	3.54
Commonwealth ..	37.73	42.95	19.32	35.43	40.90	23.67
Australia ..	32.48	58.58	8.94	33.55	57.17	9.28

4. *Working Expenses.*—(i) *General.* In order to make an adequate comparison of the working expenses, 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 systems. When traffic is light, the percentage of working expenses 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.

The following table shows the total annual expenditure, the percentage thereof on gross revenue, and the expenditure per average mile worked and per train-mile run for the years 1934-35 to 1938-39:—

GOVERNMENT RAILWAYS : WORKING EXPENSES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
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TOTAL WORKING EXPENSES.

	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1934-35 ..	11,565	6,506	5,087	2,241	2,383	472	380	28,634
1935-36 ..	11,848	6,857	5,213	2,414	2,488	561	387	29,768
1936-37 ..	12,355	7,259	5,465	2,557	2,620	620	411	31,287
1937-38 ..	13,760	7,830	5,887	2,867	2,710	676	512	34,242
1938-39 ..	14,543	8,060	6,193	2,931	2,911	678	642	35,958

PERCENTAGE ON GROSS REVENUE.

	%	%	%	%	%	%	%	%
1934-35 ..	68.83	69.06	70.98	84.31	71.95	118.06	109.83	71.40
1935-36 ..	66.74	70.76	77.84	83.87	72.20	125.05	99.84	72.07
1936-37 ..	66.37	71.62	77.07	85.00	75.68	129.54	92.89	72.37
1937-38 ..	67.83	80.43	79.74	87.28	73.68	145.60	115.48	75.63
1938-39 ..	72.91	86.82	79.42	93.97	80.90	139.18	117.43	80.30

GOVERNMENT RAILWAYS: WORKING EXPENSES—*continued.*

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
PER AVERAGE MILE WORKED.								
	£	£	£	£	£	£	£	£
1934-35 ..	1,876	1,378	775	886	547	732	177	1,055
1935-36 ..	1,935	1,452	794	954	571	870	181	1,099
1936-37 ..	2,017	1,538	832	1,011	601	953	192	1,155
1937-38 ..	2,251	1,659	897	1,122	620	1,039	233	1,260
1938-39 ..	2,378	1,695	943	1,146	665	1,030	292	1,321

PER TRAIN-MILE RUN.								
	d.	d.	d.	d.	d.	d.	d.	d.
1934-35 ..	105.64	100.50	94.21	105.89	97.44	92.08	169.96	101.83
1935-36 ..	102.65	100.39	101.01	106.06	97.97	(a)81.15	159.76	101.66
1936-37 ..	103.87	101.22	101.18	109.44	103.51	79.83	136.84	102.88
1937-38 ..	109.34	104.89	103.53	112.60	102.06	84.01	161.90	106.81
1938-39 ..	115.93	108.13	106.72	113.88	106.28	85.31	170.77	111.38

(a) See note (c), par. 3 (i) p. 118.

(ii) *Distribution.* The subjoined table shows the distribution of working expenses under four chief heads of expenditure for the years 1934-35 to 1938-39:—

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
MAINTENANCE OF WAY AND WORKS.								
1934-35 ..	2,433	1,570	1,291	394	553	116	152	6,509
1935-36 ..	2,161	1,517	1,344	445	569	122	145	6,303
1936-37 ..	2,320	1,627	1,451	471	610	130	139	6,748
1937-38 ..	2,614	1,777	1,537	528	644	135	179	7,414
1938-39 ..	2,972	1,514	1,602	503	667	129	245	7,632

ROLLING STOCK.

1934-35 ..	4,573	2,182	2,180	1,097	1,088	183	137	11,440
1935-36 ..	4,843	2,333	2,205	1,150	1,140	214	149	12,034
1936-37 ..	4,982	2,492	2,295	1,205	1,181	246	169	12,570
1937-38 ..	5,562	2,888	2,544	1,340	1,214	281	208	14,037
1938-39 ..	5,622	2,801	2,695	1,389	1,321	279	251	14,358

TRANSPORTATION AND TRAFFIC.

1934-35 ..	2,726	1,714	1,320	485	621	99	56	7,021
1935-36 ..	2,925	1,798	1,350	531	648	112	59	7,423
1936-37 ..	3,006	1,874	1,394	576	693	128	64	7,735
1937-38 ..	3,324	2,121	1,460	648	715	143	83	8,494
1938-39 ..	3,502	2,254	1,533	682	779	151	101	9,002

GOVERNMENT RAILWAYS: DISTRIBUTION OF WORKING EXPENSES
—continued.

Year.	N.S.W. £'000.	Victoria. £'000.	Q'land £'000.	S. Aust. £'000.	W. Aust. £'000.	Tasmania. £'000.	C'wealth. £'000.	Australia. £'000.
OTHER CHARGES.								
1934-35 ..	1,833	1,040	295	265	121	(a) 75	35	3,664
1935-36 ..	1,919	1,208	314	289	131	(a) 112	34	4,007
1936-37 ..	2,048	1,265	326	304	136	(a) 115	40	4,234
1937-38 ..	2,259	1,044	348	351	137	(a) 117	42	4,298
1938-39 ..	2,448	1,491	363	357	144	(a) 118	45	4,966

(a) Includes £54,000, 1935, and £94,000, 1936, 1937, 1938 and 1939, to replacement and depreciation fund.

5. Net Revenue.—The following table shows the net earnings, i.e., the excess of gross earnings over working expenses, and the amount of such net earnings per average mile worked and per train-mile run for the last five years:—

GOVERNMENT RAILWAYS: NET REVENUE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
NET REVENUE.								
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1934-35 ..	5,237	2,915	2,080	417	929	— 72	— 34	11,472
1935-36 ..	5,906	2,833	1,485	464	958	— 112	..	11,534
1936-37 ..	6,261	2,877	1,626	451	842	— 141	31	11,947
1937-38 ..	6,526	1,905	1,496	418	968	— 212	— 69	11,032
1938-39 ..	5,403	1,224	1,605	188	688	— 191	— 95	8,822

NET REVENUE PER AVERAGE MILE WORKED.

	£	£	£	£	£	£	£	£
1934-35 ..	850	618	317	165	213	— 112	— 16	423
1935-36 ..	964	601	226	184	220	— 174	..	426
1936-37 ..	1,023	609	248	178	193	— 218	14	441
1937-38 ..	1,067	403	228	163	221	— 325	— 31	406
1938-39 ..	884	257	244	74	157	— 290	— 43	324

NET REVENUE PER TRAIN-MILE RUN.

	d.	d.	d.	d.	d.	d.	d.	d.
1934-35 ..	47.84	45.04	38.52	19.70	38.00	—14.08	—15.21	40.80
1935-36 ..	51.17	41.49	28.77	20.40	37.73	a—16.25	0.10	39.39
1936-37 ..	52.64	40.11	30.12	19.32	33.26	—18.21	10.47	39.28
1937-38 ..	51.86	25.52	26.30	16.40	36.46	—26.31	—21.71	34.41
1938-39 ..	43.08	16.42	27.66	7.31	25.10	—24.01	—25.35	27.33

(a) See note (c), par. 3 (1) p. 118.

In the graphs accompanying this Chapter the gross and net revenue and working expenses are shown from 1870 to 1939.

6. **Interest.**—The amount of interest payable on expenditure from loans for the construction and equipment of the Government railways in Australia during the five years ended 30th June, 1939, was as follows:—

GOVERNMENT RAILWAYS: INTEREST ON RAILWAY LOAN EXPENDITURE.

AMOUNT OF INTEREST PAYABLE.

Year.	N.S.W. (a)	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia. (a)
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1934-35 ..	5,678	3,057	1,577	1,056	1,029	248	438	13,184
1935-36 ..	5,700	3,033	1,592	1,061	1,016	248	414	13,190
1936-37 ..	5,444	3,005	1,613	1,061	1,009	88	412	12,758
1937-38 ..	5,340	1,841	1,633	1,071	988	90	377	11,459
1938-39 ..	5,360	1,860	1,642	1,074	1,001	94	395	11,545

(a) Including interest charges on the Grafton-South Brisbane line, which for the year 1938-39 amounted to £218,125 and was contributed by New South Wales, £72,179; Queensland, £27,029; and the Commonwealth, £118,917. See par. 5, p. 113.

The interest payable on the cost of construction and equipment, after the expenditure from Consolidated Revenue (£9,299,896) for that purpose had been deducted, was at the rate of 3.75 per cent. in 1938-39.

Exchange on interest payments abroad and loan management and flotation expenses are not included in the table above. These items are not charged against the railways in Queensland, Western Australia and Tasmania and the figures for these States are not available. In the remaining States the amounts payable in 1938-39 were:—New South Wales, £690,000; Victoria, £188,075; and South Australia, £119,302.

7. **Profit or Loss.**—The following table shows, for the last five years, the actual profit or loss after deducting working expenses, interest and all other charges, excepting exchange, from the gross revenue:—

GOVERNMENT RAILWAYS: PROFIT OR LOSS.

PROFIT OR LOSS AFTER PAYMENT OF WORKING EXPENSES, INTEREST AND OTHER CHARGES.

Year.	N.S.W. (a)	Victoria. (b)	Q'land. (a) (b)	S. Aust.	W. Aust.	Tasmania. (b)	C'wealth.	Australia. (a)
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1934-35 ..	440	142	503	639	99	320	472	1,712
1935-36 ..	206	199	107	597	57	360	414	1,656
1936-37 ..	817	129	14	609	167	230	381	811
1937-38 ..	1,186	64	138	653	20	302	445	427
1938-39 ..	43	636	37	886	313	285	490	2,723

(a) See note (a), par. 6, above.

(b) See par. 1 p. 116.

8. **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 confined to 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 more recent years the competition from the air is an important factor.

The following table gives particulars for the years 1934-35 to 1938-39 :—

GOVERNMENT RAILWAYS : TRAFFIC.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	C'wealth.	Australia.
NUMBER OF PASSENGER JOURNEYS.								
	'000.	'000.	'000.	'000.	'000.	'000.	'000.	'000.
1934-35 ..	160,212	139,689	24,328	16,660	12,876	2,134	98	355,997
1935-36 ..	171,143	139,539	25,244	17,431	12,421	2,322	96	368,196
1936-37 ..	177,837	141,343	25,527	17,777	12,710	2,331	109	377,634
1937-38 ..	189,349	137,895	25,688	17,632	12,011	2,267	100	384,942
1938-39 ..	186,720	142,123	24,639	17,529	11,416	2,297	117	384,841

PER AVERAGE MILE OF LINE WORKED.

	No.	No.	No.	No.	No.	No.	No.	No.
1934-35 ..	25,992	29,589	3,705	6,587	2,954	3,308	46	13,122
1935-36 ..	27,945	29,559	3,844	6,891	2,850	3,600	45	13,592
1936-37 ..	29,038	29,941	3,887	7,028	2,917	3,581	51	13,938
1937-38 ..	30,970	29,209	3,912	6,901	2,746	3,482	45	14,163
1938-39 ..	30,541	29,896	3,752	6,854	2,608	3,490	53	14,134

TONNAGE OF GOODS AND LIVE STOCK CARRIED.

	'000.	'000.	'000.	'000.	'000.	'000.	'000.	'000.
1934-35 ..	13,019	6,010	4,879	2,333	2,903	678	87	29,909
1935-36 ..	13,839	6,424	4,663	2,465	2,887	770	101	31,149
1936-37 ..	14,685	6,813	4,975	2,383	2,798	824	127	32,605
1937-38 ..	16,480	7,258	5,061	2,879	3,062	857	132	35,729
1938-39 ..	15,417	5,976	5,234	2,640	2,859	844	186	33,156

PER AVERAGE MILE OF LINE WORKED.

	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35 ..	2,112	1,273	743	922	666	1,052	41	1,102
1935-36 ..	2,260	1,361	710	974	662	1,194	47	1,150
1936-37 ..	2,398	1,443	758	942	642	1,265	59	1,203
1937-38 ..	2,696	1,537	771	1,127	700	1,316	60	1,315
1938-39 ..	2,522	1,257	797	1,032	653	1,282	84	1,218

(ii) *Metropolitan and Country Passenger Traffic and Revenue 1938-39.* A further indication of the difference in passenger traffic conditions is obtained from the comparison of the volume of metropolitan and suburban and country traffic shown below.

**GOVERNMENT RAILWAYS : METROPOLITAN AND SUBURBAN, AND COUNTRY
PASSENGER TRAFFIC AND RECEIPTS, 1938-39.**

System.	Passenger Journeys.			Revenue.		
	Metropolitan and Suburban.	Country.	Total.	Metropolitan and Suburban.	Country.	Total.
	No.	No.	No.	£	£	£
N.S.W. ..	174,611,297	12,108,667	186,719,964	3,002,810	3,021,286	6,024,096
Victoria ..	135,545,739	6,577,828	142,123,567	2,310,799	1,543,882	3,854,681
Queensland ..	19,829,108	4,810,271	24,639,379	308,337	1,261,505	1,569,842
S. Australia ..	16,265,199	1,263,452	17,528,651	229,445	370,938	600,383
W. Australia ..	10,186,155	1,229,460	11,415,615	126,116	387,717	513,833
Tasmania ..	(a)	(a)	2,296,707	(a)	(a)	129,020
Commonwealth ..	..	117,139	117,139	..	145,821	145,821
Australia	356,437,498 (b)	26,106,817 (b)	384,841,022	5,977,507 (b)	6,731,149 (b)	12,837,676

(a) Not available.

(b) Incomplete, exclusive of Tasmania.

(iii) *Goods Traffic.* (a) *Classification.* Some indication of the differing conditions of the traffic in each system is also given by an examination of the tonnage of the various classes of commodities carried, and of the revenue derived therefrom. The following table shows the number of tons of various representative commodities carried during the year 1938-39:—

GOVERNMENT RAILWAYS : CLASSIFICATION OF COMMODITIES CARRIED, 1938-39.

'000 TONS CARRIED.

System.	Coal and Coke.	Other Minerals.	Grain and Flour.	Hay, Straw and Chaff.	Wool.	Live Stock.	All other Commodities.	Total.
N.S.W. ..	7,633	1,464	2,072	28	165	739	3,316	15,417
Victoria ..	200	191	920	219	82	725	3,639	5,976
Q'land ..	735	521	333	(a)	85	527	3,033	5,234
S. Aust. ..	129	669	631	57	38	195	921	2,640
W. Aust. ..	299	280	914	45	28	116	1,177	2,859
Tas. ..	478	(b)	50	24	6	30	256	844
C'wealth ..	21	2	(a)	(a)	5	66	92	186
Australia	9,495	3,127	4,920	373	409	2,398	12,434	33,156

(a) Included with "Other."

(b) Included with "Coal and Coke."

(b) *Revenue.* The following table shows the revenue derived from goods and live stock traffic during 1938-39:—

GOVERNMENT RAILWAYS : REVENUE FROM GOODS AND LIVE STOCK, 1938-39.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	C'wealth.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
General merchandise ..	6,552	3,386	3,563	1,364	2,317	190	127	17,499
Wool ..	673	164	434	79	74	6	12	1,442
Live stock ..	1,121	606	777	209	140	22	80	2,955
Minerals—								
Coal and coke ..	1,590	62	346	33	180	(a) 24	3	2,238
Other ..	420	58	354	459	96	(b) 76	2	1,465
Total ..	10,356	4,276	5,474	2,144	2,807	318	224	25,599

(a) Native coal.

(b) Minerals other than native coal.

(iv) *Passenger-Mileage.* The subjoined table gives particulars of passenger-mileage in respect of the Government railways in Australia for the years 1936-37 to 1938-39.

GOVERNMENT RAILWAYS : SUMMARY OF "PASSENGER-MILES."

Year ended 30th June—	Passenger Train-Mileage.	Total Passenger-Miles.	Average Passengers per Train-Mile.	Average Mileage per Passenger Journey.	Passenger Earnings.				Density of Traffic per Average Mile Worked.
					Gross.	Per Average Mile Worked.	Per Passenger-Mile.	Per Passenger Train-Mile.	
	'000.	'000.	No.	Miles.	£'000.	£	d.	d.	No.
NEW SOUTH WALES.									
1937	17,837	1,952,887	109	10.98	5,623	918	0.69	75.66	318,881
1938	18,742	2,132,966	114	11.26	5,995	980	0.67	76.76	348,878
1939	19,173	2,149,154	112	11.51	6,024	985	0.67	75.41	351,526
VICTORIA.									
1937	11,886	1,233,554	104	8.73	3,807	806	0.74	76.86	261,303
1938	12,088	1,203,812	100	8.73	3,684	780	0.73	73.15	255,003
1939	12,434	1,292,843	104	9.10	3,855	811	0.72	74.40	271,948
QUEENSLAND.(a)									
1937	5,504	(b)	(b)	(b)	1,447	223	(b)	63.09	(b)
1938	5,696	(b)	(b)	(b)	1,494	228	(b)	62.97	(b)
1939	5,750	(b)	(b)	(b)	1,523	232	(b)	63.55	(b)
SOUTH AUSTRALIA.									
1937	3,504	205,329	59	10.55	592	234	0.69	40.56	81,179
1938	3,679	200,144	54	11.35	571	223	0.68	37.23	78,319
1939	3,747	212,982	57	12.15	600	235	0.68	38.45	83,281
WESTERN AUSTRALIA.									
1937	2,398	(b)	(b)	(b)	559	128	(b)	55.93	(b)
1938	2,544	(b)	(b)	(b)	533	122	(b)	50.25	(b)
1939	2,795	(b)	(b)	(b)	514	117	(b)	44.12	(b)
TASMANIA.									
1937	949	34,653	37	14.86	121	185	0.84	30.51	53,231
1938	1,045	32,917	32	14.52	116	179	0.85	26.72	50,563
1939	1,027	35,193	34	15.32	129	196	0.88	30.15	53,485
COMMONWEALTH.(c)									
1937	344	25,797	75	237.14	117	54	1.09	81.39	12,028
1938	385	25,965	67	257.92	121	55	1.12	75.30	11,817
1939	388	34,085	88	290.98	146	66	1.03	90.21	15,486

(a) Exclusive of Queensland portion of Grafton-South Brisbane (uniform gauge) line. (b) Not available. (c) Railways controlled by Commonwealth Government.

(v) *Ton-Mileage.* Particulars regarding total "ton-miles" are given in the following table for each of the years 1936-37 to 1938-39:—

GOVERNMENT RAILWAYS : SUMMARY OF "TON-MILES."

Year ended 30th June—	Goods-Train-Mileage.	Total "Ton-miles."	Average Freight Paying Load per Ton.	Average Haul per Ton.	Goods and Live Stock Earnings.				Density of Traffic per Average Mile Worked.
					Gross.	Per Average Mile Worked.	Per "Ton-Mile."	Per Goods-Train-Mile.	
	'000.	'000.	Tons.	Miles.	£'000.	£	d.	d.	Tons.
NEW SOUTH WALES.									
1937	10,711	1,731,904	162	120.80	9,661	1,577	1.34	216.48	282,797
1938	11,461	1,854,936	162	114.05	10,831	1,772	1.40	226.80	303,402
1939	10,933	1,760,534	161	115.95	10,356	1,694	1.41	227.34	287,961
VICTORIA.									
1937	5,325	838,002	157	123.00	5,029	1,065	1.44	226.65	177,514
1938	5,829	927,444	159	127.78	4,945	1,047	1.28	203.61	196,460
1939	5,455	760,485	139	127.26	4,276	899	1.35	188.11	159,967
QUEENSLAND.(a)									
1937	7,343	665,989	91	139.89	4,824	742	1.73	157.68	105,658
1938	7,847	715,917	91	146.98	5,056	770	1.69	154.63	109,023
1939	8,073	745,351	92	147.57	5,404	823	1.73	160.67	114,708
SOUTH AUSTRALIA.									
1937	2,102	314,462	150	131.97	2,099	830	1.60	239.58	124,325
1938	2,432	365,012	150	126.80	2,353	921	1.55	232.20	142,834
1939	2,430	348,553	143	132.01	2,144	838	1.48	211.72	136,293
WESTERN AUSTRALIA.									
1937	(b)3,677	346,777	94	123.92	2,541	583	1.76	165.85	79,588
1938	(b)3,828	390,913	102	127.67	2,769	633	1.70	173.62	89,372
1939	(b)3,779	378,089	100	132.24	2,807	641	1.78	178.26	86,393
TASMANIA.(c)									
1937	(b) 915	41,151	45	51.50	302	498	1.76	84.98	63,212
1938	(b) 887	37,916	43	45.76	289	443	1.83	78.07	58,243
1939	(b) 880	38,088	43	46.80	296	450	1.87	80.76	57,885
COMMONWEALTH.(d)									
1937	376	29,742	79	234.59	195	91	1.57	124.34	13,868
1938	374	28,526	76	216.02	190	86	1.60	121.90	12,983
1939	514	34,801	68	187.28	224	102	1.54	104.38	15,811

(a) Exclusive of Queensland portion of Grafton-South Brisbane (uniform gauge) line.
 (b) Estimated. (c) Exclusive of particulars of live stock carried. (d) Railways controlled by the Commonwealth Government.

o. **Rolling Stock.**—The following table shows the numbers of rolling stock in use at the 30th June for each of the years 1937 to 1939. Further details may be found in *Transport and Communication Bulletin* No. 30.

GOVERNMENT RAILWAYS : ROLLING STOCK.

System.	At 30th June—								
	1937.			1938.			1939.		
	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.	Locos.	Coaching Stock.	Other Stock.
New South Wales ..	1,346	2,725	23,293	1,310	2,790	23,704	1,284	2,808	24,257
Victoria ..	588	2,474	21,021	574	2,458	21,029	581	2,439	20,993
Queensland ..	753	1,397	18,744	748	1,398	18,704	752	1,413	18,733
South Australia ..	327	608	8,436	329	606	8,013	335	594	7,906
Western Australia ..	417	485	11,070	420	477	11,097	427	475	11,110
Tasmania ..	93	226	2,046	94	233	2,073	95	225	2,120
Commonwealth ..	105	80	1,384	113	89	1,383	113	89	1,359
Australia ..	3,029	8,004	85,994	3,588	8,051	86,003	3,587	8,043	86,538

10. **Accidents.**—The following table gives particulars of the numbers of persons killed and injured through train accidents and the movement of rolling stock on the Government railways of Australia for each of the years 1936-37, 1937-38 and 1938-39 :—

GOVERNMENT RAILWAYS : ACCIDENTS.

System.	1936-37.		1937-38.		1938-39.	
	Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales ..	55	479	66	593	57	625
Victoria ..	55	144	48	442	48	466
Queensland ..	26	143	25	166	23	132
South Australia ..	14	172	21	182	9	187
Western Australia ..	18	703	14	190	14	142
Tasmania ..	3	46	6	66	7	62
Commonwealth ..	..	30	..	38	1	20
Australia ..	171	1,717	180	1,677	159	1,634

Further details relating to the number of passengers, employees and other persons affected by railway accidents are published on page 25 of *Transport and Communication Bulletin* No. 30.

11. **Consumption of Oil and Fuel.**—The appended table shows the quantities and values of oil and fuel consumed by the various Government Railway Departments during the year 1938-39 :—

GOVERNMENT RAILWAYS : CONSUMPTION AND VALUE OF OIL AND FUEL, 1938-39.

System.	Oil.				Coal.	
	Lubricating.		Fuel and Light, etc.		Tons.	Value.
	Gallons.	Value.	Gallons.	Value.		
New South Wales ..	401,260	45,027	1,481,449	50,204	1,476,074	1,100,277
Victoria ..	207,248	19,563	1,588,708	56,730	534,732	576,127
Queensland ..	214,185	23,430	501,789	31,873	430,709	407,614
South Australia ..	98,825	11,566	1,192,373	60,686	189,632	252,532
Western Australia ..	112,359	13,384	398,533	15,384	344,537	259,819
Tasmania ..	50,501	5,265	442,600	12,233	50,715	63,405
Commonwealth ..	28,961	3,569	154,929	6,378	31,774	49,953
Australia ..	1,113,339	121,804	5,760,441	233,488	3,058,173	2,708,827

12. **Staff Employed.**—The following table gives details of the average staff employed by the Government railways of Australia during 1938-39. Further details under this head may be found in *Transport and Communication Bulletin* No. 30.

GOVERNMENT RAILWAYS : AVERAGE STAFF EMPLOYED, 1938-39.

System.	Operating Staff.		Construction Staff.		All Employees—Staff.	
	Salaried.	Wages.	Salaried.	Wages.	Salaried.	Wages.
New South Wales ..	7,001	34,473	49	1,861	7,050	36,334
Victoria ..	3,452	20,749	(a)	(a)	3,452	20,749
Queensland ..	3,160	14,836	7	109	3,167	14,945
South Australia ..	1,374	7,099	1	1	1,375	7,100
Western Australia ..	1,307	7,401	4	308	1,311	7,709
Tasmania ..	202	1,782	(b)	(b)	202	1,782
Commonwealth ..	166	1,777	..	52	166	1,829
Australia ..	16,662	83,117	61	2,331	16,723	90,448

(a) In the State of Victoria, railway construction work is not under the control of the Railways Commissioners. (b) Construction work has been placed under the direction of the Chief Engineer of the Way and Works Section.

§ 3. Private Railways.

1. **Total Mileage Open, 1938-39.**—The bulk of the private railways in Australia have been laid down for the purpose of hauling timber, firewood, sugar-cane, coal and other minerals, and they are not generally used for the conveyance of passengers or for public traffic. In many cases the lines are practically unballasted and easily removable.

The railways referred to in this section include only lines open to the public for general passenger and goods traffic. Complete particulars of lines used for special purposes only are not available.

2. **Lines Open for General Traffic.**—The following statement gives a summary of the operations of private railways open for general traffic for the year 1938-39 :—

PRIVATE RAILWAYS : SUMMARY OF OPERATIONS, 1938-39.

State.	Route-Miles Open.	Capital Cost.	Gross Revenue.	Working Expenses.	Train-Miles Run.	Passenger Journeys.	Goods, etc., Carried.	Employees
	Miles.	£'000.	£	£	'000.	'000.	'000. Tons.	No.
N.S.W.(a)	96.63	1,253	397,365	243,051	652	1,232	1,682	489
Vic. ..	24.94	82	6,813	7,435	18	8	25	18
Q'land(a)	183.39	247	31,520	26,785	104	4	263	48
S.A.(a) ..	50.90	(b)	(b)	(b)	115	..	2,521	39
W.A. ..	277.00	2,257	177,307	82,598	282	23	130	277
Tas.(a) ..	131.55	910	152,786	129,153	236	42	232	276
Australia(a)	764.71	4,749	765,791	489,022	1,407	1,309	4,853	1,147

(a) Incomplete.

(b) Not available.

Some of the particulars given in the table are incomplete in respect of the States of New South Wales, Queensland, South Australia and Tasmania. In New South Wales and Queensland several lines, although owned by private companies, are operated by the Government Railway Departments, and Government rolling stock is used thereon, while some of the companies are not able to supply particulars of the capital cost, revenue and

working expenses of the lines which they operate. In some cases the figures relating to tonnage of goods, etc., include particulars of coal, ores, timber, sugar-cane, etc., carried for private purposes, as figures relating to goods carried for the general public are not kept separate.

C. TRAMWAYS.

1. **Systems in Operation.**—(i) *General.* Tramway systems are in operation in all the States, and in recent years considerable extension has been made in the use of electrical traction, the benefit of which is now enjoyed in a number of the larger towns.

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 (see above), 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 tables show for each State the total mileage of tramway lines open for general passenger traffic for the year 1938-39, classified (a) according to the controlling authority, (b) according to the motive power used, and (c) according to gauge:—

TRAMWAYS : ROUTE MILEAGE OPEN, 1938-39.

Controlling Authority, Nature of Motive Power, and Gauge.	N.S. Wales.	Victoria.	Q'land.	South Australia.	Western Australia.	Tasmania.	Total Australia.
ACCORDING TO CONTROLLING AUTHORITY.							
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Government ..	181.97	173.55	..	..	58.84	..	414.36
Municipal ..	..	..	60.15	77.74	11.90	29.44	179.23
Private ..	3.50	..	..	..	9.40	..	12.90
Total ..	185.47	173.55	60.15	77.74	80.14	29.44	606.49
ACCORDING TO MOTIVE POWER.							
	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.	Miles.
Electric ..	181.97	165.65	60.15	77.74	71.19	29.44	586.14
Steam or Petrol ..	3.50	..	..	..	8.95	..	12.45
Cable ..	..	7.90	..	..	..	..	7.90
Total ..	185.47	173.55	60.15	77.74	80.14	29.44	606.49
ACCORDING TO GAUGE.							
Gauge—							
5 ft. 3 in. ..	..	5.18	..	..	..	..	5.18
4 ft. 8½ in. ..	185.47	168.37	60.15	77.74	..	..	491.73
3 ft. 6 in. ..	..	..	..	..	80.14	29.44	109.58
Total ..	185.47	173.55	60.15	77.74	80.14	29.44	606.49

Further details on this subject may be obtained from page 28 of *Transport and Communication Bulletin* No. 30.

(iii) *Cost of Construction and Equipment.* The table hereunder shows the total cost of construction and equipment of all tramways to the 30th June, 1939, classified according to the nature of the motive power. Further details relating to controlling authorities are available on p. 28 of *Transport and Communication Bulletin No. 30.*

TRAMWAYS : COST OF CONSTRUCTION AND EQUIPMENT, 1938-39.

Nature of Motive Power.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Australia.
ACCORDING TO MOTIVE POWER.							
Electric	£ 8,943,941	£ 8,086,454	£ 2,390,649	£ 4,438,525	£ 1,751,790	£ 663,757	£ 26,275,116
Steam or Petrol	(a) 20,000	..	..	..	85,110	..	105,110
Cable ..	..	507,922	..	..	..	..	507,922
Total ..	8,963,941	8,594,376	2,390,649	4,438,525	1,836,900	663,757	26,888,148

(a) Estimated.

(iv) *Summary of Operations, 1934-35 to 1938-39.* The following table gives a summary of the working of all tramway systems in Australia for the years 1934-35 to 1938-39 :—

TRAMWAYS : SUMMARY OF OPERATIONS.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Mileage open for traffic .. miles	619.07	611.90	613.02	607.66	606.49
Cost of Construction and Equipment .. £'000.	26,068	26,654	26,949	26,959	26,888
Cost per mile £	42,108	43,559	43,961	44,366	44,334
Gross Revenue £'000.	7,398	7,567	7,735	7,835	7,866
Working Expenses £'000.	5,419	5,464	5,609	5,975	6,264
Net Earnings £'000.	1,979	2,103	2,126	1,860	1,602
Interest £'000.	1,166	1,135	1,102	1,117	1,094
Percentage of Working Expenses on Gross Revenue %	73.24	72.20	72.51	76.26	79.63
Percentage of Net Earnings on Capital Cost %	7.59	7.89	7.89	6.90	5.96
Tram-miles run '000 miles	81,084	81,481	82,295	83,806	83,838
Gross revenue per tram mile .. d.	21.90	22.29	22.56	22.44	22.52
Working expenses per tram mile .. d.	16.04	16.09	16.36	17.11	17.93
Net earnings per tram mile .. d.	5.86	6.20	6.20	5.33	4.59
Passengers carried '000	672,523	688,123	701,941	754,957	716,351
Passengers carried per tram mile .. No.	8.29	8.45	8.53	8.49	8.54
Average revenue per passenger journey .. d.	2.64	2.64	2.64	2.64	2.64
Persons employed at end of year .. No.	17,572	17,712	17,864	18,073	17,695

2. *Electric Tramways.*—(i) *Financial Operations.* The following table gives the capital cost and the financial results of electric tramways for each State during 1938-39, together with similar details for Australia for the last five years.

ELECTRIC TRAMWAYS : CAPITAL COST AND FINANCIAL RESULTS.

State.	Route-Miles Open at 30th June, 1939.	Capital Cost.	Gross Revenue.	Working Expenses.	Net Revenue.	Interest.	Employees at 30th June, 1939.
STATES, 1938-39.							
New South Wales ..	Miles. 181.97	£'000. 8,944	£'000. 3,449	£'000. 3,080	£'000. 369	£'000. 391	No. 8,062
Victoria ..	165.65	8,086	2,112	1,389	724	254	4,355
Queensland ..	60.15	2,391	831	632	199	120	1,911
South Australia ..	77.74	4,438	711	494	217	245	1,750
Western Australia ..	71.19	1,752	367	342	25	45	792
Tasmania ..	29.44	664	179	152	26	37	337
Australia ..	586.14	26,275	7,649	6,089	1,560	1,092	17,207

AUSTRALIA, 1934-35 TO 1938-39.

	Miles.	£'000.	£'000.	£'000.	£'000.	£'000.	No.
1934-35 ..	570.46	24,539	6,936	5,050	1,886	1,155	16,291
1935-36 ..	570.64	25,428	7,201	5,165	2,036	1,123	16,789
1936-37 ..	577.96	25,984	7,438	5,361	2,077	1,092	17,143
1937-38 ..	578.16	26,132	7,602	5,783	1,819	1,112	17,464
1938-39 ..	586.14	26,275	7,649	6,089	1,560	1,092	17,207

(ii) *Traffic and Accidents.* Particulars of the traffic of electric tramways and the accidents which occurred in the movement of rolling stock are shown in the following table for each State during 1938-39, and for Australia during the last five years :-

ELECTRIC TRAMWAYS : TRAFFIC AND ACCIDENTS.

State.	Average Mileage Open for Year.		Car-Miles Run.	Passenger Journeys.	Average Number Passengers per Car-Mile.	Accidents.	
	Route.	Track.				Killed.	Injured.
STATES, 1938-39.							
New South Wales	Miles. 181.97	Miles. 333.10	'000. 34,941	'000. 322,238	No. 9.22	No. 32	No. 1,508
Victoria ..	165.65	307.39	22,803	175,198	7.68	15	341
Queensland ..	60.10	106.55	8,100	91,444	11.29	5	505
South Australia ..	77.02	145.51	8,712	52,906	6.07	4	118
Western Australia ..	71.19	108.73	4,756	38,095	8.01	4	250
Tasmania ..	29.44	44.31	2,049	15,595	7.61	1	28
Australia ..	585.37	1,045.59	81,361	695,476	8.55	61	2,750
AUSTRALIA, 1934-35 TO 1938-39.							
	Miles.	Miles.	'000.	'000.	No.	No.	No.
1934-35 ..	570.12	1,009.00	75,203	626,901	8.34	65	1,882
1935-36 ..	570.42	1,016.63	76,684	652,491	8.51	70	2,226
1936-37 ..	576.79	1,025.99	78,526	673,227	8.57	74	2,535
1937-38 ..	577.57	1,044.74	81,038	689,286	8.51	71	2,853
1938-39 ..	585.37	1,045.59	81,361	695,476	8.55	61	2,750

D. MOTOR VEHICLES.

1. The Motor Car and Motor Industry.—(i) *Evolution of the Motor Car.* In Official Year Book No. 20, p. 319, a short history of the evolution of the motor car is given.

(ii) *Motor Industry.* Although motor cars are not entirely manufactured in Australia the capital invested in assembling and body-building plants is considerable. The importance of the industry is shown by the following figures which relate to the local manufacture of motor bodies and the importation of motor cars, fuel and tyres during the past four years :—

MOTOR VEHICLES, ETC. : LOCAL MANUFACTURE AND IMPORTS.

Particulars.	Unit.	1935-36.	1936-37.	1937-38.	1938-39.
Motor bodies built ..	No.	67,337	77,191	92,061	79,017
	£	6,043,735	6,461,314	7,400,497	6,379,955
Imports—					
Motor bodies ..	No.	1,699	786	646	532
	£	149,593	81,380	63,810	56,041
Chassis ..	No.	75,652	69,915	89,632	76,094
	£	5,507,957	5,458,640	7,355,586	6,416,949
Crude petroleum ..	Mill. gal.	65	60	70	54
	£	539,693	520,517	603,216	448,880
Petroleum spirit, etc. ..	Mill. gal.	255	282	333	345
	£	3,792,950	4,525,939	5,503,085	5,209,650
Pneumatic tyres and tubes	lb.	225,087	342,651	341,178	322,764
	£	18,826	27,932	30,968	28,094

Although precise figures are not available, the value of motor tyres and tubes produced in Australia during 1938-39 was approximately £4,000,000, and a thriving industry is engaged in the manufacture of spares, batteries and accessories.

2. *Registration.*—The arrangements for the registration of motor vehicles and the licensing of drivers and riders thereof are not uniform throughout Australia. Methods of registration, licence fees payable, etc., in each State were referred to in Official Year Book No. 16, pp. 337-40, and later issues up to No. 25.

3. *Public Vehicles.*—In all the capital cities of the States and in many of the most important provincial centres taxi-cabs and other vehicles ply for hire under licence granted either by 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 has had a marked effect on railway and tramway services. The constitution of Boards empowered to allocate the routes over which omnibuses may operate arose from the belief that the economic waste resulting from duplication, by running services parallel with or contiguous to existing railway and tramway systems, is thus avoided. The general principle governing the allocation of routes is that the omnibus services should act as feeders to existing transport facilities. In some States the railway and tramway systems run motor services complementary to their main services to meet the competition of private

enterprise and to endeavour to protect the existing transport utilities provided by public bodies. Such services are conducted in New South Wales by the Department of Road Transport and Tramways, in Victoria by the Victorian Railways Commissioners, in South Australia by the South Australian Railways Commissioners and by the Municipal Tramways Trust, Adelaide, and in Tasmania by the Hobart City Council.

5. Motor Vehicles on the Register, etc.—(i) Year 1938–39. Particulars of the registration of motor vehicles, licences issued and revenue received for the year 1938–39 are contained in the subjoined table :—

MOTOR VEHICLES : REGISTRATIONS AND REVENUE, 1938-39.

State or Territory.	Motor Vehicles Registered at 30th June, 1939. (a)					Drivers' and Riders' Licences in force at 30th June, 1939.	Gross Revenue derived from—			
	Motor Cars.(b)	Commercial Vehicles (c)	Motor Cycles.	Total.	Per 1,000 of Population at 30th June, 1939.		Vehicle Registrations and Motor Tax.	Drivers' and Riders', etc., Licences.	Other Sources.	Total.
N. South Wales	217,361	77,593	24,151	319,015	116.14	460,371	2,450,301	238,704	94,662	2,783,667
Victoria ..	153,391	481,766	26,098	261,855	139.18	358,417	1,796,039	89,718	41,530	1,927,287
Queensland ..	76,654	43,341	8,168	128,163	126.08	161,116	843,386	63,557	60,194	967,137
South Australia	56,983	24,554	9,219	90,756	152.33	138,089	647,298	72,110	10,990	730,398
Western Aust.	38,039	24,441	7,199	69,679	149.71	85,005	405,108	26,025	25,541	457,364
Tasmania ..	17,668	5,036	3,656	26,360	111.39	30,443	160,860	15,241	11,698	187,799
Northern Terr.	404	966	56	1,426	230.41	1,649	2,137	670	..	2,807
Aust. Cap. Terr.	1,771	418	90	2,279	189.07	3,407	13,216	1,762	107	15,085
Australia ..	562,271	258,025	79,237	899,533	129.23	1,238,497	6,318,435	508,387	244,722	7,071,544

(a) Exclusive of Trailers (18,464), Road Tractors, etc. (2,035), and Dealers' Plates (3,721). (b) Includes Taxis and Hire Cars. (c) Includes Lorries, Vans, Buses and Utility Trucks. (d) Includes 47,427 vehicles registered as Primary Producers'.

Particulars relating to the number of motor vehicles registered at 30th June, 1940, will be found in the Appendix to this volume.

(ii) *Quinquennium* 1934–35 to 1938–39. The following table shows the number of vehicles registered, licences issued, and revenue received therefrom during each of the years 1934–35 to 1938–39 :—

MOTOR VEHICLES : REGISTRATIONS AND REVENUE, AUSTRALIA.

Year.	Motor Vehicles Registered at 30th June.					Drivers' and Riders' Licences in force at 30th June.	Gross Revenue derived from—			
	Motor Cars.	Commercial Vehicles.	Motor Cycles.	Total.	Per 1,000 of Population at 30th June.		Vehicle Registrations and Motor Tax.	Drivers' and Riders', etc., Licences.	Other Sources.	Total.
1934–35	457,684	155,721	75,045	688,450	102.38	910,218	4,507,034	363,194	153,586	5,023,814
1935–36	484,832	180,567	77,467	742,866	109.64	979,343	5,017,888	386,322	215,949	5,620,159
1936–37	499,289	214,296	77,912	791,497	115.86	1,092,973	5,413,282	448,914	218,671	6,080,867
1937–38	534,963	241,751	80,114	856,828	124.30	1,175,786	5,884,847	470,053	234,161	6,589,061
1938–39	562,271	258,025	79,237	899,533	129.23	1,238,497	6,318,435	508,387	244,722	7,071,544

(a) Includes Primary Producers' Vehicles, Victoria.

(iii) *Relation to Population.* The table hereunder gives the number of vehicles (exclusive of motor cycles) registered per 1,000 of population in each State at the 31st December, 1921, and at 30th June for each of the years 1935 to 1939 :—

MOTOR VEHICLES (EXCLUSIVE OF MOTOR CYCLES) REGISTERED PER 1,000 OF POPULATION.

Year.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.
31st Dec. 1921 ..	15	16	8	24	12	13	(a)	..	15
30th June, 1935 ..	83	97	96	98	105	70	95	148	91
„ 1936 ..	89	105	102	110	110	77	185	160	98
„ 1937 ..	96	112	105	119	119	82	191	162	104
„ 1938 ..	103	120	111	135	128	90	206	159	113
„ 1939 ..	107	125	118	137	134	96	221	182	118

(a) Not available.

(iv) *Revenue per Motor Vehicle.* The following table gives the average revenue per vehicle (exclusive of motor cycles) received in respect of registration and motor tax in the several States for each year from 1934-35 to 1938-39. In some States the revenue from motor tax on cycles is not separately recorded. In these cases an amount based on the flat rate provided for cycles in the registration acts has been deducted from the total revenue received, and the average amounts shown must therefore be regarded as approximate only.

AVERAGE REVENUE PER VEHICLE FROM REGISTRATION FEES AND MOTOR TAX (EXCLUSIVE OF MOTOR CYCLES).

State or Territory.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ s. d.				
New South Wales ..	7 11 0	7 14 2	7 16 0	7 17 11	7 19 10
Victoria ..	7 3 5	7 5 11	7 5 10	7 7 8	7 7 9
Queensland ..	5 18 8	6 0 8	6 3 0	6 5 10	6 16 3
South Australia ..	8 11 11	8 8 6	a7 14 0	7 4 7	7 9 10
Western Australia ..	5 17 5	5 16 11	6 11 5	6 5 2	6 6 0
Tasmania ..	5 15 0	5 14 3	5 13 0	5 17 6	6 13 3
Northern Territory ..	b1 0 0	1 5 0	1 7 0	1 8 1	1 11 0
Aust. Cap. Territory ..	5 12 1	5 12 2	6 6 0	5 18 7	5 15 2
Australia ..	7 2 2	7 4 0	7 4 9	7 5 2	7 8 3

(a) Decrease as compared with figures for 1935-36 largely due to the introduction during the year of a change in the method of registering, which enabled persons to register vehicles for six-monthly periods, instead of annually only, as before. (b) Estimated.

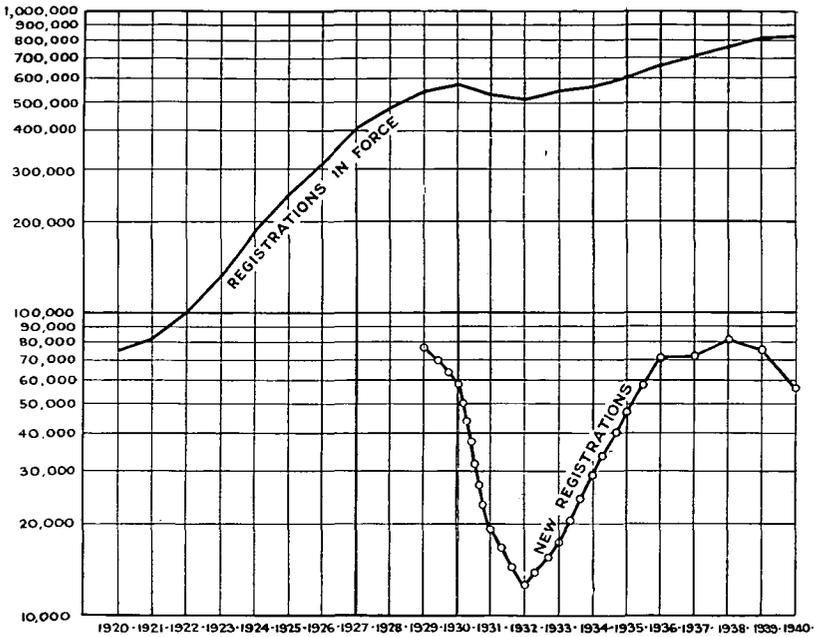
6. *New Vehicles Registered.*—(i) *Year 1938-39.* The following table gives the number of new vehicles registered in the various States during the year 1938-39 :—

NEW MOTOR VEHICLES REGISTERED, 1938-39.

State or Territory.	Motor Cars.	Commercial Vehicles, etc.	Motor Cycles.	Total.
New South Wales ..	20,493	7,845	2,196	30,534
Victoria ..	15,090	(a) 6,831	2,349	24,270
Queensland ..	7,604	5,330	1,090	14,024
South Australia(b) ..	5,152	2,222	769	8,143
Western Australia(c) ..	2,306	652	291	3,249
Tasmania ..	2,010	700	350	3,060
Australian Capital Territory ..	242	66	19	327
Total ..	52,897	23,646	7,064	83,607

(a) Includes vehicles registered as Primary Producers'. (b) Excludes Northern Territory. (c) Metropolitan Area only.

MOTOR VEHICLE REGISTRATION—AUSTRALIA, 1920 TO 1940.

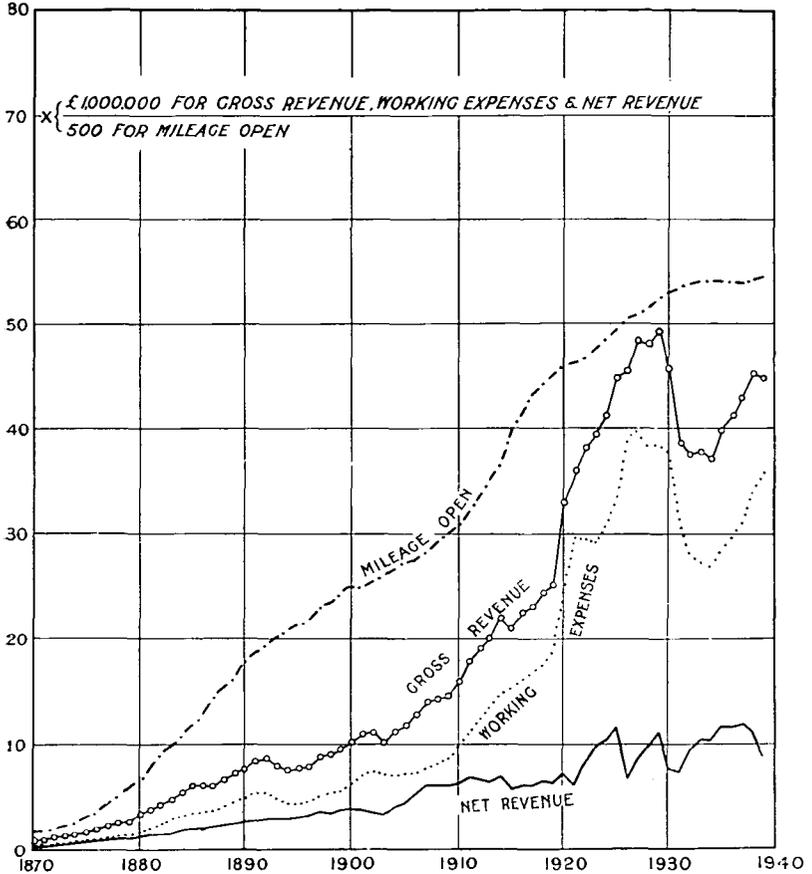


(See page 133.)

EXPLANATION.—This is a ratio graph, the vertical scale being logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual numbers are indicated by the scale at the side of the graph.

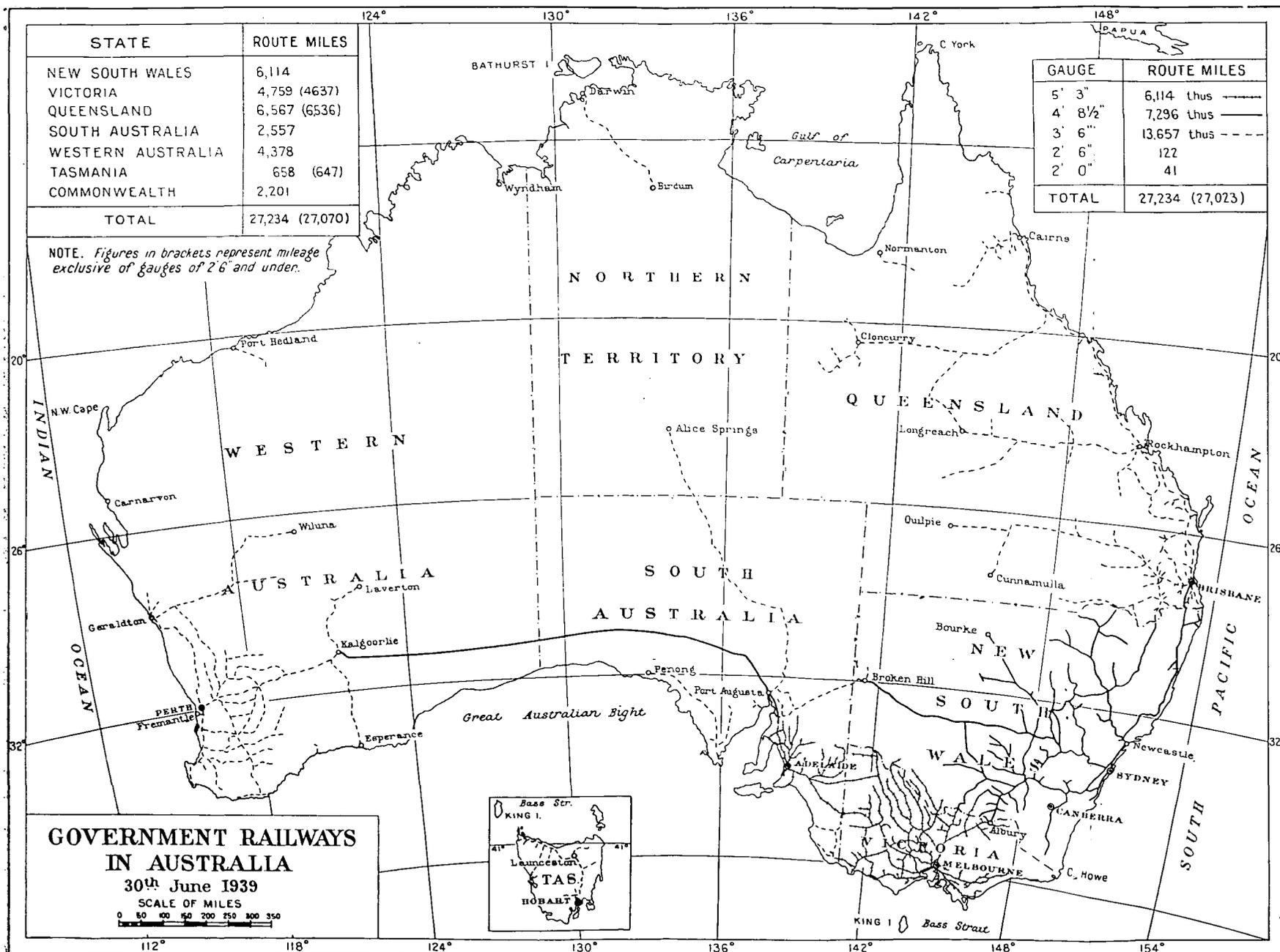
The graphs show for all motor vehicles other than motor cycles the registrations in force at 30th June each year and the number of new registrations during the year.

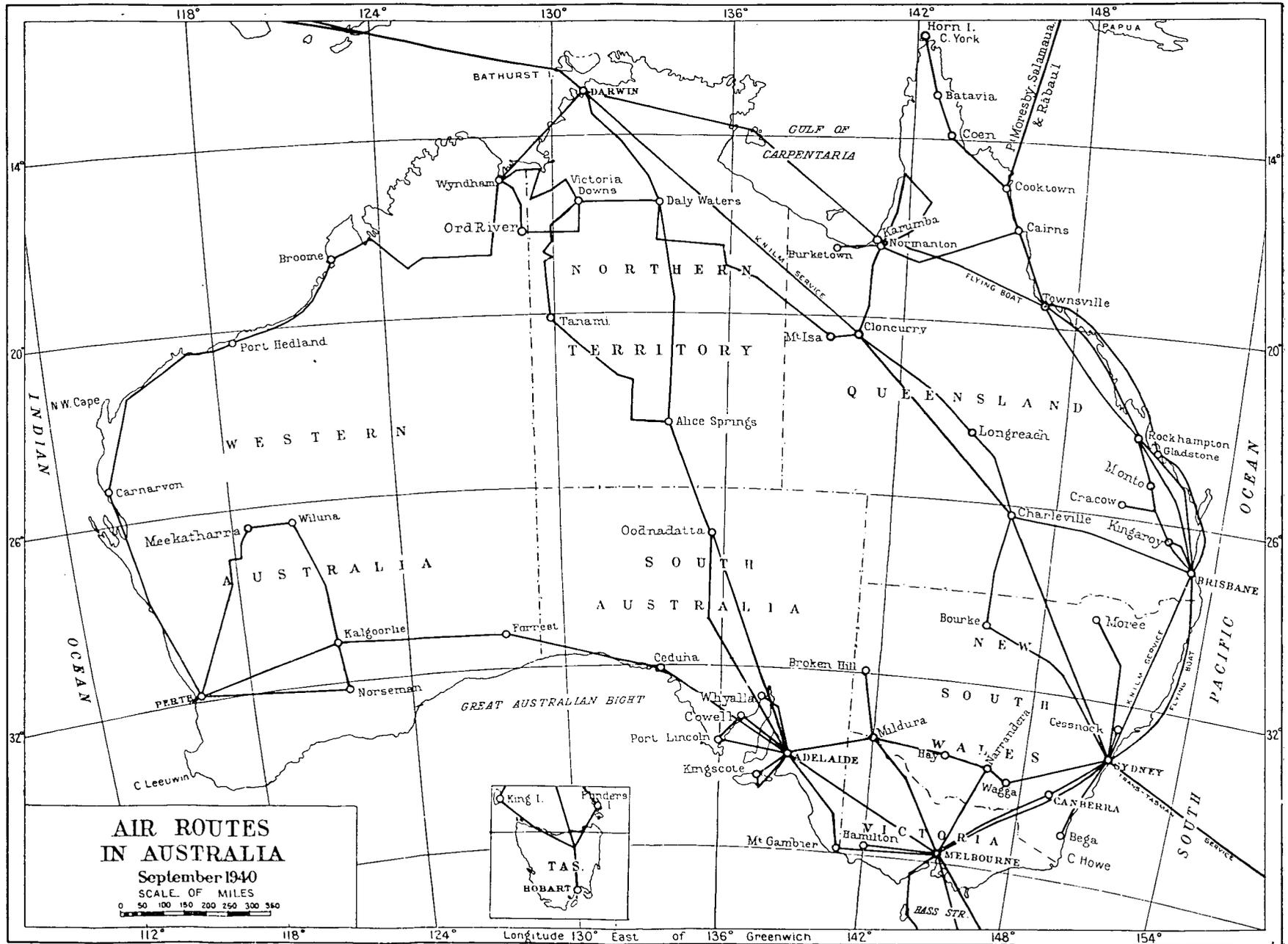
FINANCIAL POSITION OF THE GOVERNMENT RAILWAYS OF AUSTRALIA, 1870 TO 1939



EXPLANATION.—The base of each square represents throughout ten years. The significance of the vertical height of each square varies according to the nature of the several curves.

In the curves for (i) gross revenue; (ii) working expenses; and (iii) net revenue, the vertical side of each square represents £10,000,000. The mileage open is shown by a broken line, the vertical side of each square representing 5,000 miles.





Particulars of New Vehicles Registered during 1939-40 will be found in the Appendix to this volume.

(ii) *Quinquennium* 1934-35 to 1938-39. Particulars of new vehicles registered in Australia during the years 1934-35 to 1938-39 appear in the following table :—

NEW MOTOR VEHICLES REGISTERED : AUSTRALIA.(a)

Year.	Motor Cars.	Commercial Vehicles, etc.	Motor Cycles.	Total.
1934-35	32,985	14,146	5,249	52,380
1935-36	50,427	19,851	6,673	76,951
1936-37	48,587	24,191	7,479	80,257
1937-38	55,125	27,402	8,323	90,850
1938-39	52,897	23,646	7,064	83,607

(a) Excludes Northern Territory and extra-Metropolitan Area of Western Australia; also Australian Capital Territory prior to 1935-36.

7. **World Motor Vehicle Statistics, 1940.**—The result of the 1940 World Motor Census, conducted by the *American Automobile*, from which the following particulars have been extracted, shows that there were 44,515,137 motor cars, trucks, and buses registered in various countries of the world at 1st January, 1940. This shows an increase of 3.9 per cent. on the figure for the previous year, 42,834,465, and is the highest figure yet attained.

The following table shows the number of motor vehicles registered in each continent at 1st January, 1940 :—

MOTOR VEHICLES : WORLD REGISTRATIONS AT 1st JANUARY, 1940.

Continent.	Total Automobiles.	Motor Cars.(a)	Motor Trucks and Buses.(a)	Motor Cycles.(a)
Africa	692,974	543,740	147,840	52,293
America (exclusive of U.S.A.)	2,309,100	1,785,842	523,258	27,488
United States of America ..	30,180,224	25,804,340	4,375,884	118,344
Asia	695,738	427,083	266,555	101,441
Europe	9,436,293	6,704,286	2,662,007	2,771,112
Oceania	1,200,808	887,409	312,799	95,234
Total	44,515,137	36,152,700	8,288,343	3,165,912

(a) Not complete for all territories.

The next table gives the numbers of motor vehicles registered in various countries. For the purposes of comparison, the approximate population in millions of each country is also shown :—

COMPARATIVE MOTOR VEHICLE STATISTICS, 1st JANUARY, 1940.

Country.	Approximate Population in Millions.	Motor Cars, Trucks and Buses.	Motor Cycles.
Australia	7	854,150	77,000
Argentine Republic	13	292,400	2,000
Canada	11	1,420,924	12,265
France	42	2,268,985	..
Germany	77	1,951,789	1,860,722
United Kingdom	47	2,608,501	411,593
India	362	185,000	11,417
Italy	43	475,000	200,000
Japan	103	140,000	60,000
New Zealand	2	278,214	17,749
Union of South Africa	2	368,000	25,000
United States of America	130	30,180,224	118,344

The foregoing figures are in some cases approximations based on estimates furnished by Trade Commissioners or representative motor trade organizations in the several countries, and in other cases are incomplete, especially in relation to motor cycles.

E. TRAFFIC ACCIDENTS.

1. **General.**—The practice of reporting accidents occurring in a public thoroughfare is not uniform throughout the Commonwealth. Some States, like New South Wales, have not enforced the reporting of minor accidents while others, like Victoria, require that all accidents be reported. Hence the figures for each State are not comparable with regard to the number of accidents, and to a lesser extent with regard to the number of persons injured.

2. **Total Accidents Registered.**—(i) *Year 1938-39.* The following table gives particulars of the number of persons killed or injured in accidents (known to the police) which occurred in public thoroughfares during the year 1938-39 :—

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES : PERSONS KILLED AND INJURED, 1938-39.

State or Territory.	Accidents.	Persons Killed.			Persons Injured.		
		Total.	Per 1,000 of Mean Population.	Per 100 Motor Vehicles Registered.	Total.	Per 1,000 of Mean Population.	Per 100 Motor Vehicles Registered.
New South Wales	11,906	545	0.20	0.17	8,388	3.07	2.63
Victoria ..	18,496	418	0.22	0.16	7,428	3.96	2.84
Queensland ..	10,297	173	0.17	0.14	4,026	4.00	3.14
South Australia ..	13,528	118	0.20	0.13	3,536	5.95	3.90
Western Australia	5,636	126	0.27	0.18	937	2.03	1.35
Tasmania ..	5,054	43	0.18	0.16	1,300	5.50	4.93
Aus. Cap. Territory	92	3	0.26	0.13	38	3.25	1.67
Total ..	65,009	1,426	0.21	0.16	25,653	3.70	2.85

The ages of the persons killed or injured are given below :—

AGES OF PERSONS KILLED OR INJURED, 1938-39.

State or Territory.	Under 10 years.		10 to 59 years.		60 years and over.		Age not known.		Total.	
	Persons Killed.	Persons Injured.	Persons Killed.	Persons Injured.	Persons Killed.	Persons Injured.	Persons Killed.	Persons Injured.	Persons Killed.	Persons Injured.
N. South Wales	38	575	417	7,141	90	672	..	..	545	8,388
Victoria ..	24	558	304	6,011	90	655	..	204	418	7,428
Queensland ..	(a) 17	(a) 582	(b) 135	b 3,065	21	340	..	39	173	4,026
South Aust. ..	9	197	89	3,108	20	231	..	..	118	3,536
Western Aust.	(c) 19	(c) 103	(d) 84	(d) 790	23	44	..	..	126	937
Tasmania ..	4	106	28	1,126	11	68	..	..	43	1,300
Aus. Cap. Terr.	..	1	2	33	1	1	..	3	3	38
Total ..	(e) 111	(e) 2,122	(e) 1,059	(e) 21,274	256	2,011	..	246	1,426	25,653

(a) Under 15. (b) Fifteen and under 60. (c) Under 16. (d) Sixteen and under 60. (e) Approximate.

(ii) Years 1930-31 to 1938-39. Approximate figures relating to the persons killed and injured in traffic accidents in Australia during the years 1930-31 to 1938-39 are given hereunder :—

ACCIDENTS (KNOWN TO THE POLICE) WHICH OCCURRED IN PUBLIC THOROUGHFARES : PERSONS KILLED AND INJURED, AUSTRALIA.(a)

Particulars.	1930-31.	1931-32.	1932-33.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Persons killed ..	916	818	914	952	1,100	1,350	1,387	1,483	1,426
Persons injured ..	14,297	13,728	15,073	18,039	19,189	22,131	22,940	25,097	25,653

(a) Prior to 1935 figures were compiled by three States for the calendar year, and by one State for the years 1935 and 1936.

3. Accidents Involving Casualties.—The following table gives, for accidents in which persons were killed or injured, the causes of the accidents under forty-eight different headings. The table does not include particulars of South Australia or Extra-Metropolitan Western Australia. For 1937-38, 25 accidents, 77 deaths and 143 injuries occurring in New South Wales are duplicated in the table, accidents being included under two or more headings where the sole or main cause could not be determined :—

ACCIDENTS INVOLVING CASUALTIES CLASSIFIED ACCORDING TO DETAILED CAUSES : AUSTRALIA(a) 1937-38 AND 1938-39.

Cause of Accident.	1937-38.			1938-39.			
	Accidents.	Persons Killed.	Persons Injured.	Accidents.	Persons Killed.	Persons Injured.	
Driver or rider—							
Skidding on roadway	770	59	1,075	705	59	934
Cutting in	160	7	179	34	..	48
Failure to exercise care at inter-section	1,500	61	1,799	1,097	34	1,267
Excessive speed	1,065	205	1,541	891	153	1,347
Not keeping to left	844	91	1,140	923	89	1,283
Swerving to avoid vehicle or animal or other object or person	..	504	21	630	390	13	515
Overtaking on near side or without sufficient clearance	397	22	510	357	14	702
Stopping or turning in front of other vehicle or leaving kerb without warning	566	16	637	546	18	600

(a) See letterpress above.

ACCIDENTS INVOLVING CASUALTIES CLASSIFIED ACCORDING TO
DETAILED CAUSES: AUSTRALIA(a) 1937-38 AND 1938-39—continued.

Cause of Accident.	1937-38.			1938-39.		
	Acci- dents.	Persons Killed.	Persons Injured.	Acci- dents.	Persons Killed.	Persons Injured.
<i>Driver or rider—continued.</i>						
Level crossing	66	24	79	44	26	57
Vehicle overloaded (passengers) ..	24	1	40	3	2	8
Rounding corner carelessly or on wrong side	290	17	351	404	8	471
Reversing without due care	76	4	77	82	3	86
Obscured vision (except by rain)	178	16	191	111	1	134
Failing to give right of way	527	9	685	784	15	1,041
Breaking traffic regulations or fail- ing to obey traffic officer's signal	205	10	246	169	8	210
Careless, negligent or inefficient driving	2,230	161	2,635	2,548	168	3,021
Insufficient clearance to avoid halting vehicle	112	..	128	69	..	76
Failing to see signal given by car ahead or misinterpreting signal	129	2	150	161	..	181
Dazzled by sun or light	255	14	324	269	21	339
Vision obscured by rain	229	22	264	110	11	139
Driver or rider drunk	243	22	325	215	11	278
Hit and run motorist	175	11	193	131	5	139
Infirmity of driver or rider	98	10	126	37	4	48
Other	815	43	1,013	947	76	1,107
Total Driver or rider	11,458	848	14,338	11,027	739	14,031
<i>Vehicle—</i>						
Defective mechanism and tyres ..	776	62	1,145	759	60	1,100
No lights	267	33	352	172	15	206
Unattended, out of control	28	4	33	38	2	47
Vehicle overloaded (not passengers)	40	5	42	31	9	48
Other	3	1	2	19	1	24
Total Vehicle	1,114	105	1,574	1,019	87	1,425
<i>Pedestrian—</i>						
Crossing without due care	1,648	118	1,596	1,528	95	1,517
Walking in roadway	236	38	227	139	19	145
Running across roadway	728	35	713	684	30	671
Passing from behind or in front of stationary vehicle	340	17	337	411	25	400
Hesitating and/or faltering in crossing	262	21	263	257	21	254
Playing in roadway	186	10	180	374	29	357
Alighting from or boarding vehicle in motion	342	28	321	305	16	295
Alighting from moving vehicle on wrong side	33	3	34	36	1	36
Slipping or falling in crossing ..	45	5	40	28	2	26
Stepping from kerb or refuges with- out care	216	11	212	326	22	312
Standing in roadway	66	3	70	37	1	39
Pedestrian drunk	352	29	341	281	19	273
Infirmity of pedestrian	103	10	94	77	5	77
Other	30	2	31	95	18	80
Total Pedestrian	4,587	330	4,459	4,578	303	4,482

(a) See letterpress on page 141.

ACCIDENTS INVOLVING CASUALTIES CLASSIFIED ACCORDING TO
DETAILED CAUSES: AUSTRALIA(a) 1937-38 AND 1938-39—continued.

Cause of Accident.	1937-38.			1938-39.		
	Acci- dents.	Persons Killed.	Persons Injured.	Acci- dents.	Persons Killed.	Persons Injured.
Other—						
Falling from moving vehicle ..	147	18	135	166	20	152
Horses shying, bolting or stumbling	152	27	144	169	18	177
Road faults including bad lighting	392	51	533	212	14	316
Animals obstructing roadway ..	108	2	129	111	7	144
Other	293	24	307	718	59	799
Total Other	1,092	122	1,248	1,376	118	1,588
GRAND TOTAL (a) ..	18,251	1,405	21,619	18,000	1,247	21,526

(a) See letterpress on page 141.

F. 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 given in Official Year Book No. 16, pp. 334-5.

2. Civil Aviation Administration.—A brief account of the foundation and objects of this Administration will be found in Official Year Book No. 19, p. 299. In 1936 the organization was changed and the responsibility of regulating and controlling civil aviation in the Commonwealth was entrusted to a Board, consisting of four members and a secretary. The Board was responsible to the Minister for Defence and continued to function as a unit of the Defence Department organization until November, 1938. In January, 1939, the Civil Aviation Board was abolished and the Civil Aviation Administration was made a separate Department under the Minister for Civil Aviation. The permanent Head of the Department is the Director-General of Civil Aviation.

3. Air Services.—Since the year 1920 the grant of financial assistance for the establishment and maintenance of regular air transport services has been part of the Government's policy for the development of civil aviation in Australia. A notable development during the year was the inauguration of the Trans-Tasman Service (Sydney-Auckland, N.Z.) on 30th April, 1940. This Service, operating over the Tasman Sea, 1,348 miles, extends the air link from the United Kingdom to Australia on to New Zealand. It is operated on a weekly basis by two flying boats of the type known as the "Short S.30 Class".

The short-term contracts entered into for a period of six months as from 3rd July, 1939, between the Commonwealth and Airline Companies for the operation of air services in Australia referred to in last year's issue of the Official Year Book, were extended for one month and terminated on the 28th January, 1940. The Government, after consideration of a comprehensive report of a Committee of Departmental officers, constituted to investigate and report on many important aspects of civil air transport in Australia, approved of short-term contracts for air services providing for the carriage of mails, passengers and freight, being entered into for periods of six and twelve months respectively. These contracts date generally from the 29th January, 1940, and details of the Services operated are included in the statements hereunder.

The following is a list of Airline Companies operating services as at 30th June, 1940:—

SUBSIDIZED AIR SERVICES AS AT 30th JUNE, 1940.

Service.	Route Mileage.	Frequency.	Operating Company and Type of Aircraft Used.	Miles Flown per week.	Miles Flown per year.
Sydney—Darwin—Singapore ..	4,669	1 RPW. ..	Qantas Empire Airways Ltd., Short Empire Boat S-23	9,338	485,576
Brisbane—Cloncurry ..	977	2 RPW. ..	Qantas Empire Airways Ltd., D.H.86	3,908	203,216
Cloncurry—Mount Isa ..	65	2 RPW. ..	Qantas Empire Airways Ltd., D.H.90	260	13,520
Mount Isa—Daly Waters ..	547	1 RPW. ..	Qantas Empire Airways Ltd., D.H.90	1,094	56,888
Cloncurry—Normanton (a) ..	215	1 RPW. ..	Qantas Empire Airways Ltd., D.H.83	430	22,360
Trans-Tasman ..	1,348	1 RPW. ..	Tasman Airways Ltd., Short Empire Boat S-30	2,696	140,192
Melbourne—Sydney (direct) ..	440	7 RPW. ..	Australian National Airways Pty. Ltd., Douglas DC.2; DC.3	6,160	321,200
Melbourne—Sydney (Via Canberra) ..		6 RPW. ..	Australian National Airways Pty. Ltd., Douglas DC.2; DC.3	5,280	275,440
Melbourne—Hobart ..		7 RPW. ..	Australian National Airways Pty. Ltd., Douglas DC.2; DC.3	5,362	279,590
Melbourne—Adelaide ..		6 RPW. ..	Australian National Airways Pty. Ltd., Douglas DC.2; DC.3	5,484	286,082
Melbourne—King Island—Launceston—Flinders Island—Melbourne	722	6 round trips per week	Australian National Airways Pty. Ltd., D.H.89	4,332	225,986
Melbourne—Perth ..	1,809	3 RPW. ..	Australian National Airways Pty. Ltd., Douglas DC.2	10,854	564,408
Sydney—Brisbane ..	450	13 RPW. ..	Airlines of Australia Ltd., Douglas DC.2	11,700	610,200
Brisbane—Townsville ..	722	7 RPW. ..	Airlines of Australia Ltd., D.H.86; Stinson Model A	10,108	527,060
Townsville—Cairns ..	175	14 RPW. ..	Airlines of Australia Ltd., D.H.86; D.H.89	4,900	255,500
Cairns—Cooktown ..	102	3 RPW. ..	Airlines of Australia Ltd., D.H.89	612	31,824
Cooktown—Wenlock ..	234	1 RPF. ..	Airlines of Australia Ltd., D.H.84	234	12,168
Cairns—Burketown ..	436	1 RPW. ..	Airlines of Australia Ltd., D.H.84	872	45,344
Adelaide—Darwin ..	1,665	2 RPW. ..	Guinea Airways Ltd., Lockheed Electra 10-A; Lockheed 14-W	6,660	346,320
Adelaide—Kingscote ..	92	6 RPW. ..	Guinea Airways Ltd., D.H.89	1,104	57,592
Adelaide—Cowell—Cleve—Port Lincoln—Adelaide	386	3 round trips per week	Guinea Airways Ltd., D.H.89	1,158	60,216
Adelaide—Whyalla ..	147	6 RPW. ..	Guinea Airways Ltd., D.H.89	1,764	92,022
Whyalla—Iron Knob ..	31	1 RPW. ..	Guinea Airways Ltd., D.H.89	62	3,224
Perth—Darwin ..	2,193	2 RPW. ..	MacRobertson-Miller Aviation Co. Ltd., D.H.86; Lockheed 10-A	8,772	456,144
Wyndham—Daly Waters (a) ..	524	1 RPW. ..	MacRobertson-Miller Aviation Co. Ltd., D.H.83; D.H.84	1,048	54,496
Sydney—Rabaul ..	2,522	1 RPW. ..	W. R. Carpenter & Co. Ltd., D.H.86-B	5,044	262,288
Sydney—Charleville ..	727	2 RPW. ..	Butler Air Transport Co., D.H.84	2,908	151,216
Perth—Wiluna—Kalgoorlie ..	813	1 RPW. ..	Airlines (W.A.) Ltd., D.H.84; Stinson Reliant SR.7B	1,626	84,552
Sydney—Bega ..	208	6 RPW. (b)	Adastra Airways Ltd., D.H.90	2,496	130,208
Brisbane—Rockhampton ..	381	1 SPW. ..	Aircrafts Pty. Ltd., D.H.84 ..	381	19,812
Brisbane—Maryborough—Bundaberg ..	193	1 RPW. ..	Aircrafts Pty. Ltd., D.H.84 ..	386	20,072
Brisbane—Monto ..	270	1 RPW. ..	Aircrafts Pty. Ltd., D.H.84 ..	540	28,080
Brisbane—Kingaroy ..	103	4 RPW. ..	Aircrafts Pty. Ltd., D.H.84 ..	824	42,848
Melbourne—Deniliquin—Hay ..	225	6 RPW. ..	Victorian and Interstate Airways Ltd., Miles Merlin; De Soutter	2,700	140,850
Sydney—Adelaide ..	741	6 RPW. ..	Ansett Airways Ltd., Lockheed Electra 10-B	8,892	463,866
Melbourne—Broken Hill ..	449	6 RPW. ..	Ansett Airways Ltd., Lockheed Electra 10-B	5,388	281,074
Sydney—Moree ..	328	3 RPW. ..	North Western Airlines Ltd., D.H.90	1,968	102,336
Alice Springs—Wyndham ..	952	1 RPF. ..	E. J. Connellan, Percival Gull 6	952	49,504
Total ..	26,701			138,297	7,203,274

(a) Aircraft specially fitted as an Ambulance Carrier.

(b) 2 RPW. in addition to contract frequency.

NOTE.—“RPW.” signifies Return trip per week; “SPW.” signifies Single trip per week; “RPF.” signifies Return trip per fortnight.

UNSUBSIDIZED AIR SERVICES AS AT 30th JUNE, 1940.

Service.	Route Mileage.	Frequency.	Operating Company and Type of Aircraft Used.	Miles Flown per week.	Miles Flown per year.
Melbourne-Sydney (Sundays only)	511	1 RPW. . .	Ansett Airways Ltd., Lockheed Electra 10-B	1,022	53,144
Melbourne-Hamilton . .	160	6 RPW. . .	Ansett Airways Ltd., Airspeed Envoy	1,920	100,160
Normanton-Koolatah . .	379	Round trip fortnightly	Airlines of Australia Ltd., D.H. 89	189	9,854
Total	1,050			3,131	163,158

NOTE.—“ RPW.” signifies Return trip per week.

AIR TRANSPORT SERVICES IN AUSTRALIA AS AT 30th JUNE, 1940 : SUMMARY.

	Aggregate Route Mileage of Operating Companies.	Miles Flown per week.	Miles Flown per year.
Subsidized Services	26,701	138,297	7,203,274
Unsubsidized Services	1,050	3,131	163,158
Total	27,751	141,428	7,366,432
K.N.I.L.M. Service (Darwin-Sydney)	2,225	4,450	231,400
Grand Total	29,976	145,878	7,597,832

4. Air Ambulance Services.—Air ambulance services were first established in Australia in 1928, when an agreement was entered into between the Queensland and Northern Territory Aerial Services Ltd. (now Qantas Empire Airways) and the Australian Inland Mission. The company provided the aircraft and pilot and the mission authorities the doctor. The base of the operations at that time was Cloncurry, and flights were made to outback centres in Western and Northern Queensland.

The value of the scheme was readily apparent and has resulted in the establishment of other such centres to serve the sparsely populated parts of the Commonwealth not readily accessible by other means of transport. Considerable impetus to the efficiency of the air ambulance service in ameliorating the hardships of settlers in the “ outback ” was given by the introduction of a system of wireless communication by means of pedal transceivers. The simplicity of these small wireless units contributes largely to their value, power being supplied by a dynamo operated by bicycle pedals and Morse messages may be transmitted by manipulating an automatic keyboard transmitter similar to a typewriter.

At the present time air ambulance services, popularly known as the “ Flying Doctor ” services, are established at the following centres:—Cloncurry, Port Hedland, Wyndham, Kalgoorlie, Broken Hill and Alice Springs. These services are operated by the Australian Aerial Medical Services. A flying doctor service operates from Katherine and is controlled by the Department of the Interior.

The Government recognizes the national importance of the scheme in making medical aid accessible to outback settlers, and an annual grant of £7,500 is provided for maintenance and extension of air ambulance services. This grant is administered by the Health, Postmaster-General’s and Civil Aviation Departments.

5. Training of Air Pilots.—(i) *Subsidized Aero Clubs.* The Agreements under which approved aero clubs were subsidized expired on 31st December, 1939, and all approved clubs with the exception of the Tasmanian Aero Club, Broken Hill Aero Club and Whyalla Aero Club, were requested by the Department of Air to quote for elementary flying training for Air Force personnel. The three clubs named above, which were not included in the Air Force scheme owing to their small size and comparative isolation from large centres of population, were granted departmental assistance from 1st January, 1940, on the same basis as previously. During the year ended 30th June,

1940, 317 pupils qualified for private ("A") pilot's licences. Many graduates completed advanced training courses and others also qualified for their commercial pilot's and flying instructor's licences. One pilot also qualified for issue of a navigator's licence.

(ii) *Unsubsidized Training Organizations.* Flying training is also carried out by a number of private companies, clubs and private owners at various centres throughout the Commonwealth. These organizations do not receive financial assistance from the Government. During the year ended 30th June, 1940, 255 pupils graduated for private ("A") pilot's licences making a total of 572 pilots from all flying training organizations.

6. *Gliding.*—Government subsidies to approved clubs at the rate of £5 per primary glider, £7 10s. per secondary glider and £10 per sailplane ceased as from 31st December, 1939, owing to the heavy expenditure to which the Commonwealth Government is committed for aviation training and other war requirements.

7. *Meteorological Aids to Aviation.*—At the request of the Department of Civil Aviation, the Commonwealth Meteorological Bureau has arranged a comprehensive network of aviation meteorological facilities for the use of air services. The organization is gradually being expanded to meet the needs of new air services and meteorological personnel have been and are being trained in the special application of the science of meteorology to aviation requirements.

Full forecasting aviation meteorological stations are now established at the following aerodromes.—Darwin, Broome, Perth, Adelaide, Melbourne, Sydney, Brisbane, Townsville, Port Moresby, Launceston, Canberra and Hobart. Secondary aviation meteorological stations are in operation at the following aerodromes and flying boat bases :—Onslow, Kalgoorlie, Ceduna, Rockhampton, Cloncurry, Cooktown, Salamaua, Karumba, Groote Eylandt, Daly Waters and Oodnadatta. A secondary aviation station will be opened at Alice Springs at an early date. Rabaul, Willis Island and Hotham Heights also act as secondary aviation stations. Provision has also been made for the formation of reporting stations at Nhill, Holbrook and Kempsey, when night flying is introduced between the capital cities. For the Tasman Air Service upper air and observing stations have been established at Lord Howe and Norfolk Islands, and during the early part of the year an observer was stationed on one of the boats which regularly crosses the Tasman Sea, but on the outbreak of war, it was found necessary to recall this officer.

Forecasts over the whole of each air route section are given by meteorological officers when required. This information is compiled from observations taken throughout the Commonwealth, with the addition of other information received from specially selected stations on or in the vicinity of the various air routes. Pilots on regular air services are required to report to the meteorological officer prior to each flight, and also on arriving at an aerodrome where a meteorological station is established. In this way the meteorologist receives further first-hand information of the meteorological conditions of the particular route. Operation of aeradio stations over the whole of the routes of regular air services provides means for the rapid transmission of meteorological observations necessary for aircraft operation.

8. *Aerodromes and Landing Grounds.*—(i) *Australia and New Guinea.* To serve the numerous air routes in the Commonwealth and New Guinea extending over 20,000 miles there were 497 recognized landing grounds, located at intervals along the routes, on 30th June, 1940. Of this total 257 are directly controlled and maintained by the Commonwealth Government for civil aviation purposes. The balance of 240 have been established and are maintained by local authorities and private individuals.

(ii) *Empire Air Service (Flying Boat).* The necessary ground organization, including the provision of buildings, marine equipment, mooring facilities, etc., have been provided by the Commonwealth on the Australian sections—Sydney—Singapore and Sydney—Auckland (trans-Tasman)—of the Empire Air Service.

9. *Radio.*—(i) *General.* The policy of the Department of Civil Aviation in regard to the provision of radio aids for air navigation is that facilities shall be provided at all normal stopping places on the various air routes as well as at certain intermediate points in order that each air route shall be covered by radio aids.

These radio facilities comprise two main types—

1. Communication equipment. This is of modern type and provides for two-way communication with aircraft as well as point-to-point contact with ground stations. The equipment provides for communication on both medium and high frequencies.
2. Navigation equipment. Two types of navigation aids are being installed, namely—
 - (a) Ultra high frequency radio range beacons.
 - (b) Direction-finding receivers of two types operating on medium frequencies and high frequencies.

The aeradio organization is based principally on the use of high frequencies in view of the fact that Australia is situated in one of the worst areas in the world with respect to atmospheric interference. High frequencies are, however, not so susceptible to this interference, and a superior service is obtained by the use of such frequencies when compared with the results obtained on medium frequencies.

(ii) *Australia and New Guinea Air Services.* On the 30th June, 1940, there were 28 aeradio communication stations in operation in Australia and New Guinea. At 24 of these stations aeradio navigational facilities (radio range stations or Bellini-Tosi direction-finding receivers) have been provided. Certain coastal stations are also utilized for aeradio communication purposes. Additional high frequency direction-finding stations are in various stages of completion in Queensland and the Northern Territory.

(iii) *Empire Air Service.* For the Sydney-Darwin and the Sydney-Auckland (Trans-Tasman) sections of the Empire Air Service, four aeradio communication stations are in operation whilst navigational facilities (high frequency or medium frequency direction-finding receivers) have also been provided for these services at four stations.

10. **Night Flying Facilities.**—On 30th April, 1940, night flying facilities were available at the following aerodromes: Archerfield (Brisbane), Evans Head, Coff's Harbour, Kempsey, Kingsford Smith (Sydney), Goulburn, Holbrook, Cootamundra, Canberra, Benalla, Essendon (Melbourne), Nhill, Parafield (Adelaide), Cambridge (Hobart), Western Junction (Launceston), Maylands (Perth), and Darwin. The Cloncurry-Longreach section of the Brisbane-Darwin route and the Kalgoorlie-Cook section of the Perth-Adelaide route are also equipped for night flying. Airways rotating beacons have been installed at the following intermediate points along the main air routes: Bowral, Adelong (New South Wales), Chiltern, Yea (Victoria), Bordertown, Tailem Bend, Mount Lofty, Oodnadatta (South Australia), and Wiluna (Western Australia). Installation of a rotating beacon at Townsville, Queensland, is in progress. These lights are visible up to 80 miles under conditions of good visibility and are a useful aid to air navigation.

11. **Materials and Parts for use in Civil Aircraft.**—The range of approved and certified aircraft parts and materials offered to aircraft operators and owners by reliable manufacturing and distributing organizations has continued to expand during the twelve months under review. The Department of Civil Aviation has now extended approval to 100 firms to supply goods under cover of official release notes certifying compliance with approved material specifications or drawings. Of these firms, 69 are manufacturers and 49 are distributors of local or imported aircraft supplies.

An important development has been the action taken by the Standards Association of Australia to investigate the whole question of the co-ordination of Australian and oversea standards for aircraft materials. An Aircraft Materials Executive Committee has been formed comprising representatives of State Government Departments and manufacturers, and sub-committees have already made considerable investigations into aircraft specifications for steels, light alloys and Australian timbers. Where possible, British specifications are endorsed, but quite a number of specifications are being drafted to cover Australian materials to which no British specifications apply.

12. **Aircraft Maintenance.**—Facilities available in Australia for the repair and overhaul of aircraft, aircraft engines, instruments and component parts have been greatly extended in the period under review. Adequate equipment has been set up

and suitable technical staffs have been engaged by firms to cater for the many phases of overhaul and repair work involved in the maintenance of aircraft and accessories. Thirty-eight firms authorized by the Department of Civil Aviation to issue certificates of repair may now certify that such repair work has been executed in accordance with approved practices. The recent successful execution of extensive repairs to large transport aircraft is an example of the advances made in capacity to perform major overhaul work on all-metal aircraft in this country. Three particular cases have involved extensive re-building of modern all-metal, stressed skin aircraft.

Under the terms of their contract for the operation of the Empire Air Route, Qantas Empire Airways Ltd. have undertaken the overhaul of Bristol Pegasus XC engines as fitted to Short "C" Class Flying Boats to be performed in Sydney. This work, the performance of which requires expert workmanship and special equipment, was previously performed overseas.

13. **Statistical Summary.**—The collection and compilation of aircraft statistics were undertaken by this Bureau on the 1st July, 1922. The subjoined table gives a summary of operations for the five years ended 30th June, 1939:—

CIVIL AVIATION IN AUSTRALIA : SUMMARY.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Registered Aircraft Owners					
(a) No.	123	124	102	139	149
Registered Aircraft(a) No.	208	228	214	286	296
Licensed Pilots—(a)					
Private .. . No.	569	714	744	937	1,096
Commercial .. No.	210	236	205	323	346
Licensed Navigators(a) No.	13	22	29	47	59
Licensed Aircraft Radio Telegraph Operators (a) No.	7	8	9	23	75
Licensed Ground Engineers (a) No.	297	295	346	437	525
Aerodromes—(a)					
Government .. . No.	65	63	72	74	71
Public No.	146	171	183	197	213
Government Emergency Grounds .. . No.	138	148	151	153	147
Hours flown .. . No.	45,693	62,479	84,010	113,647	121,935
Approx. Mileage .. Miles	3,854,424	5,819,751	8,731,612	12,291,570	14,098,615
Passengers carried—					
Paying No.	45,540	60,476	85,574	133,408	123,566
Non-paying .. . No.	11,743	14,643	16,590	25,495	24,353
Total No.	57,283	75,119	102,164	158,903	147,919
Goods, weight carried lb.	249,415	442,497	822,724	1,169,207	1,734,644
Mails, weight carried lb.	67,908	121,187	167,601	228,581	(b) 740,375
Accidents—					
Persons killed No.	28	20	19	10	38
Persons injured No.	10	6	14	4	15

(a) At 30th June.

(b) Includes gross weight of oversea mail.

Separate particulars of flying over the Darwin-Singapore Section of the Imperial Airways route, included in the table above, are shown below:—

Particulars.	1934-35. (a)	1935-36.	1936-37.	1937-38.	1938-39.
Hours flown .. . No.	1,186	2,159	3,767	3,788	4,903
Miles flown .. . No.	140,706	290,542	494,105	488,417	718,288
Passengers carried No.	49	177	351	522	1,112
Goods, weight carried lb.	1,019	8,564	17,582	28,080	103,948
Mails, weight carried lb.	24,828	69,436	89,647	113,117	(b) 576,188

(a) December, 1934 to June, 1935.

(b) Gross weight.

Preliminary figures relating to the Operations of Civil Aircraft in Australia during the year 1939-40 will be found in the Appendix to this volume.

14. New Guinea Activities.—Since the discovery of gold in New Guinea in 1927, air transport has been introduced to the gold-fields as the most efficient means of communication and transport owing to the nature of the terrain of the country. Aviation has progressed considerably since 1927 and to-day air services operate to practically every part of the country. The greatest activity is between Salamaua and Lae on the north-east coast of the mainland of New Guinea to Wau and Bulolo, the two main centres of the gold-fields. Wau and Bulolo are located inland about 70 miles by native track over very mountainous country, and the journey occupies about a week. The approximate time by air is 25 minutes.

The European population of the gold-fields is over 1,200 and indentured native labourers number over 14,000. Every requirement for this number of people, including all types of mining and dredging machinery, motor cars, trucks, horses, cattle, building and other heavy materials, are carried by aircraft. The petrol required for the operation of motor transport on the gold-fields alone amounts to more than 12,000 gallons per month and this is also transported by air. During the year 1938-39 the average weight of cargo and mails carried per day was 33 tons.

The companies and persons operating in New Guinea and Papua are:—Guinea Airways Ltd., Bulolo Gold Dredging Ltd., Mandated Airlines Ltd., Stephens Aviation Ltd., K. Parer, Ray Parer and Madang Aerial Transport Co. W. R. Carpenter & Co. Ltd. operate a weekly service from Sydney to Port Moresby, Salamaua and Rabaul. Mails, official passengers and cargo are carried by Guinea Airways Ltd. and Mandated Airlines Ltd. under contract with the New Guinea Administration between Salamaua and Lae, Bulolo, Wau, Surprise Creek, Madang, Wewak and intermediate centres.

The subjoined table gives a summary of operations for the five years ended 30th June, 1939.

CIVIL AVIATION IN TERRITORY OF NEW GUINEA: SUMMARY.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Registered Aircraft Owners					
(a) No.	9	12	9	10	10
Registered Aircraft(a) No.	25	38	34	40	47
Licensed Pilots—(a)					
Private .. . No.	3	5	4	12	13
Commercial .. No.	27	27	22	24	23
Licensed Navigators(a) No.	1	1	..	2	3
Licensed Ground Engineers					
(a) No.	42	41	36	37	46
Aerodromes—(a)					
Government .. No.	3	15	18	21	24
Public .. . No.	5	15	19	19	19
Government Emergency Landing Grounds No.	3	6	8	6	11
Hours flown .. . No.	13,022	18,114	16,371	15,445	15,626
Approximate mileage Miles	1,094,308	1,486,983	1,466,355	1,560,179	1,456,154
Passengers carried—					
Paying .. . No.	14,200	15,943	11,718	12,247	12,909
Non-paying .. No.	203	616	1,382	1,017	1,569
Total .. . No.	14,403	16,559	13,100	13,264	14,478
Goods, weight carried lb.	17,447,746	21,883,413	24,441,860	25,574,028	27,063,912
Mails, weight carried lb.	97,889	128,982	122,063	166,643	162,668
Accidents—					
Persons killed No.	2	1	..	1	..
Persons injured No.	3	..	..	1	1

(a) At 30th June.

Preliminary figures relating to the Operations of Civil Aircraft in New Guinea during the year 1939-40 will be found in the Appendix to this volume.

G. POSTS, TELEGRAPHS AND TELEPHONES.

§ 1. General.

1. **The Commonwealth Postal Department.**—In previous issues of the Official Year Book some account was given of the procedure in connexion with the transfer to the Commonwealth Government of the postal, telegraphic and telephonic facilities of the separate States. (See Official Year Book No. 15, p. 601.)

Under the provisions of the Commonwealth Post and Telegraph Act, 1901, the Commonwealth Postal Department was placed under the control of a Postmaster-General, being a responsible Minister with Cabinet rank. The Director-General of Posts and Telegraphs controls the Department under the Postmaster-General, whilst the principal officer in each State is the Deputy Director, Posts and Telegraphs.

2. **Postal Facilities.**—(i) *Relation to Area and Population.* The subjoined 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) in each State and in Australia at the 30th June, 1939. 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. The returns given for South Australia in this and all succeeding tables include those for the Northern Territory, while the returns for the Australian Capital Territory are included in those for New South Wales.

POSTAL FACILITIES : RELATION TO AREA AND POPULATION,
AT 30th JUNE, 1939.

State.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Australia.
Number of post offices(a) ..	2,521	2,572	1,237	792	615	510	8,247
Number of square miles of territory to each office in State ..	123	34	542	1,141	1,587	51	361
Number of inhabitants to each office	1,094	732	822	760	757	464	844
Number of inhabitants per 100 square miles	889	2,141	152	67	48	903	234

(a) Includes " Official," " Semi-Official," and " Non-Official " Offices.

The foregoing table does not include " telephone " offices at which there is no postal business.

(ii) *Number of Offices.* The following table shows the number of post offices in each State for the years 1909, 1919, 1929 and 1939 :—

NUMBER OF POST OFFICES.

State.	At 31st December—		At 30th June—					
	1909.		1919.		1929.		1939.	
	Official and Semi-Official.	Non-Official. (a)						
New South Wales ..	2,397	466	2,133	448	2,250	433	2,088	
Victoria ..	2,370	272	2,297	283	2,455	268	2,304	
Queensland ..	1,378	202	1,081	211	1,070	190	1,047	
South Australia ..	723	136	655	148	660	142	650	
Western Australia ..	413	124	479	128	547	126	489	
Tasmania ..	417	46	443	44	473	43	467	
Australia ..	7,698	1,246	7,088	1,262	7,455	1,202	7,045	

(a) Includes offices previously designated as " Allowance " and " Receiving " Offices.

(iii) *Employees and Mail Contractors.* The number of employees and mail contractors in the Central Office and in each of the States at specified dates is given in the appended table:—

POSTAL EMPLOYEES AND MAIL CONTRACTORS.

State.	At 31st December—		At 30th June—					
	1909.		1919.		1929.		1939.	
	Em- ployees.	Mail Con- tractors.	Em- ployees.	Mail Con- tractors.	Em- ployees.	Mail Con- tractors.	Em- ployees.	Mail Con- tractors.
Central Office ..	(a)	..	84	..	195	..	340	..
New South Wales ..	7,469	1,553	11,732	1,964	15,267	1,952	16,281	2,651
Victoria ..	6,285	804	8,499	1,112	11,067	1,180	12,893	1,659
Queensland ..	3,146	589	4,289	787	5,437	786	6,212	1,569
South Australia ..	1,896	259	2,768	350	4,117	421	3,955	310
Western Australia ..	1,736	234	2,258	264	2,929	365	3,341	394
Tasmania ..	874	186	1,173	227	1,533	276	1,670	242
Australia ..	21,406	3,625	30,803	4,704	40,545	4,980	44,692	6,825

(a) Included in Victorian Staff.

3. *Gross Revenue, Postmaster-General's Department.—Branches.* The gross revenue (actual collections) in respect of each branch of the Department during each of the last five years is shown in the table hereunder:—

POSTMASTER-GENERAL'S DEPARTMENT: GROSS REVENUE.

Branch and Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Postal—							
1934-35 ..	2,557	1,765	917	469	433	177	6,318
1935-36 ..	2,705	1,850	959	503	452	193	6,662
1936-37 ..	2,825	1,915	994	521	471	200	6,926
1937-38 ..	2,992	2,010	1,039	550	491	208	7,290
1938-39 ..	3,048	2,042	1,067	552	502	211	7,422
Telegraph—							
1934-35 ..	433	302	222	119	140	44	1,260
1935-36 ..	443	322	225	112	144	44	1,290
1936-37 ..	496	348	229	115	146	37	1,371
1937-38 ..	508	342	231	117	143	37	1,378
1938-39 ..	502	341	234	118	139	38	1,372
Wireless—							
1934-35 ..	133	110	30	37	19	10	339
1935-36 ..	141	118	35	39	22	11	366
1936-37 ..	163	136	44	45	27	14	429
1937-38 ..	185	156	52	51	33	16	493
1938-39 ..	198	152	59	53	36	18	516
Telephone—							
1934-35 ..	2,361	1,750	884	563	328	142	6,028
1935-36 ..	2,583	1,892	946	594	356	151	6,522
1936-37 ..	2,825	2,066	976	628	395	171	7,061
1937-38 ..	3,083	2,192	1,024	669	415	189	7,572
1938-39 ..	3,261	2,352	1,098	696	431	202	8,040
All Branches—							
1934-35 ..	5,484	3,927	2,053	1,187	922	372	13,945
1935-36 ..	5,872	4,181	2,165	1,249	974	399	14,840
1936-37 ..	6,309	4,465	2,243	1,309	1,039	422	15,787
1937-38 ..	6,768	4,700	2,346	1,387	1,082	450	16,733
1938-39 ..	7,009	4,887	2,458	1,419	1,108	469	17,350
Total revenue per capita—							
	£	£	£	£	£	£	£
1934-35 ..	2.07	2.14	2.14	2.01	2.08	1.62	2.08
1935-36 ..	2.20	2.27	2.23	2.11	2.18	1.73	2.20
1936-37 ..	2.34	2.41	2.28	2.20	2.30	1.82	2.32
1937-38 ..	2.48	2.52	2.34	2.32	2.35	1.92	2.43
1938-39 ..	2.55	2.61	2.44	2.36	2.40	1.98	2.50

Compared with the corresponding figures for the previous year, an increase of 3.7 per cent. is shown in the gross revenue earned. Increases in the several branches were as follows :—Postal 1.8 per cent., Wireless 4.7 per cent., and Telephone 6.2 per cent. A decrease of 0.4 per cent. was recorded for the Telegraph Branch.

4. **Expenditure, Postmaster-General's Department.**—(i) *Distribution.* The following table shows, as far as possible, the distribution of actual expenditure on various items in each State during the year ended 30th June, 1939. 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 DEPT.: DISTRIBUTION OF EXPENDITURE, 1938-39.

Particulars.	Central Office.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£	£
Expenditure from Ordinary Votes—								
Salaries and payments in the nature of salary ..	64,139	2,198,409	1,535,967	803,051	527,210	408,017	201,078	5,737,871
General expenses ..	15,395	190,699	128,875	49,486	36,201	26,844	10,812	458,312
Stores and material	3,923	114,583	124,363	70,219	13,733	21,223	8,445	350,489
Mail services ..	a 309,570	448,086	287,392	224,898	77,781	83,962	38,177	1,469,866
Engineering services (other than New Works) ..	74,082	1,397,180	885,459	417,818	310,735	256,999	141,413	3,483,686
Other services ..	57,286	..	..	..	..	..	..	57,286
Total ..	524,395	4,348,957	2,962,056	1,565,472	965,660	797,045	399,925	11,563,510
Pensions and retiring allowances ..	..	24,343	26,127	..	..	23,968	..	74,438
Rent, repairs, maintenance, fittings, etc.	..	40,182	35,204	19,412	8,993	7,309	3,083	114,183
Proportion of audit expenses ..	..	4,625	3,150	1,692	1,015	782	396	11,660
New Works—								
Telegraph, telephone and wireless ..	6,873	1,319,790	1,011,128	424,599	205,640	175,038	86,525	3,229,593
New buildings, etc.	..	373,648	108,579	28,191	14,081	12,622	3,986	541,107
Other expenditure not allocated to States	3,339,443	..	..	..	..	..	..	3,339,443
	(b)							
Grand Total ..	3,870,711	6,111,545	4,146,244	2,039,366	1,195,389	1,016,764	493,915	18,873,934
	(c)							

(a) Orient Steam Navigation Company's Oversea Mail Contract and expenditure on air-mail services.
 (b) Particulars of apportionment to States not available. (c) Including expenditure not apportioned to States.

(ii) *Total, 1934-35 to 1938-39.* The next table gives the actual payments made, as shown by records kept for Treasury purposes in respect of the Postal Department, for each of the last five years :—

POSTMASTER-GENERAL'S DEPARTMENT: EXPENDITURE 1934-35 TO 1938-39.

Expenditure.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Total ..	13,458,581	14,424,388	15,622,255	17,135,560	18,873,934

The total expenditure increased by 10.1 per cent. during 1938-39.

5. Profit or Loss, Postmaster-General's Department.—(i) *States, 1938-39.* 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 in the several States, after providing for working expenses, depreciation and interest charges, including exchange, were as follows:—

POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, 1938-39.

Branch.	Profit or Loss.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
Postal ..	{ Profit	879,037	652,370	314,577	133,987	102,876	22,361	2,105,208
	{ Loss	..	..	..	..	..	..	..
Telegraph ..	{ Profit	3,697	43,837	7,296	..	..	..	51,617
	{ Loss	..	..	..	313	2,144	756	..
Wireless ..	{ Profit	54,023	33,666	..	18,256	..	..	76,054
	{ Loss	..	..	4,927	..	15,175	9,789	..
Telephone ..	{ Profit	685,177	500,486	241,454	12,311	..	..	1,392,492
	{ Loss	..	..	..	..	7,278	39,658	..
All Branches ..	{ Profit	1,621,934	1,230,359	558,400	164,241	78,279	..	3,625,371
	{ Loss	..	..	..	..	..	27,842	..

After providing for depreciation, pensions and retiring allowances and interest on capital, the year 1938-39 closed with a surplus of £3,625,371. For the preceding year a surplus of £3,533,476 was shown.

(ii) *Branches, 1934-35 to 1938-39.* The following statement gives particulars of the operating results of each branch for the period 1934-35 to 1938-39:—

POSTMASTER-GENERAL'S DEPARTMENT : PROFIT OR LOSS, BRANCHES.

Year—	Branch Profits.				
	Postal.	Telegraph.	Wireless.	Telephone.	All Branches.
	£	£	£	£	£
1934-35	1,828,279	15,019	162,343	402,332	2,407,973
1935-36	1,948,385	64,993	86,184	884,423	2,983,985
1936-37	2,055,963	79,791	87,718	1,117,458	3,340,930
1937-38	2,094,561	73,020	82,211	1,283,684	3,533,476
1938-39	2,105,208	51,617	76,054	1,392,492	3,625,371

6. Capital Account.—The appended statement shows particulars of the fixed assets of the Postmaster-General's Department at 30th June, 1939:—

POSTMASTER-GENERAL'S DEPARTMENT: FIXED ASSETS, 30th JUNE, 1939.

Particulars.	Net Value, 1st July, 1938.	Capital Expenditure, 1938-39.	Gross Value, 30th June, 1939.	Less Deprecia- tion, &c., 1938-39. (a)	Net Value, 30th June, 1939.
	£	£	£	£	£
Telephone service plant (ex- clusive of trunk lines) ..	38,278,015	3,448,378	41,726,393	807,421	40,918,972
Trunk and telegraph service plant (aerial wires) ..	10,718,192	277,023	10,995,215	86,581	10,908,634
Telegraph service plant ..	682,004	59,938	741,942	4,739	737,203
Postal service plant ..	426,142	13,250	439,392	2,397	436,995
Wireless plant ..	463,878	105,359	569,237	5,453	563,784
Sites, buildings, furniture and office equipment ..	10,046,390	617,240	10,663,630	50,053	10,613,577
Miscellaneous plant ..	918,521	114,346	1,032,867	76,543	956,324
Total	51,533,142	4,635,534	6,168,676	1,033,187	65,135,489

(a) Includes dismantled assets, depreciation written off, and assets transferred.

During the past quinquennium the value of the fixed assets has increased by 21.7 per cent., the net value at 30th June, 1934, being £53,539,642.

§ 2. Posts.

1. Postal Matter Dealt With.—(i) *Australia*. The following table gives a summary of the postal matter dealt with in Australia during the five years 1934-35 to 1938-39. Although mail matter posted in Australia for delivery therein is necessarily handled at least twice, only the numbers dispatched are included in the following table, which consequently gives the number of distinct articles handled:—

POSTAL MATTER DEALT WITH: AUSTRALIA.

Year.	Letters, Postcards, Letter Cards and Packets.		Newspapers.		Parcels.		Registered Articles other than Parcels.	
	Number (⁰⁰⁰ omitted).	Per 1,000 of Popula- tion.	Number (⁰⁰⁰ omitted).	Per 1,000 of Popula- tion.	Number (⁰⁰⁰ omitted).	Per 1,000 of Popula- tion.	Number (⁰⁰⁰ omitted).	Per 1,000 of Popula- tion.
POSTED WITHIN AUSTRALIA FOR DELIVERY THEREIN.								
1934-35 ..	752,112	112,215	125,088	18,663	8,456	1,262	6,576	981
1935-36 ..	775,469	114,869	129,290	19,152	8,606	1,275	6,814	1,009
1936-37 ..	792,869	116,519	133,034	19,550	8,811	1,295	7,144	1,046
1937-38 ..	825,128	119,704	138,129	20,039	9,072	1,316	7,439	1,079
1938-39 ..	836,243	120,717	139,635	20,157	9,056	1,307	7,474	1,079
TOTAL POSTAL MATTER DEALT WITH.								
1934-35 ..	809,729	120,812	147,662	22,031	8,876	1,324	7,273	1,085
1935-36 ..	832,685	123,344	150,755	22,331	9,058	1,342	7,539	1,117
1936-37 ..	853,676	125,455	156,123	22,943	9,264	1,362	7,950	1,164
1937-38 ..	889,771	129,082	162,682	23,601	9,572	1,389	8,489	1,231
1938-39 ..	903,090	130,367	165,362	23,871	9,585	1,384	8,371	1,208

(ii) *States.* The next table shows the postal matter dealt with in each State during the year 1938-39.

POSTAL MATTER DEALT WITH : STATES 1938-39.(a)

State.	Letters, Postcards, Letter Cards and Packets.		Newspapers.		Parcels.		Registered Articles other than Parcels.	
	Number ('000 omitted).	Per 1,000 of Population.	Number ('000 omitted).	Per 1,000 of Population.	Number ('000 omitted).	Per 1,000 of Population.	Number ('000 omitted).	Per 1,000 of Population.

POSTED FOR DELIVERY WITHIN AUSTRALIA.

New South Wales	333,132	121,331	68,130	24,814	3,811	1,388	2,795	1,018
Victoria ..	241,551	128,829	28,278	15,082	1,760	939	2,068	1,103
Queensland ..	107,821	107,089	23,192	23,035	1,896	1,883	1,136	1,128
South Australia ..	63,155	105,215	7,877	13,123	772	1,286	607	1,011
Western Australia	56,611	122,357	6,635	14,341	691	1,494	576	1,245
Tasmania ..	33,973	143,391	5,523	23,311	126	532	292	1,232
Australia ..	836,243	120,717	139,635	20,157	9,056	1,307	7,474	1,079

OVERSEA DISPATCHED.

New South Wales	11,919	4,341	2,632	959	115	42	207	75
Victoria ..	8,840	4,715	3,644	1,944	53	28	104	55
Queensland ..	3,104	3,083	851	845	14	14	50	50
South Australia ..	2,630	4,382	393	655	8	13	16	27
Western Australia	4,103	8,868	623	1,347	16	35	40	86
Tasmania ..	2,381	10,050	191	806	3	13	4	17
Australia ..	32,977	4,760	8,334	1,203	209	30	421	61

OVERSEA RECEIVED.

New South Wales	15,240	5,551	9,562	3,483	155	56	246	90
Victoria ..	9,982	5,324	3,155	1,683	89	47	132	70
Queensland ..	2,649	2,631	1,521	1,511	28	28	36	36
South Australia ..	1,679	2,797	989	1,648	16	27	17	28
Western Australia	3,194	6,903	1,758	3,800	26	56	39	84
Tasmania ..	1,126	4,753	407	1,718	6	25	5	21
Australia ..	33,870	4,889	17,392	2,511	320	46	475	69

(a) See explanation in paragraph (1).

2. Value-Payable Parcel Post.—(i) *General.* The Postal Department undertakes to deliver registered articles sent by parcel post within Australia, or between Papua or Nauru and Australia, to recover from the addressee on delivery a specified sum of money fixed by the sender, and to remit the sum to the sender by money order, for which the usual commission is charged. 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, also to meet the requirements of traders and others who do not wish their goods to be delivered except on payment.

(ii) *Summary of Business.* The next statement gives particulars regarding the value-payable parcels posted in each State for the years 1934-35 to 1938-39 :—

VALUE-PAYABLE PARCEL POST : SUMMARY OF BUSINESS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF PARCELS POSTED.							
	No.	No.	No.	No.	No.	No.	No.
1934-35	309,024	36,959	200,358	19,940	76,174	1,720	644,175
1935-36	324,800	39,700	192,539	20,340	76,946	2,023	656,348
1936-37	326,045	35,510	186,439	20,367	75,068	1,573	645,002
1937-38	328,459	34,681	184,080	20,592	70,719	1,168	639,699
1938-39	332,419	36,000	175,376	20,596	67,852	849	633,092
VALUE COLLECTED.							
	£	£	£	£	£	£	£
1934-35	364,750	50,469	244,829	19,965	83,364	1,936	765,313
1935-36	389,595	55,577	236,608	22,347	81,538	2,597	788,202
1936-37	398,582	50,529	230,656	22,343	84,382	2,111	788,603
1937-38	395,969	48,250	232,797	24,124	78,196	1,591	780,927
1938-39	405,844	50,224	226,409	22,962	76,323	1,143	782,905

REVENUE INCLUDING POSTAGE, COMMISSION ON VALUE, REGISTRATION AND MONEY ORDER COMMISSION.

	£	£	£	£	£	£	£
1934-35	39,653	5,012	24,623	2,307	8,912	215	80,722
1935-36	43,285	5,334	24,830	2,546	8,775	242	85,012
1936-37	43,214	4,761	25,081	2,448	8,666	191	84,361
1937-38	41,958	4,672	23,816	2,507	8,102	139	81,194
1938-39	45,097	4,867	24,881	2,587	8,207	102	85,741

The number and value of parcels forwarded in New South Wales and Queensland are much higher than in any of the other States, although the system has also found favour in Western Australia. These three States have the largest areas, and consequently more people at long distances from business centres who avail themselves of the value-payable system. Although South Australia also has a large area, the population of that State is, comparatively, not widely spread.

3. *Sea-borne Mail Services.*—(i) *General.* In earlier issues of this work particulars of sea-borne mail services were included, but owing to the restrictions of space the insertion of this information terminated with Official Year Book No. 22.

(ii) *Amount of Subsidies Paid.* The following table shows the amounts of subsidies paid by the Commonwealth Postal Department for ocean and coastal mail services during the year ended 30th June, 1939 :—

MAIL SUBSIDIES : OCEAN AND COASTAL SERVICES, 1938-39.

Service.	Orient S.N. Co.	Queensland Ports.	South Australian Ports.	Western Australian Ports.	Tasmanian Ports.
Annual subsidy	£ Stg. 137,913	£ 975	£ 3,800	£ 5,500	£ 55,379

4. **Total Cost of Carriage of Mails.**—During the year 1938–39 the total amount paid for the carriage of mails, as disclosed by the Profit and Loss Account of the Postal Branch, was £1,446,423. Details appear hereunder:—

CARRIAGE OF MAILS : TOTAL COST, 1938–39.

Inland Mails.		Non-Contract Vessels.	Overland and Sea Transit.	Coastwise Mails.	Mails to Europe. (a)	Air Mails.	Tasmanian Subsidy.	Total.
By Road.	By Railway.							
£	£	£	£	£	£	£	£	£
547,539	462,441	43,349	6,362	10,911	137,921	207,900.	30,000	1,446,423

(a) Orient contract.

5. **Transactions of the Dead Letter Offices.**—The table hereunder shows the number of letters, postcards and letter-cards, and packets and circulars, including Inland, Interstate and International, dealt with by the Dead Letter Offices in 1938–39, and the methods adopted in the disposal thereof:—

DEAD LETTER OFFICES : TRANSACTIONS, 1938–39.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
LETTERS, POSTCARDS AND LETTER-CARDS.							
Returned to writers or delivered ..	529,148	244,591	183,661	86,963	113,412	60,834	1,218,609
Destroyed in accordance with Act ..	82,394	31,599	14,933	9,058	4,709	3,378	146,071
Returned to other Countries as unclaimed ..	49,735	16,619	8,690	3,668	6,700	1,794	87,206
Total ..	661,277	292,809	207,284	99,689	124,821	66,006	1,451,886

PACKETS AND CIRCULARS.

Returned to writers or delivered ..	212,676	148,289	249,656	12,645	58,754	35,970	717,990
Destroyed in accordance with Act ..	38,582	16,033	14,176	552	8,720	1,395	79,458
Returned to other Countries as unclaimed ..	4,665	5,611	3,125	2,064	240	599	16,304
Total ..	255,923	169,933	266,957	15,261	67,714	37,964	813,752
Grand Total (letters, packets, etc.) ..	917,200	462,742	474,241	114,950	192,535	103,970	2,265,638

During the year 1938–39 money and valuables to the amount of £77,894 were found in postal articles sent to the Dead Letter Office.

6. **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. A money order may be issued for payment of sums up to £20 within Australia, and not

exceeding £40 (in some cases £20, and in Mauritius £10) in places abroad. A postal note, which is payable only within Australia and in Papua, cannot be issued for a larger sum than twenty shillings.

(ii) *States, 1938-39.* Particulars regarding the business transacted in each State for the year 1938-39 are given hereunder :—

MONEY ORDERS AND POSTAL NOTES : TRANSACTIONS, 1938-39.

State.	Value of Money Orders Issued.	Value of Money Orders Paid.	Net Money Order Commission Received.	Value of Postal Notes Issued.	Poundage Received on Postal Notes.
	£	£	£	£	£
New South Wales ..	8,734,097	8,933,351	49,456	3,491,630	80,384
Victoria ..	3,496,136	3,817,482	20,898	2,241,741	55,007
Queensland ..	2,824,023	2,652,523	17,835	932,549	20,730
South Australia ..	1,068,466	1,051,721	6,676	544,316	13,115
Western Australia ..	1,545,136	1,437,783	9,681	503,594	11,194
Tasmania ..	681,525	655,407	3,487	212,259	5,370
Australia ..	18,349,383	18,548,267	108,033	7,926,089	185,800

(iii) *Australia, 1934-35 to 1938-39.* The next table shows the total number and value of money orders and postal notes issued and paid in Australia from 1934-35 to 1938-39 :—

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.
1934-35 ..	2,859	15,185	2,847	15,169	19,557	6,650	19,489	6,631
1935-36 ..	2,968	16,303	2,938	16,260	21,083	7,221	21,103	7,222
1936-37 ..	3,066	17,098	3,057	17,105	20,622	7,348	20,538	7,313
1937-38 ..	3,191	17,959	3,175	17,935	21,426	7,706	21,375	7,692
1938-39 ..	3,239	18,349	3,254	18,548	21,942	7,926	21,966	7,934

(iv) *Classification of Money Orders Issued and Paid. (a) Money Orders Issued.* The next table shows the number and value of money orders issued during the year 1938-39, classified according to the country where payable :—

MONEY ORDERS ISSUED : COUNTRY WHERE PAYABLE, 1938-39.

Where Issued.	Where Payable.				Total.
	In Australia.	In New Zealand.	In United Kingdom.	In Other Countries.	
	NUMBER.				
Australia ..	3,067,534	21,342	103,634	46,050	3,238,560
	VALUE.				
Australia ..	£ 17,926,229	£ 60,589	£ 215,739	£ 146,826	£ 18,349,383

(b) *Money Orders Paid.* The number and value of money orders paid during the year 1938-39, classified according to the country where issued, are given hereunder :—

MONEY ORDERS PAID : COUNTRY OF ISSUE, 1938-39.

Where Paid.	Where Issued.				Total.
	In Australia.	In New Zealand.	In United Kingdom.	In Other Countries.	
NUMBER.					
Australia	3,071,963	103,692	47,867	30,678	3,254,200
VALUE.					
Australia	£ 17,928,546	£ 342,139	£ 183,389	£ 94,193	£ 18,548,267

In the tables above, money orders payable or issued in foreign countries which have been sent from or to Australia through the General Post Office in London are included in those payable or issued in the United Kingdom.

(v) *Postal Notes Paid.* The subjoined table shows the number and value of postal notes paid in each State during the year 1938-39. Particulars regarding the total number and value of postal notes issued and paid in each of the last five years have been given previously.

POSTAL NOTES PAID : STATE OF ISSUE, 1938-39.

Issued In—	Postal Notes Paid In—						
	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
NUMBER.							
Same State	'000. 7,967	'000. 3,854	'000. 2,014	'000. 884	'000. 1,080	'000. 444	'000. 16,243
Other States	824	563	881	111	101	3,243	5,723
Total	8,791	4,417	2,895	995	1,181	3,687	21,966
VALUE.							
Same State	£'000. 2,971	£'000. 1,440	£'000. 753	£'000. 335	£'000. 412	£'000. 155	£'000. 6,066
Other States	306	228	307	46	26	955	1,868
Total	3,277	1,668	1,060	381	438	1,110	7,934

The number and value of postal notes paid in Australia during the year showed increases of 2.8 per cent. and 3.1 per cent. respectively on the corresponding figures for the year 1937-38.

§ 3. Telegraphs.

i. General.—(i) *Development of System.* A review of the development of the Telegraph Services in Australia was given in a previous issue of this work (see Official Year Book No. 15, p. 625). During the past few years substantial improvements in both the speed and grade of telegraph service throughout Australia have been effected, the entire system being subjected to intensive reorganization.

(ii) *External Circulation or Routing of Traffic.* The external circulation system of the Australian telegraph service has been considerably modified, direct communication having been established between cities and towns which formerly were served through intermediate repeating centres. The reorganization has eliminated the loss of time in transit, improved the grade of service, and led to economy as regards the labour formerly required in manual re-transmission. As a result of the reorganization there are now only five repeating centres, eighteen centres having been abolished.

(iii) *Carrier Wave System.* This system which permits a number of messages to be transmitted simultaneously over the one pair of wires is now in operation between Perth and Adelaide, Adelaide and Melbourne, Melbourne and Sydney, and Sydney and Brisbane. There are now 41,158 miles of one-way telegraph carrier channels in operation.

(iv) *Voice-Frequency System.* This system, which enables a number of telegraph channels to be superposed on a single telephone channel by employing frequencies from 420 to 2,460 cycles per second, was first introduced between Sydney and Tamworth. Between these two points 18 duo-directional channels have been provided by adopting the voice-frequency principle, equivalent to 9,360 miles of uni-directional channels. This system has now been extended to the following routes :—Sydney-Canberra, Sydney-Wagga Wagga and Perth-Kalgoorlie. In view of its service and economic advantages, extensions to other main telegraph routes are contemplated.

(v) *Direct Telegraph Communication over Great Distances.* The telegraph system in Australia provides direct communication between many places separated by great distances as indicated in the following examples :—Sydney-Perth, 2,695 miles ; Perth-Wyndham, 1,933 miles ; Melbourne-Brisbane, 1,246 miles ; Brisbane-Cairns, 1,056 miles ; Brisbane-Cloncurry, 1,215 miles ; Adelaide-Perth, 1,627 miles ; Melbourne-Perth, 2,104 miles ; Adelaide-Darwin, 1,940 miles ; and Sydney-Adelaide, 1,068 miles. These direct channels provide a speedy service between the centres named, the average time involved in the transmission of a telegram being ten minutes.

(vi) *Machine Telegraphy.* In order to speed up transmission, machine printing telegraph systems have been introduced between capital cities and between important country centres. Murray multiplex machine apparatus is in operation between Sydney and Melbourne, Sydney and Brisbane, Sydney and Adelaide, Sydney and Perth, Sydney and Canberra, Sydney and Lismore, Sydney and Newcastle, Sydney and Wagga Wagga, Melbourne and Brisbane, Melbourne and Adelaide, Melbourne and Perth, Melbourne and Canberra, Adelaide and Perth, Brisbane and Rockhampton, and Brisbane and Townsville. These provide telegraph outlets which permit the carriage of very heavy loads with a minimum transit time. The operation of the apparatus has been steadily improved, and the system now gives a high output. Between Melbourne and Mildura, Melbourne and Launceston, Sydney and Tamworth, Brisbane and Toowoomba, Brisbane and Mackay, Perth and Fremantle, Perth and Kalgoorlie, and Adelaide and Darwin, start-stop telegraph printing systems are in operation.

(vii) *Phonogram Service.* Telephone subscribers may now telephone telegrams for onward transmission, or have messages telephoned to them. The fee for the service is small, and the innovation 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 twelve months ended 30th June, 1939, was 3,164,872 or 18.3 per cent. of the total lodgments, and the popularity of this facility is growing.

(viii) *Radiograms within Australia.* On 1st May, 1929, the rates for radiograms between Flinders Island, Wave Hill, Brunette Downs and other places within the Commonwealth were reduced to 1½d. per word with a minimum charge of two shillings. Communication at these rates was extended to Lord Howe Island in August, 1929.

(ix) *Pedal Wireless Stations.* A number of privately operated pedal wireless transceiver stations have been established at various centres throughout the Commonwealth, enabling telegrams to be exchanged with departmental telegraph offices. These pedal stations are sponsored by the Australian Aerial Medical Services and communicate by wireless with base stations established at Wyndham, Port Hedland, Cloncurry, Kalgoorlie, Broken Hill, Yunta, Nonning, Dalwallinu, Wave Hill, Camooweal, Port Lincoln and Alice Springs. The radiogram rates of 1½d. per word with a minimum charge of two shillings apply to pedal station telegrams.

(x) *Picturegram Service.* During the year ended 30th June, 1939, 323 picturegrams were transmitted between Sydney and Melbourne, the revenue being £798. Any kind of picture or document may be accepted for transmission, the charges varying from 30s. to 67s. 6d. according to the size of the picture or document and the grade of transmission desired.

(xi) *Oversea Phototelegram Service.* An oversea phototelegram service, "via Beam," was inaugurated in October 1934, permitting the transmission in either direction of facsimiles between Sydney or Melbourne and England, of dimensions up to a maximum of ten inches by seven inches. The charges are calculated at the rate of three shillings and three pence per square centimetre with a minimum charge of £16 5s. as for 100 square centimetres.

(xii) *Ornamental Telegram Forms.* The use of appropriately designed telegram forms for conveying Christmas and New Year greetings continues to increase in volume and popularity. In 1939, 346,922 Greeting Telegrams were sent, an increase of 140.7 per cent. on the number (144,102) sent in 1929, the year of inception of the service.

During the year 1933-34 telegram forms of special design and attractive colouring in connexion with Mothers' Day messages, Birthday greetings and Congratulatory telegrams were placed at the disposal of the public. The popularity of these facilities is indicated by the increase in the number of Mothers' Day telegrams from 16,091 in 1934 to 66,678 in 1940. Complete statistics are not available in respect of Birthday greetings and Congratulatory messages, but it is estimated that the number of telegrams in these categories is approximately 750,000 annually. In 1936 two additional greeting facilities employing ornamental telegram stationery were introduced, one for the conveyance of social greetings and the other for use during Easter-tide. The number of Easter Greeting telegrams in 1935, prior to the introduction of the special form for the occasion, was 4,164. This figure increased to 14,907 in 1940. Extensive use is also being made of the Social telegram service, which is popular for conveying "bon voyage" greetings and for making social engagements.

(xiii) *Private Wire Teletypewriter and Printergram Services.* In conformity with its policy of placing at the service of the public new developments in communication, the Department has now introduced the teletypewriter service. This may be briefly defined as typewriting over electrical circuits, teletypewriters being similar in performance to typewriters, except that the keyboard and distant printer are electrically connected by means of a telegraph line.

This facility combines the speed of the telegraph and the flexibility and personal touch of the telephone with the accuracy and permanency of the printed word. It affords the great advantage of direct and instantaneous communication between points within the same building or separated by distances up to thousands of miles. Communications are automatically produced at both ends exactly as sent, and information may be dispatched with the utmost privacy even in exposed situations where other means are unsuitable. It affords two-way communication at speeds up to 60 words a minute.

Printergram services connecting any business premises with the local Telegraph Office for the transmission and reception of telegrams are also available. This saves time and labour, while providing a permanent record of each transaction.

Seventy private wire services employing 180 teleprinter units have already been installed, including a stock ticker service enabling the simultaneous communication of information from a single transmitting unit located in the Sydney Stock Exchange to each of 26 printer units installed in the offices of city stock-brokers.

2. **Telegraph Offices, Length of Lines and Wire.**—(i) *States.* The following table shows the number of telegraph offices and the length of telegraph lines and of telegraph wire available for use in each State at the 30th June, 1939:—

TELEGRAPH OFFICES AND LINES : STATES, 30th JUNE, 1939.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus- tralia.
Number of offices	3,061	2,453	1,579	831	928	537	9,389
Length of wire (miles)—							
Telegraph purposes only	12,494	7,632	14,742	6,513	8,533	644	50,558
Telegraph and telephone purposes	61,440	19,121	36,872	13,069	9,410	1,448	141,360
Length of line (miles)—							
Conductors in Morse cable	2,715	1,405	491	..	181	24	4,816
Conductors in submarine cable (statute miles) ..	4,106	419	326	226	193	477	5,747
Pole routes (miles)	33,059	19,124	14,771	14,793	12,071	3,493	97,311

A total length of 191,918 miles of wire is available for telegraph purposes, of which 141,360 miles are also used for telephone purposes. Compared with those for the previous year, the figures show an increase of 5,917 miles (3.2 per cent.) in the total length and an increase of 6,386 miles (4.7 per cent.) in the length of line used for both telegraph and telephone purposes.

(ii) *Summary for Australia.* The following table gives corresponding particulars for Australia for the years 1935 to 1939:—

TELEGRAPH OFFICES AND LINES : AUSTRALIA, at 30th JUNE.

Particulars.	1935.	1936.	1937.	1938.	1939.
Number of offices	9,255	9,252	9,320	9,359	9,389
Length of wire (miles)—					
Telegraph purposes only	54,806	56,292	55,196	51,027	50,558
Telegraph and telephone purposes ..	104,203	113,277	121,788	134,974	141,360
Length of line (miles)—					
Conductors in Morse cable	4,694	4,815	4,863	4,813	4,816
Conductors in submarine cable (statute miles)	4,883	5,193	5,421	5,693	5,747
Pole routes (miles)	97,694	97,850	96,917	97,120	97,311

3. Number of Telegrams Dispatched.—(i) States. The following table shows the total number of telegrams dispatched in each State during 1938-39 according to the class of message transmitted :—

TELEGRAMS DISPATCHED(a) : STATES, 1938-39.

Class of Message Transmitted within Australia.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	No.	No.	No.	No.	No.	No.	No.
Paid and Collect—							
Ordinary ..	5,254,839	3,415,307	2,713,563	1,056,211	1,629,617	302,262	14,371,799
Urgent ..	202,423	60,299	70,881	33,718	44,172	8,764	420,262
Press ..	203,354	107,489	78,467	37,562	44,433	38,546	509,851
Lettergram ..	68,680	33,796	49,033	27,903	84,849	17,951	282,212
Radiogram ..	34,178	3,055	9,533	7,824	3,628	3,020	61,238
Total ..	5,763,474	3,619,946	2,921,482	1,163,218	1,806,699	370,543	15,645,362
Unpaid—							
Service ..	172,183	66,301	78,700	41,907	55,117	20,960	435,168
Shipping ..	21,851	94,289	15,867	3,739	13,579	5,037	154,362
Meteorological ..	284,986	138,805	196,831	191,804	151,313	53,128	1,016,867
Total ..	479,020	299,395	291,398	237,450	220,009	79,125	1,606,397
Grand Total ..	6,242,494	3,919,341	3,212,880	1,400,668	2,026,708	449,668	17,251,759

(a) Including radiogram traffic with islands adjacent to the Commonwealth and to ships at sea.

(ii) Australia. The number of telegrams dispatched to destinations within Australia during each of the last five years is given hereunder :—

TELEGRAMS DISPATCHED : AUSTRALIA, 1934-35 TO 1938-39.

Telegrams.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number(a) ..	14,617,871	15,508,843	16,268,416	16,965,336	17,251,759

(a) See Note (a) above.

The increase in the volume of telegraph business has averaged 771,626 messages during each of the past five years.

4. Letter-telegrams.—Letter-telegrams are accepted at any hour at telegraph offices which are open for business after 7 p.m., subject to the condition that delivery is effected by posting at the letter-telegram office of destination.

5. Revenue and Expenditure.—Particulars of the revenue and net operating results of the telegraph systems for the years 1934-35 to 1938-39 are given in earlier pages.

6. Telegraph Density.—The latest statistics available disclose that, on a population basis, Australia now occupies a pre-eminent position in the world in the use of the Telegraph Service, with an average of 2.5 messages annually per head of population. The United States of America has the second highest average of 1.6 followed by the United Kingdom

with 1.2 per head of population. The following table gives the figures for the more important countries :—

TELEGRAPH DENSITY STATISTICS : PRINCIPAL COUNTRIES.

Country.	Percentage of Telegraph to Total Wire Communication.	Telegraph Communication per Head of Population.
Australia	2.9	2.5
Belgium	1.8	0.7
Canada	0.5	1.1
Denmark	0.2	0.4
Finland	0.3	0.2
France	2.8	0.7
Germany	0.6	0.2
United Kingdom	2.6	1.2
Hungary	1.2	0.2
Japan	1.3	0.9
Netherlands	0.8	0.4
Norway	1.1	1.2
Poland	0.7	0.1
Sweden	0.4	0.7
Switzerland	0.6	0.4
Union of South Africa	2.3	0.7
United States of America	0.7	1.6

§ 4. Oversea Cable and Radio Communication.

1. **First Cable Communication with the Old World.**—In earlier issues of the Official Year Book will be found a detailed account of the connexion of Australia with the Old World by means of submarine cables. (See No. 6, p. 770.)

2. **General Cable Service.**—Descriptions of the various cable services between Australia and other countries are given in Official Year Book No. 22, pp. 335-6.

3. **Merging of Cable and Wireless Interests.**—Following upon the recommendations of the Imperial Wireless and Cable Conference in London in 1928 which examined the situation that had arisen as the result of the competition of the Beam Wireless with the cable services, the Imperial and International Communications Limited (since renamed Cable and Wireless Ltd.) was formed and took over the operations of the Pacific Cable Board and the control of the Eastern Extension Cable Company and the Marconi Wireless Company. Further particulars in relation to wireless services will be found in par. 5 of this section and in § 6, Radio Telegraphy and Telephony.

4. **Oversea Cable and Radio Traffic.**—(i) *States.* The number of telegrams received from and dispatched overseas in each State during the year 1938-39 is given hereunder :—

INTERNATIONAL TELEGRAMS : STATES, 1938-39.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number received ..	391,250	220,538	27,848	35,383	31,225	9,763	716,007
Number dispatched	375,198	245,479	33,701	35,820	45,127	10,429	745,754
Total ..	766,448	466,017	61,549	71,203	76,352	20,192	1,461,761

(ii) *Australia.* The subjoined table shows the number of international telegrams received from and dispatched overseas in Australia during 1937-38 and 1938-39 :—

INTERNATIONAL TELEGRAMS.—AUSTRALIA.

Messages.	Number Received.		Number Dispatched.		Total Number Received and Dispatched.	
	1937-38.	1938-39.	1937-38.	1938-39.	1937-38.	1938-39.
Number ..	705,349	716,007	744,834	745,754	1,450,183	1,461,761

5. **Cable and Beam Wireless Rates.**—(i) *Ordinary Messages.* As from the 25th April, 1938, the Cable and Beam Wireless rates per word for telegrams exchanged between Australia and British Empire Countries were reduced to the following levels :—Urgent, 2s. 6d ; Ordinary, 1s. 3d. ; C.D.E. (5 letter code), 10d., (minimum 5 words) ; Deferred, 7½d. ; (minimum 5 words) ; Daily Letter Telegram, 5d., (minimum charge 10s. 5d. as for 25 words). Where, however, the charges between Australia and certain Empire countries (e.g., New Zealand, Fiji and some Pacific Islands) were below these levels, the rates were unaltered. No change was effected in the rates for traffic exchanged between Australia and foreign countries.

The following are the ordinary rates at present operating in regard to traffic with the principal countries, other than members of the British Empire :—

INTERNATIONAL TELEGRAM RATES.

To—	Rate per Word and Route.	
	Via Cable.	Via Beam.
European Countries	2s. 6d. to 2s. 7d.	1s. 11½d. to 2s. 5½d.
Asiatic Countries	2s. 5d. to 4s. 7d.	.. .. .
Africa	2s. 6d. to 5s. 6d.	2s. 2½d. to 2s. 11d.
United States of America	2s. 4d. to 2s. 8d.	2s. 1½d. to 2s. 5d.
Central America	3s. 2½d. to 4s. 4½d.	2s. 11½d. to 4s. 4½d.
West Indies	3s. 0d. to 5s. 1d.	2s. 8½d. to 4s. 11d.
South America	3s. 9d. to 5s. 9d.	3s. 8d. to 5s. 2½d.

(ii) *Deferred Telegrams (via Cable or Beam).* Under this system a reduction of 50 per cent. in the ordinary charge for international telegrams is made under certain conditions. Deferred telegrams are transmitted after ordinary rate telegrams and ordinary press telegrams have been disposed of.

(iii) *Daily Letter Telegrams.* The Daily Letter Telegram service was inaugurated in September, 1923, between Australia and Great Britain and Canada, later being extended to most countries in the British Empire and in Europe, to the United States of America and to certain other places. The charges are based on one-third of the tariff per word for ordinary messages, subject to a minimum charge as for 25 words. These messages are delivered on the morning of the second day following that of lodgment.

(iv) *Night Letter Telegrams.* A Night Letter Telegram service was introduced between Australia and New Zealand on 1st May, 1924, and was extended to Fiji on 1st December, 1924. The minimum charge for messages is fixed as for 25 words, the rates being—to New Zealand, 3s. 9d. minimum, 2d. for each additional word beyond 25 ; Suva, 5s. 10d. minimum, 3d. for each additional word ; other places in Fiji, 7s. 4d. minimum, and 4d. for each additional word. Night Letter Telegrams are delivered on the morning following the day of lodgment.

(v) *Oversea Press Telegrams.* The rate on ordinary press telegrams exchanged with Great Britain prior to 15th April, 1939, was 4d. per word and on deferred press 3d. per word. As from this date a uniform tariff of 2½d. a word is applied uniformly to all Empire countries except Sudan. In all cases where the reduced rate applies the deferred press service has been abolished.

(vi) *Social Greetings Telegram Service.* As from 1st May, 1939, a Social Greeting Service was introduced between Australia and Empire points. The minimum charge for messages is 5s. for thirteen words, the indicator GLT being counted and charged for as one word. A charge of 5d. is made for each additional word. The texts of such telegrams are restricted to messages of a social and greeting character. This service replaces the special Christmas, Easter and Jewish New Year Greeting Telegram Service previously available to Empire points. These facilities are also available, on payment of the prescribed rates, to foreign countries which admit the service.

(vii) *De-Luxe Telegram Service.* A de-luxe telegram service has been established between Australia and certain of the more important oversea countries whereby, on payment of an additional fee of sixpence per telegram, the message will be delivered to the addressee on an ornamental form enclosed in a decorative envelope.

§ 5. Telephones.

1. Telephone Services.—(i) *Mileage in Australia.* The following table shows the mileage of lines for telephone purposes, giving trunk lines separately, at 30th June in each of the years 1936 to 1939 :—

TELEPHONE LINES : AUSTRALIA.

Particulars.	At 30th June—			
	1936.	1937.	1938.	1939.
Ordinary Lines—				
Conduits duct miles	7,771	8,546	9,664	10,817
" route miles	5,094	5,869	6,942	8,082
Conductors in aerial and underground cables miles	861,437	892,795	941,816	983,756
Working conductors in cables for junction circuits, not included above				
Open conductors loop mileage	75,094	77,889	84,437	102,649
Open conductors single wire mileage	421,075	425,857	428,106	434,932
Trunk Lines—				
Telephone trunk lines only .. miles	230,684	224,447	218,146	220,687
Telegraph and telephone purposes ..	113,277	121,788	134,974	141,360

(ii) *Comparison with Other Countries.* The increase in telephones throughout the Commonwealth during 1938–39 was 31,821 compared with 35,320 in 1937–38. The lower figures for 1938–39 are attributed mainly to adverse seasonal conditions and disastrous bush fires which affected development considerably in a number of States. Australia with an average of 95 telephones per 1,000 of population occupies seventh place among the countries of the world having the greatest density of telephones. The average length of wire per instrument in Australia is 4.5 miles.

(iii) *Trunk Line System.* The special underground trunk line cable between Melbourne and Geelong, to which reference was made in the previous issue of the Official Year Book, has been laid. The installation of a similar cable from Sydney to Newcastle and Maitland, a distance of 124 miles, is proceeding. A further substantial amount has been expended during the current year in providing trunk line circuits and long line equipment. Twenty-four carrier-wave systems were installed and there are now 134 in operation, yielding 248 channels of an aggregate length of 64,101 miles. A notable feature in the progress of carrier-wave telephony in Australia is the introduction of a special 12-channel system between Sydney and Melbourne, thus increasing the channels of communication between those cities from 18 to 30. This system is of the very latest design and among the first of its kind to be installed in any country.

The new semi-auto positions at the Main Trunk Exchange, Melbourne, are now being installed and it is expected that the Interstate positions will be brought into operation during the next financial year. This exchange incorporates many automatic features designed to facilitate the handling of long distance calls and when the whole of the positions are installed and working it will be the most up-to-date trunk exchange in the world. The Sydney Trunk Exchange which has also been modernized now provides many additional operating aids. Moreover, a number of trunk lines have been equipped with "Voice Frequency" apparatus which will permit dialling direct into the main automatic network from distant centres where previously this method of operation was impracticable.

(iv) *Automatic Exchanges.* During 1938–39, 34 new automatic exchanges were established bringing the total automatic exchanges in operation in Australia to 164. At the 30th June, 1939, there were 337,740 automatic telephones in service, representing 51 per cent. of the total in use.

(v) *Rural Automatic Exchanges.* The work of establishing rural automatic exchanges is being pushed on as rapidly as possible. Thirty exchanges were provided during the

year and at the 30th June, 1939, 80 installations had been completed. The experience with this type of apparatus, which confers such benefits on the users concerned, has been eminently satisfactory.

(vi) *Summary for States.* Particulars relating to the telephone service in each State for the years ended 30th June, 1937 to 1939, will be found in the following table :—

TELEPHONE SERVICES : SUMMARY.

Particulars.	Year (30th June).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aus. tralia.
Exchanges ..	1937	1,985	1,663	1,012	570	652	354	6,236
	1938	2,004	1,682	1,029	569	652	355	6,291
	1939	2,010	1,680	1,053	579	653	358	6,333
Telephone Offices (in- cluding Exchanges)	1937	2,986	2,354	1,497	816	926	509	9,088
	1938	3,036	2,356	1,519	820	903	510	9,144
	1939	3,040	2,358	1,517	829	907	509	9,160
Lines connected ..	1937	170,724	135,751	55,796	41,467	23,838	12,895	440,471
	1938	181,458	143,657	58,626	43,307	24,968	13,482	465,498
	1939	189,915	150,570	61,650	45,224	26,032	14,144	487,535
Instruments con- nected	1937	229,727	187,753	73,793	55,019	32,346	16,217	594,855
	1938	244,590	198,761	77,929	57,630	34,210	17,055	630,175
	1939	257,246	208,230	82,226	60,451	35,830	18,013	661,996
(a) Subscribers' in- struments	1937	223,712	183,613	71,092	53,319	30,976	15,349	578,061
	1938	238,283	194,451	75,122	55,874	32,807	16,170	612,707
	1939	250,511	203,668	79,293	58,512	34,380	17,098	643,462
(b) Public tele- phones	1937	3,758	2,465	1,672	875	900	551	10,221
	1938	3,941	2,506	1,726	906	904	549	10,532
	1939	4,223	2,573	1,775	1,017	926	562	11,076
(c) Other local in- struments	1937	2,257	1,675	1,029	825	470	317	6,573
	1938	2,366	1,804	1,081	850	499	336	6,936
	1939	2,512	1,989	1,158	922	524	353	7,458
Instruments per 100 of population	1937	8.50	10.12	7.44	8.98	7.12	6.98	8.71
	1938	8.96	10.65	7.77	9.63	7.43	7.28	9.14
	1939	9.32	11.07	8.09	10.04	7.70	7.61	9.51
Earnings		£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
	1937	2,903	2,116	1,002	640	397	178	7,236
	1938	3,194	2,250	1,063	685	425	194	7,811
1939	3,371	2,409	1,136	709	450	209	8,284	
Working expenses ..	1937	1,753	1,280	603	470	292	176	4,574
	1938	1,936	1,361	652	516	326	192	4,983
	1939	2,119	1,488	691	543	365	204	5,410
Percentage of working expenses on earn- ings		%	%	%	%	%	%	%
	1937	60.41	60.46	60.14	73.42	73.55	99.11	63.21
	1938	60.63	60.47	61.36	75.31	76.57	99.01	63.78
1939	62.87	61.75	60.80	76.58	81.13	97.94	65.31	

At the 30th June, 1939, there were 661,996 telephones in service throughout the Commonwealth, and of this total 253,844 or 38 per cent. were connected to exchanges in country districts. The net additions during 1938-39 totalled 31,821 telephones, a gain of 5.05 per cent. The number of instruments per 100 of population increased from 9.14 to 9.51.

The year 1938-39 was a record one for handset telephone installations, 68,036 being provided for subscribers as compared with 61,050 during 1937-38. At the 30th June, 1939, there were 259,131 instruments of this pattern in use, representing 39.14 per cent. of the total in service.

(vii) *Systems in Use.* Of the total lines in service in Australia, 51 per cent. are connected to automatic exchanges, 42 per cent. to magneto exchanges and 7 per cent. to common battery exchanges. Details for each State are shown in *Transport and Communication Bulletin* No. 30 issued by this Bureau.

(viii) *Subscribers' Lines and Calling Rates.* The next table gives the number of subscribers' lines and the daily calling rate at central, suburban and rural telephone exchanges in the several States for the year 1938-39:—

TELEPHONES : SUBSCRIBERS' LINES AND DAILY CALLING RATE, 1938-39.

State.	Central Exchanges.		Suburban Exchanges.		Rural Exchanges.		Total.	
	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.	Subscribers' Lines.	Average Outward Calls Daily per line.
	No.	No.	No.	No.	No.	No.	No.	No.
New South Wales ..	20,794	12.63	94,387	4.17	67,046	2.45	182,227	4.50
Victoria ..	11,912	10.11	82,715	4.24	51,280	1.97	145,907	3.92
Queensland ..	8,527	10.53	17,655	3.54	33,525	2.70	59,707	4.07
South Australia ..	6,289	10.06	18,890	3.45	19,150	1.71	44,329	3.04
Western Australia ..	7,875	7.05	7,053	4.11	10,187	1.94	25,115	4.15
Tasmania ..	3,401	4.79	1,706	2.64	8,377	2.23	13,484	2.93
Australia ..	58,798	10.34	222,406	4.07	189,565	2.25	470,769	4.12

There was little change in the average daily calling rates for each class of exchange when compared with those shown in the previous issue of the Official Year Book. New South Wales registered the greater number per line at Central, Queensland at rural exchanges and Victoria at suburban exchanges.

For Australia as a whole the average number of calls per line at Central exchanges was approximately two and a half times greater than at suburban exchanges, while the average for suburban exchanges was almost double the number shown for rural exchanges.

(ix) *Effective Paid Local Calls.* The numbers of effective paid local calls from subscribers and public telephones in the various States during the years ended 30th June, 1938 and 1939 appear hereunder:—

TELEPHONES : NUMBER OF EFFECTIVE PAID LOCAL CALLS.

State.	Subscribers' Calls.		Calls from Public Telephones.		Total Calls.	
	1937-38.	1938-39.	1937-38.	1938-39.	1937-38.	1938-39.
	'000.	'000.	'000.	'000.	'000.	'000.
New South Wales ..	224,794	236,372	21,021	22,768	245,815	259,140
Victoria ..	152,305	166,529	10,078	10,857	162,383	177,386
Queensland ..	61,371	65,654	4,638	5,002	66,009	70,656
South Australia ..	41,028	43,232	3,511	3,676	44,539	46,908
Western Australia ..	27,507	28,821	1,432	1,533	28,939	30,354
Tasmania ..	10,159	10,903	799	847	10,958	11,750
Australia ..	517,164	551,511	41,479	44,683	558,643	596,194

(x) *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 of the States for the years 1936-37 to 1938-39:—

TELEPHONES : TRUNK LINE CALLS AND REVENUE.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Total Calls—	'000.	'000.	'000.	'000.	'000.	'000.	'000.
1936-37 ..	13,245	10,322	6,541	3,942	2,118	1,573	37,741
1937-38 ..	14,217	11,007	6,851	4,211	2,222	1,727	40,235
1938-39 ..	14,401	11,198	7,306	4,166	2,311	1,770	41,152
Total Revenue—	£	£	£	£	£	£	£
1936-37 ..	644,434	470,541	368,171	178,043	113,219	61,185	1,835,593
1937-38 ..	711,872	518,212	387,431	194,909	122,915	68,114	2,003,453
1938-39 ..	739,472	529,190	412,811	196,780	126,141	73,634	2,078,028
Average Revenue per Call—	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.	Pence.
1936-37 ..	11.68	10.93	13.51	10.84	12.83	9.33	11.67
1937-38 ..	12.02	11.30	13.57	11.11	13.27	9.47	11.95
1938-39 ..	12.32	11.34	13.56	11.34	13.09	9.98	12.12

The number of trunk line calls during 1938-39 increased by nearly a million or 2.28 per cent., compared with the figures for the previous year, while the average revenue per call rose by 0.17d.

2. *Revenue from Telephones.*—Particulars regarding the revenue from telephone services are included in tables in § 1.

§ 6. Radio Telegraphy and Telephony.

1. *General.*—A statement in regard to the initial steps taken to establish radio telegraphy in Australia was given in Official Year Book No. 18, p. 343.

2. *Wireless Licences.*—(i) *General.* Under the Wireless Telegraphy Act and Regulations, no wireless station can be installed or operated without a licence from the Postmaster-General. Licences are issued for the following:—(a) *Coast Stations*, which are operated at various points around the coast and in Papua and New Guinea by Amalgamated Wireless (Australasia) Ltd., under agreement with the Commonwealth; (b) *Ship Stations* (regulations under the Navigation Act 1935 require that all ships registered in Australia and engaged in interstate traffic shall have an efficient radio telegraph installation, which in the case of cargo vessels of less than 750 tons gross register shall include apparatus for automatically transmitting prescribed signals of distress, these vessels not being required to carry fully qualified operators; similar legislation, designed to ensure the safety of life at sea, has also been introduced by the Governments of New South Wales, Victoria and Queensland); (c) *Land Stations* to be operated where no telegraph or telephone facilities exist; (d) *Broadcasting Stations*, other than those of the National Broadcasting Service; (e) *Broadcast Listeners' Receiving Sets*; (f) *Portable Stations* on motor cars, etc.; (g) *Aircraft Stations*; (h) *Experimental Stations*; and (i) *Special Stations*, i.e., stations other than those named above. The issue of Experimental Licences has been suspended for the duration of the war.

The following table shows the number of each class of licence issued in each State or Territory during the year 1938-39 :—

WIRELESS LICENCES, 1938-39.

Station Licence.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Coast ..	2	1	6	1	5	3	1	..	19
Ship ..	93	96	16	10	5	1	1	..	222
Aircraft ..	14	13	7	4	3	2	1	..	44
Land(a) ..	14	3	52	27	72	9	43	..	220
Broadcasting(b)	35	18	19	8	8	8	..	1	97
Broadcast Listeners' ..	431,159	327,579	133,217	117,091	79,262	39,392	216	1,870	1,129,786
Experimental ..	774	580	260	212	142	68	1	10	2,047
Portable ..	11	4	5	4	5	1	8	..	38
Special ..	74	24	18	1	8	..	..	..	125
Total Issued	432,176	328,318	133,600	117,358	79,510	39,484	271	1,881	1,132,598

(a) In addition to the licensed stations there were two operated by the Postmaster-General's Department, viz., Wave Hill (N.T.) and Camooweal (Q.). (b) There were also twenty-six stations operated by the National Broadcasting Service, including a short-wave station (PLR, Lyndhurst, Victoria).

Similar particulars to the above in relation to the year 1939-40 will be found in the Appendix to this volume.

(ii) *Broadcast Listeners'*. The striking development of the use of the radio in Australia is illustrated by the following table, which gives the number of broadcast listeners' licences in force at the 30th June for each year from 1925 to 1939 :—

NUMBER OF BROADCAST LISTENERS' LICENCES.

In force at 30th June—	N.S.W. (a)	Victoria.	Q'land. (b)	S. Aust. (c)	W. Aust.	Tas.	Australia.
1925 ..	33,719	19,243	1,061	3,118	3,417	501	61,059
1926 ..	36,292	63,494	8,100	12,105	3,866	1,170	125,047
1927 ..	56,908	113,612	22,226	15,904	3,616	1,142	213,408
1928 ..	79,931	137,503	25,211	20,247	3,727	3,141	269,760
1929 ..	100,798	142,534	24,660	23,944	3,841	4,751	300,528
1930 ..	111,080	139,887	23,263	25,671	5,715	6,032	311,648
1931 ..	122,470	137,005	24,108	30,238	9,075	8,232	331,128
1932 ..	141,450	139,323	28,958	37,142	12,679	9,540	369,092
1933 ..	178,000	170,995	36,186	50,150	20,536	12,563	468,430
1934 ..	226,831	206,995	52,038	64,174	31,404	16,547	597,989
1935 ..	278,648	236,886	67,369	76,365	41,176	20,088	720,532
1936 ..	315,731	263,414	83,028	87,335	49,987	24,118	823,613
1937 ..	358,292	288,717	101,358	99,033	61,151	29,780	938,331
1938 ..	403,978	315,406	117,496	111,787	71,324	36,013	1,056,004
1939 ..	433,029	327,579	133,217	117,307	79,262	39,392	1,129,786

(a) Includes Australian Capital Territory. (b) Includes Papua. (c) Includes Northern Territory.

3. *Broadcasting.*—(i) *The National Broadcasting Service.* The technical services for the National Service are provided by the Postmaster-General's Department, and the programmes by the Australian Broadcasting Commission, a body consisting of five members, constituted under the provisions of the Australian Broadcasting Commission

Act. The fee for a broadcast listener's licence is 21s. per annum for a receiver situated approximately within 250 miles from a station of the National Service, and 15s. per annum in the territory beyond. Licences are issued free to blind persons. The Commission receives 12s. from each fee, the Department retaining the balance.

There is a total of 28 transmitting stations in the National Broadcasting System of the Commonwealth; these comprise 26 medium wave stations and two short wave stations. Details are as follows :—

Medium Wave Stations—

2FC and 2BL Sydney.	4QN Townsville.
2NC Newcastle.	4QS Dalby.
2CO Corowa.	4RK Rockhampton.
2NR Lawrence.	5CL and 5AN Adelaide.
2CR Cumnook.	5CK Crystal Brook.
2CY Canberra.	6WF and 6WN Perth.
3LO and 3AR Melbourne.	6WA Minding.
3GI Sale.	6GF Kalgoorlie.
3WV Dooen.	7ZR and 7ZL Hobart.
4QR and 4QG Brisbane.	7NT Kelso.

Short Wave Stations—

VLR Lyndhurst, Victoria.	VLW Perth, Western Australia.
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A contract has been let for a third short wave station, to be located in Brisbane. The stations, for a large portion of the transmission time, are linked together in two groups of networks, namely, the Australian National Network and the State Networks. A large number of stations are linked together by land line to radiate the same programme, forming the Australian National Network, which comprises one transmitter in each of the capital cities and one or more country regional stations in each State. The individual State networks consist of the second capital city transmitter and regional stations not included in the Australian Network.

On special occasions the whole of the national and commercial stations are linked together in nation-wide broadcasts, involving 126 stations and 16,000 miles of high quality programme transmission lines. There has been increasing use made of short wave programmes received from overseas, especially since the outbreak of war, and the News Services from the British Broadcasting Corporation are re-broadcast several times each day, after having been picked up at the receiving centre at Mont Park. Oversea programmes now form an important feature in the National Broadcasting Service.

(ii) *Commercial Broadcasting Stations.* The services of other broadcasting stations are conducted by private enterprise under licence from the Postmaster-General. Licences are granted on conditions which ensure satisfactory alternative programmes for listeners. The fee for a broadcasting station licence is £25 and the maximum period of a licence is three years, although they may be renewed annually at the discretion of the Postmaster-General. Licensees of these stations do not share in the listeners' licence fees, but rely for their income on revenue received from the broadcasting of advertisements and other publicity. The number of these stations in operation at 30th April, 1940, was 100, and there are other stations in prospect.

(iii) *Radio Inductive Interference.* The Postmaster-General's Department takes active measures to suppress, so far as possible, interference with broadcast reception resulting from the radiations of energy from electrical machinery and appliances. During the year, the Department received 7,051 complaints of interfering noises, which, in all but a few instances, were satisfactorily disposed of.

(iv) *Prosecutions Under the Wireless Telegraphy Act.* During the year 2,995 persons were convicted for using unlicensed broadcasting receiving equipment. The total fines amounted to £6,237.

(v) *World Licence Distribution.* The following table shows the number of listeners' licences and the ratio of licences to population in the leading "radio" countries. These particulars are compiled from figures supplied by L'Union Internationale de Radio-diffusion.

WORLD LICENCE DISTRIBUTION, 31st DECEMBER, 1938.

Country.	Listeners' Licences.	
	Total.	Per 100 of Population.
United States of America	28,000,000(a)	21.50
Denmark	762,711	20.58
New Zealand	313,826	19.59
Sweden	1,226,858	19.47
United Kingdom	8,908,366	19.28
Australia	1,102,315	15.99
Belgium	1,126,218	13.42
Germany	11,503,019	13.34
Netherlands	1,108,625(a)	13.27
Switzerland	548,533	13.12
Norway	364,548	12.58
France	4,705,859	11.22
Canada	1,213,723(b)	10.88
South Africa	212,914	10.23
Argentine Republic	1,100,000	9.14
Finland	293,790	7.80
Japan	3,983,399	5.75
Eire	148,811	5.01
Estonia	66,268	4.96
Mexico	875,000(a)	4.89
Hungary	419,215	4.66
Poland	1,016,473	2.94
Italy	995,500	2.30
Union of Soviet Socialist Republics	3,760,400(c)	2.21

(a) Listeners are not licensed and the totals shown are estimates only of the number of receiving sets in operation. (b) At 31st March, 1939. (c) December, 1936 figures.

Australia ranks sixth amongst countries of the world in relation to licences per 100 of population.

4. **Oversea Communication by Wireless.**—(i) *Beam Wireless.* The Beam Wireless stations provided for under the agreement between the Commonwealth Government and Amalgamated Wireless (Australasia) Ltd. were completed early in 1927, and a direct beam wireless service to England was established on 8th April, 1927. A similar service to North America was opened on 16th June, 1928. Satisfactory communication is maintained daily over a period of hours, and the services are being well patronized by the public. A comparison of the rates charged for "Beam" and Cable messages is given in § 4, Oversea Cable and Radio Communication. Particulars of international traffic via "Beam" are given in par. (iii) (a) following.

(ii) *Wireless Communication in the Pacific.* New Zealand, the territories of New Guinea and Papua and the various small islands in the Pacific Ocean are served by a comprehensive system of wireless communication. In New Guinea and Papua, nine wireless telegraphy stations are established under an agreement between the Commonwealth and Amalgamated Wireless (Australasia) Ltd. for communication with ships at sea, and for inter-communication. Three of these stations Rabaul (New Guinea) and Port Moresby and Samarai (Papua) also have direct communication with the mainland of Australia. In addition, there are in New Guinea several low powered transmitters established by the New Guinea Administration for interior communication, while in both Papua and New Guinea several small stations are operated by gold exploration parties, missionary societies and others.

Direct communication by wireless telegraphy exists between Sydney and Suva (Fiji) and Noumea (New Caledonia), while Wellington (New Zealand) is linked with Sydney by wireless telephone. Other wireless telegraph stations in the Pacific include Auckland, Awarua and Chatham Islands (New Zealand), Port Vila (New Hebrides), Apia (Samoa), Tulagi and Vanikoro (Solomon Islands), Nauru (Marshall Islands), Ocean Island (Gilbert and Ellice Group), Truk and Yappu (Caroline Islands), and Guam (Marian Islands).

(iii) *Radiotelegraphic Traffic.* (a) *International.* The following statement shows particulars of international traffic "via Beam" to and from United Kingdom and other places during the year ended 30th June, 1939:—

RADIO TRAFFIC : INTERNATIONAL, 1938-39.

Class of Traffic.	Number of Words Transmitted to—			Number of Words Received from—		
	United Kingdom.	Other Places.	Total.	United Kingdom.	Other Places.	Total.
Ordinary(a)	1,215,838	687,489	1,903,327	1,088,091	226,056	1,314,147
Deferred (Ordinary) ..	1,176,634	649,102	1,825,736	1,133,969	200,372	1,334,341
Government(a)	83,794	11,696	95,490	63,173	7,974	71,147
Press (including deferred press) ..	173,151	35,080	208,231	2,164,137	138,639	2,302,776
Daily letter and greeting telegrams	1,378,870	929,436	2,308,306	1,118,740	434,825	1,553,565
Total	4,028,287	2,312,803	6,341,090	5,568,110	1,007,866	6,575,976

(a) Includes Code telegrams.

(b) *Coast Stations.* Particulars of the traffic handled by the several coast stations during the year 1938-39 are as follows:—

RADIO TRAFFIC : COAST STATIONS, 1938-39.

State or Territory.	Particulars.				
	Total Paying Words.	Messages.			
		Paying.	Service.	Weather.	Total.
No.	No.	No.	No.	No.	
New South Wales	1,374,170	89,541	14,425	14,014	117,980
Victoria	128,979	12,360	..	1,936	14,296
Queensland	264,424	21,137	4,529	16,726	42,392
South Australia	75,052	6,796	839	1,001	8,636
Western Australia	157,728	11,366	3,317	4,717	19,400
Tasmania	110,705	6,604	978	4,003	11,585
Northern Territory	67,026	3,326	1,452	4,476	9,254
Australia	2,178,084	151,130	25,540	46,873	223,543
Papua	609,977	33,984	2,417	6,414	42,815
Grand Total	2,788,061	185,114	27,957	53,287	266,358

(c) *Island Stations.* Particulars of the island radio traffic dealt with during the year 1938-39 are given in the following table :—

RADIO TRAFFIC : ISLAND STATIONS, 1938-1939.

Particulars.	To Australia.	From Australia.	Inter- Island.	Ship.	Total.
Messages	No. 19,594	No. 16,388	No. 30,415	No. 1,899	No. 68,296
Words	351,741	225,356	411,692	24,800	1,013,589

5. *Proficiency Certificates.*—Every transmitting station, in respect of which a licence is issued, must be operated by a person holding a certificate of proficiency.

During the year ended 30th April, 1940, 441 Operators' Certificates of Proficiency were awarded. The number of each class were :—Commercial—First Class, 106 ; Second Class, 53 ; Third Class, 18 ; Aircraft—First Class, 1 ; Second Class, 12 ; Third Class, 48 ; Broadcast Station, 57 ; and Amateur, 136.

CHAPTER VI. EDUCATION.

§ 1. Evolution of Educational Systems in Australia.

1. **Educational Systems of the States.**—As the first settlement in Australia was in New South Wales, it was but natural that Australian Education should have had its beginning in that State, and consequently the mother State has played a leading part in the evolution of educational method and system in Australia. The subject is dealt with in some detail in the first two issues of the Official Year Book, which also contain a more or less detailed account of the origin and development of the educational systems of the other States.

2. **Later Development in State Educational Systems.**—Issues of the Official Year Book up to No. 22 contain an outline of later developments of the educational systems of the various States. The educational systems of the States may now be considered as more or less homogenous entities, the various stages succeeding one another by logical gradation from kindergarten to university.

3. **School Age.**—The statutory school age for children in each State, set out briefly, is as follows:—New South Wales, 6 to 14 years; Victoria, 6 to 14 years; Queensland, 6 to 14 years; South Australia, 6 to 14 years; Western Australia, 6 to 14 years; and Tasmania, 7 to 14 years. In December, 1939, the statutory period was extended in New South Wales by one year to include children at age 6 years.

It is provided in some States that in cases where any child is living outside stated distances from a State school, the age at which the child must commence school is increased. Provision is also made that a scholar having attained a certain standard may leave school before reaching the statutory leaving age.

At the 1936 Conference of Directors of Education a resolution was passed urging the necessity of raising the compulsory school leaving age to 15 years. This resolution was subsequently submitted to a conference in Sydney of Ministers of Education who agreed to recommend to their respective Governments legislation to implement the proposal by the year 1940.

4. **Australian Council for Educational Research.**—This Council, which was constituted on 10th February 1930, is at present financed almost entirely by the Carnegie Corporation of New York. The Council consists of nine members, of whom six are elected by State Institutes for Educational Research which have been established in each of the Australian States. One full meeting of the Federal body is held each year. The publications of the Council appear in the form of a Research Series published by the Melbourne University Press. Up to the end of 1939, 58 numbers had appeared. Under the title *Review of Education in Australia* the Council produces a Year Book of Australian education. Since its inception the Council has granted 191 applications for assistance to persons who wish to carry out investigations, or have their works published. The Council also initiates investigations. At the present time for example it is making a survey of the teaching profession in Australia. Authorized expenditure on grants to the end of June, 1939, amounted to £16,499. In addition to organizing and supporting research, the Council acts as a centre for the collection and dissemination of information concerning Australian education. The Council was instrumental in arranging for the survey of Australian libraries conducted for the Carnegie Corporation during 1934 by Messrs. Ralph Munn and E. R. Pitt. As a result of their report there are strong movements in several States to rectify the serious deficiencies revealed in existing library services in Australia. The Council provides technical services and advice to private and to official inquiries. In particular, there has been a demand for the tests of intelligence and of scholastic attainment which have been standardized to meet Australian conditions. During the past twelve months over 150,000 copies have been supplied to schools. The Council is represented on the Conference on Employment of Youth convened by the Commonwealth Government. It is recognized by the

Institute of Intellectual Co-operation, Paris, as the National Centre for Educational Information in Australia, and also acts as the Australian representative of the Institute of International Education, New York. The headquarters of the Council are situated at 147 Collins-street, Melbourne.

§ 2. Census Records.

1. **Persons Receiving Instruction.**—The Census and Statistics Act 1905–1938 specifies "Education" as a subject for inquiry at a Census, but does not indicate the nature or range of the information to be furnished. At earlier Censuses an inquiry regarding the degree of education was restricted to a question as to ability to read and write, but under the system of compulsory education the number of persons in Australia who reach maturity without being able to read and write is very small, and this question was omitted at the 1933 Census. The only question asked concerning those receiving instruction at the time of the 1933 Census was to state the nature of the school they were attending. The tabulation of these details for each of the last three Censuses resulted as follows :—

PERSONS RECEIVING INSTRUCTION AT THE DATE OF THE CENSUS, 1911 TO 1933.

Receiving Instruction at—	Number.			Percentage.		
	1911.	1921.	1933.	1911.	1921.	1933.
Government School ..	593,959	791,724	904,383	76.49	77.36	77.23
Private School ..	156,106	193,774	224,994	20.13	18.93	19.21
University ..	2,465	7,252	8,525	0.32	0.71	0.73
Home ..	23,760	30,712	33,126	3.06	3.00	2.83
Total ..	775,390	1,023,462	1,171,028	100.00	100.00	100.00

2. **Ages of Scholars.**—In the next table the number of scholars at specified ages in 1933 are shown together with the total number of persons recorded for those ages :—

SCHOOLING OF AUSTRALIAN POPULATION (SEXES COMBINED), 30th JUNE, 1933.

Age Last Birthday.	Number Receiving Instruction at—				Number not stated and not at School.	Total.
	Government School.	Private School.	Home.	University.		
4 ..	6,287	3,528	2,916	..	(a) 556,234	(a) 568,965
5 ..	49,051	12,037	3,475	..	60,348	124,911
6 ..	83,816	18,269	3,169	..	17,385	122,639
7 ..	95,811	20,172	3,091	..	7,221	126,295
8 ..	98,769	20,642	2,809	..	5,798	128,018
9 ..	97,616	20,414	2,467	..	5,020	125,517
10 ..	100,676	21,264	2,309	..	5,189	129,438
11 ..	101,047	21,318	2,190	..	4,939	129,494
12 ..	102,087	21,712	2,108	..	5,224	131,131
13 ..	88,375	20,392	2,114	..	9,127	120,008
14 ..	40,868	15,643	1,804	..	56,836	115,151
15 ..	20,149	12,261	1,347	..	86,197	119,954
16 ..	9,784	8,361	869	101	103,265	122,380
17 ..	4,799	4,521	611	494	110,208	120,633
18 ..	2,480	2,087	565	1,224	120,434	126,790
19 ..	1,257	893	403	1,463	121,637	125,653
20 and over ..	1,511	1,480	879	5,243	4,183,749	4,192,862
Total ..	904,383	224,994	33,126	8,525	5,458,811	6,629,839

(a) Including those aged 0 to 3.

3. **Percentage of Persons not Receiving Instruction.**—The compulsory school age in the various States ranges from 6 to 14 years. From the foregoing table it will be seen that the proportion of children aged last birthday from 6 to 13 years receiving instruction was 94.1 per cent. Conversely 5.9 per cent. of the children within the compulsory range were not indicated as receiving instruction at the date of the Census. The corresponding ratio in 1921 was 6.7 per cent.

As the minimum compulsory school age in New South Wales and Tasmania at the date of the Census was 7 years and as exemptions from further attendance for special reasons on attaining age 13 obtain throughout the States, a more reliable estimate of the percentage of children not receiving instruction may be obtained by ignoring the extreme ages of the compulsory range. The elimination of these ages reduces the percentage from 5.9 to 4.3 per cent. Attendance at school was known to be affected by the severe economic conditions prevailing at the time of the Census, and this latter figure was consequently in excess of the corresponding percentage of 3.7 in 1921. The effect of accessibility to schools may be seen in the further reduction of the percentages of these ages not receiving instruction in the metropolitan areas to 3.5 in 1933 and to 2.9 in 1921.

4. **Religions of Scholars.**—The following table shows the class of school at which the young adherents to the principal religious denominations were being educated at the date of the Census:—

**ADHERENTS RECEIVING INSTRUCTION AT DIFFERENT KINDS OF SCHOOLS.
30th JUNE, 1933.**

Denomination.	Government School.	Private School.	University.	Home.	Total Specified.
Baptist	17,473	998	166	304	18,941
Catholic, Roman(a) ..	84,763	146,197	1,339	6,263	238,562
Church of Christ	10,822	479	86	214	11,601
Church of England	397,717	37,442	3,263	14,612	453,034
Congregational	9,274	1,112	202	224	10,812
Lutheran	8,257	910	45	217	9,429
Methodist	116,365	5,926	1,023	2,723	126,037
Presbyterian	108,870	9,836	1,302	3,814	123,822
No Reply	119,130	18,415	646	3,805	141,996
Other	31,712	3,679	453	950	36,794
Total	904,383	224,994	8,525	33,126	1,171,028

(a) Including Catholic, Undefined.

The most prominent feature of the results given above is the relatively small proportion of Roman Catholics attending State schools. Of the Roman Catholics reported as receiving instruction, 34.66 per cent. were attending State schools compared with 86.84 per cent. for the rest of the community, the proportion for the whole being 77.23 per cent.

§ 3. State Schools.

1. **General.**—The State Schools, or, as they are sometimes termed, the "public" schools, of Australia comprise all schools directly under State control, in contradistinction to the so-called "private" schools, the bulk of which, though privately managed, nevertheless cater for all classes of the community. Separate information regarding Technical Education is given in § 7, but the junior technical schools are included hereunder. The returns include figures relating to correspondence schools as well as subsidized schools, but evening schools and continuation classes, where such are in existence, are not included, but are dealt with separately in par. 3 (iv) hereinafter

2. Returns for Year 1938—(i) *General*. The following table shows the number of State Schools, together with the teachers employed and the number of individual children in attendance during the year 1938 :—

STATE SCHOOLS, 1938.

State or Territory.	Schools.	Teachers Employed.	Teachers in Training.	Net Enrolment.
New South Wales(a)	3,283	11,668	1,476	383,025
Victoria	2,688	8,343	409	234,802
Queensland	1,693	4,261	296	141,505
South Australia	1,061	3,050	274	78,845
Western Australia	836	2,379	152	(b) 61,580
Tasmania	459	1,274	93	34,553
Northern Territory(c)	9	19	..	680
Australia	10,029	30,994	2,700	934,990

(a) Including Australian Capital Territory. (b) Estimated. (c) Year ended 30th June, 1938.

(ii) *Average Enrolment and Attendance*. The methods of calculating enrolment are not identical throughout the States. The unit in South Australia is the daily enrolment while New South Wales, Victoria, Western Australia and Tasmania employ the weekly enrolment. In Queensland no average enrolment is compiled, and the mean of the four quarterly gross enrolments is the only figure available.

As with enrolments there is not complete uniformity in arriving at the average attendance, but most of the States aggregate the attendances for the year and divide by the number of school sessions. New South Wales and Western Australia, however, employ averages of term averages. The matter of securing uniformity in these respects has been under consideration for some time, and the Council for Educational Research, already referred to in § 1, par. 4, is devoting attention to the question of securing greater uniformity in methods of collection and presentation of educational data generally. The average enrolment and attendance in each State during 1938 are shown below :—

STATE SCHOOLS: AVERAGE ENROLMENT AND ATTENDANCE, 1938.

State or Territory.	Average Weekly Enrolment.	Average Daily Attendance.	Percentage of Attendance on Enrolment.
			%
New South Wales	344,243	300,768	87.37
Victoria	219,270	190,275	(a) 87.10
Queensland	136,621	113,842	83.33
South Australia	75,519	69,681	(a) 92.08
Western Australia	59,087	54,284	91.87
Tasmania	31,578	28,359	89.81
Northern Territory(b)	508	460	90.55
Total	866,826	757,669	87.46

(a) Excluding correspondence students. (b) Year ended 30th June, 1938.

The percentage of attendance on enrolment is lowest in Queensland, but this figure is not comparable with those of the other States, as no average enrolment is available for Queensland. The actual attendance in Queensland is in all probability just as high as in the other States, for in a calculation based on comparable mean quarterly enrolments in 1938 the percentage of attendance was slightly higher in Queensland than in New South Wales.

Extraordinary epidemics apart, it would appear from the steadiness of the returns in recent years that the percentage of attendance on enrolment is approaching its

maximum under present conditions in Australia. Recurring epidemics of contagious diseases, minor illnesses, bad weather and long distances are all serious factors limiting the full attendance of pupils at school.

The average attendance at the State Schools in Australia is shown below for the year 1891 and at varying intervals to 1938 :—

STATE SCHOOLS : AVERAGE ATTENDANCE, AUSTRALIA.

Year.	Total Population. (a)	Average Attendance.	Year.	Total Population. (a)	Average Attendance.
1891	3,421	350,773	1934	6,706	792,892
1901	3,825	450,246	1935	6,753	790,186
1911	4,574	463,799	1936	6,807	792,148
1921	5,511	666,498	1937	6,867	761,848
1931	6,553	817,262	1938	6,930	757,669
1933	6,057	805,334			

(a) At 31st December, in thousands.

It is possible, for Census years, to relate with reasonable accuracy the average attendance of scholars at State Schools to the number of children who are approximately of school age. For this purpose the ages 5 to 15 years, both included, have been taken and the average attendance per thousand children was:—1891, 455; 1901, 464; 1911, 477; 1921, 544; and 1933, 585. Although other factors might have affected the results in a minor degree it would appear that considerable improvement has taken place in school attendance during the last twenty years.

(iii) *Schools in the Australian Capital Territory.* During the year 1938 fourteen State Schools were in operation in the Australian Capital Territory. The individual pupils enrolled numbered 1,663 and the average attendance 1,308. Cost of upkeep amounted to £23,103. By arrangement with the Commonwealth Government these schools are conducted by the New South Wales Education Department in the same way as the ordinary State Schools, the Department being recouped for expenditure. Ample provision has been made for both primary and secondary education, and this will be increased to meet requirements. The figures quoted, other than expenditure, do not include enrolment, etc., at the Trade School and the Evening Continuation School. A reference to the Canberra University College will be found in § 6, par. 6.

3. Distribution of Educational Facilities.—(i) In Sparsely-settled Districts.—

(a) *General.* The methods adopted in the various States to carry the benefits of education into the remotest and most sparsely-settled areas are set out in some detail in previous issues of the Official Year Book (see No. 22, pp. 430-1). (b) *Correspondence Teaching.* Teaching by correspondence has been adopted to meet the needs of children out of reach of the ordinary means of education, including those prevented from attending school through physical ailment. Approximately 19,750 children received instruction in this way during 1938, the respective numbers in each State being: New South Wales, 8,101; Victoria, 1,112; Queensland, 6,000; South Australia, 1,825; Western Australia, 2,157; and Tasmania, 526. In the Northern Territory, 27 children received tuition by correspondence during the year.

(ii) *Centralization of Schools.* The question of centralization of schools adopted so successfully in America and Canada has received some attention in Australia, and particularly in New South Wales. It is recognized that a single adequately staffed and well equipped central institution can give more efficient teaching than a number of small scattered schools in the hands of less highly trained teachers, and the small schools in some districts were therefore closed and the children conveyed to the central institution. The principle was first adopted in New South Wales in 1904, and in 1938 a sum of £22,277 was expended in boarding allowances and conveyance to central schools. Cost of conveyance to State Schools in Victoria during 1938-39 was returned as £18,007. In South Australia the sum of £4,435 was disbursed in connexion with travelling expenses of school children in 1938, while £15,321 was spent in Western Australia during 1937-38, and £11,796 in Tasmania in 1938. (It may be pointed out, however, that the

parents are often reluctant to part with the small schools which form as it were, "heart centres" in their little community, while the kindly help of the teachers is a great asset in the social and intellectual life of the districts served by the schools.)

(iii) *Education of Backward and Defective Children.* This subject was alluded to at some length in preceding issues of the Official Year Book (see No. 22, pp. 431-2).

(iv) *Evening Schools.* Evening Continuation Schools have been in existence for many years in some of the States, but their progress has been uncertain. The aim of these schools is to provide a means of furthering the education of those who have left school at the termination of the primary course. Practical and cultural subjects are combined in the curriculum to be of assistance to those attending in their occupations and their civic life. In New South Wales the 34 Evening Continuation Schools had an average weekly enrolment in 1938 of 3,303 and an average attendance of 2,541. The schools are divided into three groups, junior technical, domestic science, and commercial. Attendances at the schools for boys numbered 2,012, and at those for girls 529. Unemployed pupils receive free tuition, and all fees are refunded to others with a satisfactory record of attendance. In Western Australia evening continuation classes were held at 23 centres in 1930, with an average enrolment of 2,777 pupils, but the classes were discontinued at the end of that year and preparatory technical classes were substituted wherever there was a technical school in operation.

(v) *Higher State Schools.* In all the States higher schools have been established which provide advanced courses of instruction for pupils who have completed the primary grades. Reference to the development of these schools will be found in preceding Official Year Books (see No. 22, pp. 433-4).

(vi) *Agricultural Training in State Schools.* Extended reference to the methods adopted in the teaching of agriculture in State Schools was incorporated in preceding Official Year Books (see No. 22, pp. 434-7).

4. *Training Colleges.*—The development of the training systems of the various States was referred to at some length in earlier issues of the Official Year Book (see No. 22, pp. 437-9).

5. *Expenditure.*—(i) *Maintenance—All Schools.* The net expenditure on maintenance in all grades of schools, excepting senior technical schools and in Victoria and Tasmania junior technical schools, and the cost per head of average attendance for the five years ended 1938 are shown in the following table. The figures do not include expenditure on buildings, which is given separately in a subsequent table. In all expenditure tables the figures for Victoria and Western Australia relate to the financial year ending six months later than the stated calendar year.

STATE SCHOOLS: EXPENDITURE ON MAINTENANCE.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
TOTAL (INCLUDING SECONDARY SCHOOLS).								
	£	£	£	£	£	£	£	£
1934	3,312,614	2,163,111	1,312,758	666,593	575,340	215,105	3,897	8,249,418
1935	3,523,552	2,335,096	1,235,724	721,275	625,847	250,759	5,594	8,697,847
1936	3,642,321	2,528,177	1,261,461	761,847	674,083	268,579	5,763	9,142,231
1937	3,994,646	2,602,114	1,337,120	786,942	695,584	298,246	6,307	9,720,959
1938	4,525,546	2,621,297	1,458,366	821,935	712,012	307,543	6,307	10,453,006
PER HEAD OF AVERAGE ATTENDANCE.								
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1934	10 13 9	10 11 9	11 11 8	8 14 7	10 15 1	7 6 9	14 5 6	10 9 8
1935	11 6 8	11 10 9	10 18 2	9 12 1	11 18 2	8 12 0	18 2 1	11 2 0
1936	11 14 8	12 12 1	10 13 4	10 6 4	12 14 6	9 4 3	13 3 5	11 12
1937	13 0 1	14 16 6	11 11 11	10 16 5	12 16 5	10 6 2	12 19 0	12 17
1938	15 0 11	14 6 11	12 6 2	11 15 11	13 2 4	11 0 8	13 14 3	13 18

(a) Gross figures, receipts not being available.

Prior to the depression the maximum expenditure on State Schools was £10,087,570 in 1929. Economies were effected during the depression years, but since 1934 the expenditure has risen rapidly to a new high level of £10,453,006 in 1938.

(ii) *Maintenance—Secondary Schools.* The figures given in the preceding table refer to expenditure on maintenance of all State primary and secondary schools, exclusive of technical colleges. It has been thought desirable by the State Education Departments to give separate information in regard to the cost of secondary education. The difficulty of making any satisfactory allocation of the kind, however, will be understood when it is realized that both elementary and higher education are in some instances given in the same school and by the same teacher. Unfortunately, too, the term "secondary" does not indicate the same thing in all States. It might be mentioned here that 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 in regard to cost hereunder have been extracted from the Reports of the State Education Departments, and are subject to the qualifications enumerated above.

STATE SECONDARY SCHOOLS: EXPENDITURE ON MAINTENANCE, 1938.

State.	Cost.	Cost Per Head of Population.
	£	s. d.
New South Wales	759,694	5 7
Victoria	436,363	4 8
Queensland	154,995	3 1
South Australia	125,991	4 3
Western Australia	(a) 150,390	6 7
Tasmania	37,031	3 2

(a) Year 1937-38.

The figures in all cases are exclusive of cost of buildings. In the case of Victoria the total includes the expenditure on "intermediate" education amounting (excluding administration costs) to £113,573. For Queensland, the figure quoted does not include the cost of the Agricultural High School and College, which amounted in 1938 to £23,514. For Western Australia the total includes £92,090 on account of "post primary" education.

(iii) *Buildings.* Expenditure on school buildings exclusive of Technical Colleges in each of the years quoted was as follows:—

STATE SCHOOLS: EXPENDITURE ON BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
	£	£	£	£	£	£	£	£
1933	360,194	94,850	213,181	52,697	52,955	9,926	156	783,959
1934	300,999	104,591	285,358	44,120	66,515	24,973	54	826,610
1935	406,662	132,744	347,735	60,656	102,634	53,589	897	1,104,917
1936	377,403	167,428	211,169	69,627	56,191	60,810	726	943,354
1937	467,920	163,532	325,865	76,775	44,344	62,117	786	1,141,339
1938	479,703	170,061	208,750	94,584	72,658	70,962	786	1,097,504

The totals for the various States in 1938 include the following amounts expended from loan and unemployment relief funds:—New South Wales, £187,084; Victoria, £78,799; Queensland, £135,623; South Australia, £59,996; Western Australia, £46,911; and Tasmania, £58,936.

(iv) *Total.* The net total cost during the year 1938 was as follows :—

STATE SCHOOLS : NET TOTAL COST, 1938.

Item.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
Net cost of education, including buildings ..	£ 5,005,249	£ 2,791,358	£ 1,667,116	£ 916,519	£ 784,670	£ 378,505	£ 7,093	£ 11,550,510

The figures in this and the preceding tables refer to all grades of State Schools (with the exception of senior technical schools and in Victoria and Tasmania junior technical schools). Including buildings, the net cost per scholar in average attendance for the whole of the State Schools in Australia amounted in 1938 to £15 8s. 2d., as compared with £4 9s. 3d. in 1901.

6. *School Banking.*—With the object of inculcating principles of thrift amongst the children, agencies of the Savings Banks have been established at many of the schools throughout the Commonwealth. Particulars for each State at 30th June, 1939, were as follows :—

SCHOOL SAVINGS BANKS AT 30th JUNE, 1939.

State.	Agencies.		Depositors.		Amount on Deposit.	Average for Depositor.	
	No.	No.	No.	No.	£	£	s. d.
New South Wales	2,847	193,274	314,717	1 12 7			
Victoria (i)	2,781	200,888	293,229	1 9 2			
Queensland	1,464	66,622	172,243	2 11 8			
South Australia	1,168	80,415	164,895	2 1 0			
Western Australia	772	36,539	92,905	2 10 11			
Tasmania (a)	498	31,950	51,967	1 12 6			
Northern Territory	5	283	687	2 8 7			
Total	9,535	609,971	1,090,703	1 15 9			

(a) Including inoperative accounts.

§ 4. Private Schools.*

1. *Returns for 1938.*—The following table shows the number of private schools, together with the teachers engaged therein, and the enrolment and average attendance in 1938 :—

PRIVATE SCHOOLS, 1938.

State or Territory.	Schools.	Teachers.	Enrolment.	Average Attendance.
New South Wales	746	5,060	100,720	84,726
Victoria	516	2,654	80,161	(a) 74,299
Queensland	231	1,591	34,390	29,387
South Australia	162	872	13,218	11,842
Western Australia	146	644	14,320	13,046
Tasmania	64	328	6,523	5,066
Northern Territory (b)	2	9	165	144
Total	1,867	11,158	249,497	218,510

(a) Net enrolment.

(b) Year ended 30th June, 1938.

The Roman Catholic schools comprise the largest group of private schools in Australia. On the basis of the figures available, approximately 200,000 children, or 80 per cent. of the total in private schools, are educated in Roman Catholic schools.

* Private schools include all schools not wholly under State control. The term "private," though popularly applied, is, of course, a misnomer.

The figures for Queensland include the returns from Grammar schools, of which there are eight—five for boys and three for girls, with an enrolment of 1,074 boys and 564 girls. These schools are governed by boards of trustees, partly nominated by the Government, and partly by the subscribers to the funds. The trustees make regulations regarding the fees of scholars, the salaries of teachers, and generally for the management of the schools. The Government endowment received in 1938 amounted to £11,325. In addition, a sum of £10,715 was received by way of fees for the tuition of State scholarship holders. The Grammar schools are inspected annually by officers of the Department of Public Instruction.

In addition to the private schools already mentioned there were 46 privately-conducted schools at orphanages and charitable institutions throughout Australia during 1938, with an enrolment of 3,512 pupils and an average attendance of 3,066. These figures are exclusive of Victoria, for which State particulars are not available.

2. **Growth of Private Schools.**—The enrolment and average attendance at private schools in 1891 and at varying intervals to 1938 were as follows :—

PRIVATE SCHOOLS : ENROLMENT AND ATTENDANCE.

Year.	Enrolment.	Average Attendance.	Year.	Enrolment.	Average Attendance.
1891	124,485	99,588	1934	223,538	196,927
1901	148,659	120,742	1935	229,525	200,539
1911	160,794	132,588	1936	234,278	206,026
1921	198,688	164,073	1937	235,815	210,101
1931	221,387	189,665	1938	249,497	218,510

3. **Registration of Private Schools.**—Conditions in regard to the registration of private schools were alluded to in previous Official Year Books (see No. 18, p. 451).

§ 5. Free Kindergartens.

The following information regarding Free Kindergartens 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 :—

FREE KINDERGARTENS, 1939.

State.	No. of Schools.	Average Attendance.	Permanent Instructors.	Student Teachers.	Voluntary Assistants.
New South Wales	16	791	43	67	60
Victoria	30	1,439	83	77	262
Queensland	6	380	9	20	8
South Australia	10	339	18	20	(a)
Western Australia	8	336	20	12	20
Tasmania	2	91	5	1	2
Total	72	3,376	178	197	352

(a) Not available.

The kindergartens in the foregoing table are all in the metropolitan areas of the various States, with the exception of three country centres, two at Geelong and one at Ballarat which are included in the Victorian returns. The average attendance at

these country schools in 1939 was 156 children. In each capital city there is a training college and the number of students in training during 1939 was 67 in Sydney, 77 in Melbourne, 20 in Brisbane, 29 in Adelaide, 12 in Perth, and 1 in Hobart.

The information given above refers to institutions under private kindergarten unions or associations, and is exclusive of the kindergarten branches in the Government schools of the various States.

§ 6. Universities.

1. **Origin and Development.**—A brief account of the origin and development of the Universities in the various States is given in preceding issues of the Official Year Book (see No. 22, pp. 442-3).

2. **Teachers and Students.**—The following table shows the number of professors and lecturers, and the students in attendance at each of the State Universities during the year 1938 :—

UNIVERSITIES : TEACHERS AND STUDENTS, 1938.

University.	Professors.	Lecturers and Demonstrators.	Students attending Lectures.		
			Matriculated.	Non-matriculated.	Total.
Sydney	52	225	3,097	435	3,532
Melbourne	37	258	(a)	(a)	(b) 3,670
Queensland (Brisbane)	21	100	1,179	226	1,405
Adelaide	19	155	1,329	978	(c) 2,307
Western Australia (Perth)	19	48	843	81	924
Tasmania (Hobart)	9	28	222	66	288

(a) Not available. (b) Exclusive of 261 students at Conservatorium of Music. (c) Exclusive of 233 students at Conservatorium of Music.

The Conservatorium in Sydney, while attached to the Education Department, is not under the control of the University.

3. **University Revenue.**—The revenue of the Universities is derived principally from Government aid, the fees of students, and income from private foundations. The receipts from all sources other than new bequests during the year 1938 are set out in the table below. With the exception of New South Wales, receipts from public examinations are included as University revenue under lecture and examination fees. In South Australia Government grants and income from private foundations include amounts in respect of the Waite Agricultural Research Institute. The returns for Western Australia are exclusive of the private foundations account as these figures are not made available by the University authorities.

UNIVERSITIES : REVENUE, 1938.

University.	Government Grants.	Lecture and Examination Fees.	Income from Private Foundations.	Other.	Total.
	£	£	£	£	£
Sydney	103,350	89,465	77,935	13,702	284,452
Melbourne	75,421	108,193	35,183	27,824	246,621
Queensland (Brisbane)	37,352	33,994	24,803	7,007	103,156
Adelaide	66,600	32,317	23,114	19,034	141,065
Western Australia (Perth)(a)	37,500	1,570	1,742	5,532	46,344
Tasmania (Hobart)	15,265	5,245	1,266	3,000	24,776
Total	335,488	270,784	164,043	76,099	846,414

(a) Excludes revenue on account of bequests, endowments, etc., not taken into general account.

The figures in the foregoing table do not include the value of new foundations received during the year which amounted to £5,920 in New South Wales, £136,840 in Victoria, £4,805 in Queensland, £20,431 in South Australia, £1,875 in Western Australia, and £411 in Tasmania.

In preceding issues of the Official Year Book information is given in some detail in regard to the extent to which the Universities have benefited from private munificence. Space will permit of reference to the more important benefactions only.

The endowments to the Sydney University include the Challis Fund, £376,466; the G. H. Bosch Fund, £257,961; the P. N. Russell Fund, £100,758; and the Fisher Estate, £42,613. In addition, the University receives a large annual revenue from the trustees of the McCaughey bequest. Excluding the principal of the latter, the credit balances of the private foundations amounted to £1,178,170 on the 31st December, 1938. In 1930 a sum of £100,000 was received from the Rockefeller Foundation in aid of the building and equipment of a clinical laboratory for the medical school.

Mr. Sidney Myer's gifts to the Melbourne University amounted to £60,000, while Sir Samuel Gillott, Mr. Edward Wilson (Argus Trust), and Sir Samuel Wilson contributed £41,000, £34,000, and £30,000 respectively. The estate of the late Miss Helen Mackie provided £40,000 for the establishment of pre-clinical chairs, while Mr. R. B. Ritchie's gifts for the endowment of a Chair of Economics amounted to £30,000, and a similar sum was received from the Supreme Court Library Fund for the endowment of a Chair of Public Law. Dr. James Stewart founded Scholarships in Anatomy, Medicine and Surgery to the value of £26,000. The Hon. Francis Ormond contributed £20,000 to the University as well as benefactions to Ormond College amounting to considerably over £100,000 and the late Dr. F. Haley left £25,000 for medical research.

Queensland University, to the 29th February, 1940, had received £190,719 from the McCaughey estate, and £35,464 from the Walter and Eliza Hall Trust, while the Hon. T. C. Beirne gave £20,000 in 1935 for the endowment of a chair of Law in Queensland. The permanent site for the University and other land valued at £62,000 were presented by Dr. and Miss Mayne. The chief benefactors to the Adelaide University were Sir Thomas Elder, £100,000; Sir Langdon Bonython, £71,000; Miss M. T. Murray, £45,000; Mr. T. E. Barr Smith, £35,000; Mrs. Jane Marks, £30,000; Edward Neale, £27,000; Mrs. R. F. Mortlock and J. T. Mortlock, £25,000; Family of John Darling, £25,000; R. B. Smith and family, £21,000; and Sir William Mitchell, £20,000. Several valuable properties, in addition to shares which realized £58,450, were also bequeathed to this University by Mr. Peter Waite, the total value of the bequest being estimated at £100,000. Under the will of Sir Winthrop Hackett the University of Western Australia received £425,000, while the late Robert Gladden bequeathed an estate valued at £60,000.

4. University Expenditure.—The principal item of University disbursements consists of salaries. In the following table is given the expenditure incurred during 1938, excluding capital expenditure on buildings:—

UNIVERSITIES : EXPENDITURE, 1938.

University.	Salaries.	Scholarships and Bursaries.	Buildings and Grounds.	Maintenance, Equipment, &c.(b)	Total.
	£	£	£	£	£
Sydney	200,787	8,349	9,481	56,900	275,517
Melbourne	165,938	7,384	9,946	64,009	247,277
Queensland (Brisbane)	62,441	2,112	502	31,254	96,309
Adelaide	(c) 75,199	1,110	6,688	(c) 60,404	143,401
Western Australia (Perth)(d)	33,206	..	5,950	6,783	45,939
Tasmania (Hobart)	16,891	989	546	6,155	24,581
Total	554,462	19,944	33,113	225,505	833,024

(a) Excluding capital expenditure on new buildings.

(b) Includes expenses of public examinations for all States other than New South Wales.

(c) Includes salaries, £18,422 and maintenance and equipment, £12,854, in respect of the Waite Agricultural Research Institute.

(d) Excludes expenditure on account of bequests, endowments, etc., not taken into General Account.

Capital expenditure on new buildings during 1938 amounted to £280,986 distributed as follows:—New South Wales, £78,038; Victoria, £32,388; Queensland, £89,519; South Australia, £3,841; and Western Australia, £24,316.

5. **University Extension.**—Some account of the initiation and progress of university extension is given in preceding Official Year Books (see No. 22, p. 446).

6. **The Canberra University College.**—The question of the establishment of a University at the Australian Capital is still under consideration, and in the meantime a University College has been established under the Canberra University College Ordinance 1929–1940. By virtue of a temporary regulation of the University of Melbourne, which expires on the 31st December, 1940, the College is empowered to provide approved lectures in the subjects of the Arts, Science, Commerce and Law courses in preparation for certain degrees and diplomas of that University. Lectures commenced in 1930 with the aid of several part-time lecturers, and 30 students were enrolled during the year. In 1938 and 1939 the students numbered 151 and 163 respectively. The staff now consists of three full-time and eighteen part-time lecturers.

7. **The New England University College.**—New England University College is a branch of the University of Sydney. It is situated at Armidale, on the Northern Tablelands of New South Wales. The present main University Building (serving both as a residential College and for lecture rooms and library) stands in 183 acres of land and was given to the University of Sydney by Thomas Richmond Forster, Esq., in 1937. The Government of New South Wales bore the expense of converting it to its present use. Under the direction of the University of Sydney lectures began at the College on 14th March, 1938, in the Faculty of Arts, and on 13th March, 1939 in the Faculty of Science. Students wishing to proceed to degrees in Economics, Medicine, Veterinary Science and Agriculture may take the earlier courses at the College. In 1939 there were 13 lecturers, including one part-time, 63 students taking courses leading to degrees and 22 students attending Extension Board Courses.

8. **Workers' Educational Association.**—In 1913 Workers' Educational Associations were formed in all the States of Australia, and later in New Zealand. The movement has for its object the bringing of the University into closer relationship with the masses of the people, and thereby providing for the higher education of the workers in civic and cultural subjects. There are now direct grants from all State Governments except Western Australia. The particulars of grants for classes in 1939 were as follows:—New South Wales, £5,500, 72 classes, 60 discussion groups and 4 study circles; Victoria, £3,120, 36 tutorial classes, 7 study circles and extension work; Tasmania, £691, 7 classes; South Australia, £2,250, 10 tutorial classes, 14 lecture classes, 5 study circles, 2 discussion groups and extension lectures at country centres; Queensland, £1,650, 17 tutorial classes and 20 discussion groups. In addition, the New South Wales Association receives a Government grant for general organizing purposes of £770, and the Queensland and South Australian Associations received grants of £850 and £240 respectively. The Carnegie Corporation has in recent years shown its interest in the work by allotting substantial grants to the Associations and to the Universities. The principal subjects chosen in all States are Industrial History, Economics, Political Science and Sociology, but there is an increasing number of classes in other subjects such as History, Psychology, Philosophy, Literature, Music, Physiology and Biology. Each University co-operates with the W.E.A. in the formation of a joint committee for tutorial classes, which supervises the work with the assistance of a University officer with the title of Director of Tutorial Classes. In addition to the longer University tutorial classes, many preparatory classes, study circles, and summer schools are organized by the Association, numerous courses of public lectures are delivered, educational conferences promoted, and an extensive book service is spreading educational literature throughout Australia.

§ 7. Technical Education.

1. **General.**—Although provision has been made in all of the States for many forms of technical education, the total expenditure figures still indicate a lack of proportion in comparison with the total educational votes. The rapid expansion of manufacturing

industries in recent years, however, is increasing the demand for technically-trained personnel, and the provision of facilities for such instruction is demanding and will demand greatly increased expenditure.

In preceding issues of the Official Year Book an outline was given of the origin and development of technical education in each State (see No. 22, pp. 447-51), but considerations of space preclude the inclusion of more up-to-date information in later volumes.

2. **Schools, Teachers and Students.**—The number of schools, teachers and enrolments of individual students during 1938 are given in the following table:—

TECHNICAL EDUCATION : SCHOOLS, TEACHERS AND ENROLMENTS, 1938.

State.	Schools or Colleges.	Teachers.			Individual Students Enrolled.	
		Full-time.	Part-time.	Total.	Male.	Female.
New South Wales ..	22	300	753	1,053	22,739	8,126
Victoria(a) ..	28	795	419	1,214	27,258	8,736
Queensland ..	14	341	151	492	9,978	6,410
South Australia ..	17	(b)	(b)	296	6,353	3,257
Western Australia ..	5	36	119	155	3,693	1,689
Tasmania(a) ..	5	40	93	133	1,438	413
Total ..	91	..	..	3,343	71,459	28,631

(a) Includes junior enrolments, 7,794 males and 1,341 females in Victoria, and 502 males and 33 females in Tasmania, as teaching staff and expenditure cover both senior and junior sections.

(b) Not available.

The numbers of individual scholars enrolled during the last five years are given below. In order to make the figures comparable enrolments at Junior Technical Schools are omitted from the Victorian and Tasmanian totals.

TECHNICAL EDUCATION : INDIVIDUAL STUDENTS, 1934 TO 1938.

State.	1934.	1935.	1936.	1937.	1938.
New South Wales ..	18,564	19,959	21,364	26,188	30,865
Victoria ..	16,763	20,008	22,345	24,130	26,859
Queensland ..	12,540	13,492	15,189	15,652	16,388
South Australia ..	7,457	8,339	8,654	9,247	9,610
Western Australia ..	4,081	4,542	5,224	5,232	5,382
Tasmania ..	980	1,037	1,073	1,253	1,316
Total ..	60,385	67,377	73,849	81,702	90,420

3. **Expenditure.**—The expenditure on technical education in each State for the year 1938 is shown below:—

TECHNICAL EDUCATION : EXPENDITURE, 1938.

State.	Salaries and maintenance.	Equipment.	Buildings.	Total.	Receipts—Fees, etc.	Net Expenditure.
	£	£	£	£	£	£
New South Wales ..	234,113	59,931	166,717	476,816	68,532	408,284
Victoria(a) ..	349,545	8,190	96,708	468,739	89,009	..
Queensland ..	72,473	17,840	13,302	103,615	19,181	84,434
South Australia ..	61,059	8,358	24,774	94,448	15,043	79,405
Western Australia ..	25,700	2,031	659	28,390	2,769	25,621
Tasmania(a) ..	22,839	6,357	7,774	38,317	3,242	35,075
Total ..	765,729	102,707	309,934	1,210,325	197,776	..

(a) Includes the expenditure on Junior Technical Schools.

Fees and other receipts are paid into Consolidated Revenue in all States except Victoria, where they are retained and spent by the Technical School Committee. The expenditure on buildings is largely financed from loan moneys; the sums provided from this source in 1938 were:—New South Wales, £146,816; Victoria, £88,534; Queensland, £10,379; South Australia, £24,229; Western Australia, £102; and Tasmania, £7,400.

The expenditure on maintenance for technical education in 1938 amounted to 2s. 7d. per head of the population of Australia, as compared with 30s. 4d. per head expended in maintenance for primary and secondary education.

§ 8. Business Colleges and Shorthand Schools.

There has been a considerable development in recent years both in the number and scope of privately conducted institutions which aim at giving instruction in business methods, shorthand, typewriting, the use of calculating machines, etc. Particulars for all States, so far as they are available, are given in the following table. Owing to the varying methods employed in the States it is not possible to give any comparative figures of enrolment:—

BUSINESS COLLEGES, SHORTHAND SCHOOLS, ETC., 1938.

State.	Schools.	Teachers.	Average Attendance of Students.	
			Males.	Females.
New South Wales	51	315	2,092	4,482
Victoria	13	154	2,538	2,975
Queensland	13	55	195	740
South Australia	15	76	(a) 1,604	(a) 1,848
Western Australia	11	65	(b) 4,423	(b) 1,219
Tasmania	4	21	106	274
Total	117	686	10,958	11,538

(a) Individual students enrolled. (b) Average weekly enrolment; attendance figures not available.

In addition to those shown above for South Australia there were 3,999 males and 56 females receiving instruction from interstate schools by correspondence. Particulars regarding fees received in 1938 are available for Western Australia and Tasmania only, the respective figures being £39,413 and £3,092.

§ 9. Miscellaneous.

1. *Scientific Societies.*—(i) *Royal Societies.* In previous issues of the Official Year Book an outline was given of the origin and progress of the Royal Society in each State (see No. 22, pp. 454-5). The accompanying table contains the latest available statistical information regarding these institutions, which in every case have their headquarters in the capital cities.

ROYAL SOCIETIES : PARTICULARS, 1939.(a)

Heading.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
Year of origin	1,866	1,854	1,884	1,834	1,913	1,843
Number of members	272	198	209	146	155	255
Vols. of transactions issued	72	81	50	63	25	73
Number of books in library	36,800	18,000	7,000	8,500	4,900	20,000
Societies on exchange list	319	322	220	274	175	283
Income	£ 1,227	567	257	687	237	798
Expenditure	£ 1,137	473	224	565	225	695

(a) The Royal Society of Australia, with headquarters at Canberra, was founded on the 25th July, 1930, and received permission to use its title on the 14th January, 1931. The members, including associates, numbered 99 in 1939. Income and expenditure for the year amounted to £21 and £22 respectively.

(ii) *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 meetings are usually held biennially within the various States and in the Dominion of New Zealand. The next meeting was to have been held at Adelaide in August, 1940, but has been postponed indefinitely owing to the war.

(iii) *Other Scientific Societies.* The Linnean Society of New South Wales, with headquarters in Sydney, was founded in 1874. The soundness of its present position is due to the benefactions of Sir William Macleay, who during his lifetime and by his will endowed the Society to the amount of £67,000, which has been increased by judicious investment to over £80,000. The Society maintains a research bacteriologist and offers annually 4 research fellowships in various branches of natural history. Four fellowships were awarded in 1939. The library comprises some 14,000 volumes, valued at about £7,000. Sixty-four volumes of proceedings have been issued, and the Society exchanges with about 240 kindred institutions. The ordinary membership at the end of 1939 was 183.

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.

2. Libraries.—(i) *Commonwealth—(a) Parliamentary and National Library.* When the Commonwealth Parliamentary Library was created in 1902, it was recognized that at such time as the Australian Capital was established it would be necessary to have available there, for the use of Members, Government Departments and the public, a library sufficient for their requirements, and therefore wider in scope than would be the case with a purely Parliamentary Library. The ideal of a great general library was kept in view, and standard works were systematically acquired. At the same time, the first Library Committee conceived the idea of a National Library for the use and benefit of the people of Australia. The policy was therefore pursued of securing, as far as possible, all works and documents connected with the discovery, settlement and early history of Australia, New Zealand and the Pacific Islands.

In 1909 a valuable collection of *Australiana*, comprising about 10,000 volumes and 6,500 pamphlets, maps, documents and pictures—the library of Mr. E. A. Petherick—was acquired. In 1912 a provision was included in the Commonwealth Copyright Act requiring the publisher of every book, pamphlet, etc., printed in Australia to supply a copy free to the library. In the same year the publication of the *Historical Records of Australia* was begun, and 34 volumes were issued before publication was temporarily suspended in 1926.

The rapid development of the Australian and National sections of the Library persuaded the Library Committee in 1923 that the title "Commonwealth National Library" should be given to those sections, and that at Canberra a division of the Parliamentary and National collections should be effected, the former to be housed in Parliament House, the latter in a separate building to which the public would be given free access. The erection of the first wing of the permanent National Library building has been completed, and it is designed to meet the requirements of University students and the general public, to whom the privileges of the Library have been extended in respect to borrowing as well as reference. The design for the complete building makes ample provision for the housing of special collections and for the proper display of the valuable records of Australian history which the Library possesses. In 1936 a further development in the scope of the National Library was the establishment of an Historical Film and Speaking Record Section. This is being developed in co-operation with the Department of Commerce and is controlled by a Committee consisting of the Librarian, the Officer-in-Charge of the Cinema and Photographic Branch of the Department of Commerce, and a representative of the Film Industry—Mr. H. Gratton Guinness.

The work of the National Library was also extended in 1936 as the result of a grant of \$7,500 in three annual instalments of \$2,500 from the Carnegie Corporation of New York for the establishment of library and reading facilities to outlying Commonwealth Territories. Collections of books are regularly sent to the Northern Territory, Papua,

New Guinea, Central Australia, Norfolk Island and Nauru. After remaining for a period in one Territory they are sent on to another and are then finally distributed among the Territories for permanent retention so as to help build up a Central Library for each Territory.

The number of volumes in the National and Parliamentary collections—both of which are under the same administration—was, at the end of June, 1939, 147,308 books, the outstanding feature of the National collection being a unique collection of Captain Cook manuscripts, while the Parliamentary section contains an extensive series of official publications of Great Britain, the Dominions, and Foreign countries. The following publications are issued by the Library: Historical Records of Australia—34 volumes, 12s. 6d. per volume; Parliamentary Handbook and record of elections—nine issues, 10s. 6d. per volume; Annual catalogue of Australian publications—three issues, 2s. per volume; Select list of representative works dealing with Australia (reprinted from the Official Year Book)—five issues.

(b) *Patent Office Library.* The free library attached to the Commonwealth Patent Office, Canberra, contains over 53,000 volumes. Patent specifications are received from the principal countries of the world, together with official publications dealing with Patents and Trade Marks. A wide range of technical literature and periodicals is available.

(ii) *States.* In each of the capital cities there is a well-equipped Public Library, the institutions in Melbourne and Sydney especially comparing very favourably with similar institutions elsewhere. The following statement gives the number of volumes in the Public Library of each capital city at the 30th June, 1939:—

METROPOLITAN PUBLIC LIBRARIES, 1938-39.

City.	Number of Volumes in—			Total.
	Reference Branch.	Ordinary Lending Branch.	Country Lending Branch.	
Canberra(a)	137,308	10,000	(b)	147,308
Sydney (c)	414,244	(d)	89,521	503,765
Melbourne(e)	478,858	81,048	16,639	576,545
Brisbane	41,317	..	..	41,317
Adelaide	196,197	(f)	(g) 9,635	205,832
Perth	154,681	..	(h) 26,996	181,677
Hobart(e)	38,455	(i) 9,745	..	48,200

(a) Includes Parliamentary section. (b) Books are loaned to libraries or students throughout Australia whenever necessary for research work. (c) Including 136,192 volumes in the Mitchell Library. (d) The maintenance and control of the ordinary lending branch of the Public Library at Sydney were transferred in 1908 to the Municipal Council. At 31st December, 1938, the books numbered 47,491. (e) Year ended 31st December, 1938. (f) The Adelaide Circulating Library at 30th June, 1939, contained 89,823 books. (g) Including 4,291 volumes in Children's Branch. (h) Includes 7,027 volumes in the School Libraries Branch. (i) Includes 2,209 volumes in the Children's Branch.

In connexion with the Country Lending Branch of the Sydney Public Library, it may be noted that books are forwarded on loan to State schools, to approved associations, to Schools of Arts and to individual students. During the year 1938-39, about 76,000 books were lent to small State schools, 16,598 to Schools of Arts, 7,078 to branches of the Teachers' Federation and 2,082 to Agricultural Bureaux, while 61,619 reference works were loaned to individual country students.

A special research staff attached to the Public Library gives valuable assistance in making readily available to inquirers the store of information contained in books, etc., which, owing to limitations of space, are not in open access. Approximately 13,116 volumes were added to the library in 1938-39.

The Mitchell Library in Sydney of more than 60,000 volumes and pamphlets, and 300 paintings, principally relating to Australasia, and valued at £100,000, was bequeathed to the trustees of the Public Library in 1907 by Mr. D. S. Mitchell, together with an endowment of £70,000. The testators stipulated that the regulations of the British Museum were to be adopted as far as practicable, hence the library is the resort of specialists. There are now 136,192 volumes in the library in addition to valuable manuscripts, collections of Australian postage and fiscal stamps, and various pictures, coins, etc.

Other important libraries in New South Wales are the Australian Museum, 29,441 volumes; Teachers' Colleges, 52,849; Technical Colleges, 27,588; Public Schools, 583,475; Railways' Institute, 131,624; and the Cooper Library of the New South Wales Public School Teachers' Federation and the library at the Botanic Gardens, each of 10,000 volumes. At the 30th June, 1939, the Parliamentary Library contained 85,406 volumes.

The reading room at the Melbourne Public Library ranks among the finest in the world. It was opened in 1913, and has a diameter of 114 feet, with a similar height and is capable of seating 320 readers at a time, all of whom are under observation from the centre of the room. The Library forwards volumes on loan to Mechanics' Institutes and Free Libraries, and to individual borrowers in the country. During the year 1938 the volumes added to the reference branch by purchase, donation, etc., numbered 9,276, while additions to the lending branch numbered 3,795.

For some years past efforts have been made in South Australia to collect original documents likely to be of service in compiling a history of the State. So far back as 1914, Professor Henderson, of Adelaide University, under commission from the South Australian Government, visited and reported on the system of keeping archives in England, France, Belgium, Holland and Ceylon, and obtained valuable information also from the United States of America and Canada. A department of historical documents has been created under the care of an archivist, and valuable work has been done in connexion with examination, classification and permanent preservation of the valuable papers. A suitable building for housing the documents and the staff was provided in 1921. At the 30th June, 1939, the collection numbered 309,642 documents, 17,138 views and 1,389 maps.

For the year ended 30th June, 1939, accessions to the Public Library at Perth numbered 3,077 volumes.

During 1922 the Tasmanian Public Library adopted the plan of lending books to individual country borrowers and to families or committees of residents in country districts. The Public Library at Launceston contains 45,000 volumes. Books added to the Public Libraries at Hobart and Launceston during the year 1938 numbered 1,915 and 1,208 respectively.

Statistics in regard to other libraries are not available for all States, while the information supplied is not in all cases complete. Returns for Victoria in 1938 showed a total of about 420 libraries in receipt of State or municipal aid, but apart from the Melbourne Public Library statistics are now only collected from 25 institutions in Greater Melbourne and 44 in the chief extra metropolitan towns. These libraries contained approximately 480,000 volumes. Queensland returned a total of 211 libraries with 574,341 books in 1937-38 although libraries other than the State Public Library do not receive Government aid. Although 272 suburban and country institutions were recorded in South Australia during 1938 statistics were collected from only 247 which returned 698,635 volumes, while in Tasmania 87,000 volumes were distributed between 28 libraries other than the Hobart and Launceston public institutions.

(iii) *University Libraries.* The libraries of the Australian universities perform two important functions in Australian life and development; they provide material not only for the education of graduates and undergraduates, but for scholars, research workers and practical investigators all over the continent, since no genuine student is refused access to them. 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, whose resources they are thus able to supplement. They lend to one another and to State and private institutions as well as to individual investigators, and they both lend to and borrow from the public and scientific libraries. 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 professorial staff. In size the Library of the University of Sydney is the third in Australia, and the Libraries of the Universities of Adelaide and Melbourne are respectively seventh and eighth. The following table shows the sizes and rates of growth of the Australian university libraries; it is impossible to give borrowing statistics, as they differ too widely to be comparable without much explanation:—

UNIVERSITY LIBRARIES, 1939.

University.	Number of Volumes.	Yearly Accessions.	Number of Current Periodicals.
Sydney	254,200	7,900	3,168
Melbourne	112,000	4,660	1,350
Queensland(a)	48,631	2,801	900
Adelaide	122,450	6,750	2,100
Western Australia	59,978	5,418	470
Tasmania	40,849	1,149	250

(a) 1938 figures. This library is in process of reorganization.

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. It is named after its principal benefactor, Thomas Fisher, who bequeathed to it in 1885 the sum of £30,000. It contains an up-to-date bookstack of glass and steel, but the design of the otherwise fine reading room is such as to make it difficult to install a satisfactory system of shelving; the Library is therefore conducted on the closed access system. Undergraduates, however, as well as graduates and members of the teaching staff, 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 a medical branch, there are a number of departmental libraries.

Early in 1854 the Council of the University of Melbourne made its first allocation for books, but the Library was housed in temporary and unsatisfactory quarters for a number of years, and consequently growth was slow and complaints frequent. In recent years the University authorities have treated the Library generously, and there have been some welcome benefactions, but accommodation is insufficient and a new library building is one of the most pressing needs of the University. All 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 Library is administered from the centrally situated general library; there is a large medical branch library specially rich in periodicals, and smaller branch libraries are accommodated in some of the science departments.

The Library of the University of Queensland began 27 years ago with £3,000 worth of books, £2,000 having been raised by public subscription and £1,000 granted by the Government. At present it shares a building with a science department. There are several departmental libraries.

The Adelaide University Library bears the name of its original benefactor, Robert Barr Smith, who, with members of his family in and after 1892, gave the University about £50,000 for library purposes. Some 20,000 volumes are shelved in the reading room, and available to the ordinary student. Up-to-date steel bookstacks provide accommodation for about 100,000 volumes, and additions now planned will be capable

of housing a further 500,000. Borrowing facilities are available to all matriculated students, to country students and to graduates. There are medical and law departmental libraries. The medical library has on permanent loan the collection of the Institute of Medical and Veterinary Science, and also incorporates the library of the British Medical Association (South Australian Branch).

In the University of Western Australia the first permanent library staff was not appointed until 1927. A special feature is the use made of student co-operation. The whole collection is accessible on open shelves, and there are several departmental libraries.

The Library of the University of Tasmania was founded in 1893, but for many years it comprised little more than a collection of text-books. In 1913 a substantial increase of funds was allotted and important gifts received. In 1919 it was organized for the first time in accordance with modern library practice. Its growth has been steady since 1925.

3. Public Museums and Art Galleries.—Previous issues of the Official Year Book contained a brief description of the public museums and art galleries in each State (see No. 22, pp. 457-9), but considerations of space preclude the incorporation of this matter in the present volume.

4. State Expenditure on Education, Science and Art.—The expenditure in each State on education, science and art during the year 1938-39 is given in the following table. Owing to the details not being available in all States the figures are exclusive of officers' pensions and interest and sinking fund on capital expended on buildings. The cost of the medical inspection of school children is also excluded, as this service is more appropriately classified under Public Health, etc. :-

STATE EXPENDITURE ON EDUCATION, SCIENCE AND ART, 1938-39.

State	Expenditure from—				Receipts.	Net Expenditure.
	Revenue.	Loan.	Other Funds.	Total.		
	£	£	£	£	£	£
New South Wales	5,438,425	439,081	..	5,877,506	132,353	5,745,153
Victoria ..	3,124,833	155,174	15,521	3,295,528 ^a	56,946	3,238,582
Queensland ..	1,846,663	188,349	135,140 ^b	2,170,152	25,994	2,144,158
South Australia ..	1,100,993	84,135	..	1,185,128	38,135	1,146,993
Western Australia	862,694	48,266	..	910,960	30,446	880,514
Tasmania ..	390,599	60,367	..	450,966	418	450,548
Total ..	12,764,207	975,372	150,661	13,890,240	284,292	13,605,948

(a) In addition fees in respect of technical education amounting to £80,000 were received and spent by the School Councils. (b) Mainly from Unemployment Relief Tax Fund.

CHAPTER VII.

PUBLIC JUSTICE.

§ 1. Lower (Magistrates') Courts.

1. **General.**—In considering the criminal returns of the various States, due allowance must be made for certain factors, such as the relative powers of the courts, both lower and higher, etc. In the case of lower courts, the actual number of laws in each State the breach of which renders a person liable to fine or imprisonment must be taken into account. Again, the attitude of the magistracy and police towards certain classes of offences is a factor, for in the case of liquor laws, or laws connected with vagrancy or gaming, the views of the magistrates, and instructions issued to the police, may be responsible for considerable variations in the returns. The strength and distribution of the police forces, and the age-constitution and distribution of the population of the States, also influence the results. Due weight should also be given to the prevalence of undetected crime, but information on this point is not available for all States. It may be mentioned that each State has its own separate judicial system, the Commonwealth jurisdiction being confined to the High Court of Australia, which is largely a Court of Appeal intermediate to the Privy Council although it has also original jurisdiction, the Commonwealth Court of Conciliation and Arbitration and the Federal Court of Bankruptcy. Full particulars regarding the judicial power of the Commonwealth will be found in Chapter III. of the Commonwealth Constitution.

2. **Powers of the Magistrates.**—Preceding issues of the Official Year Book contain a brief statement of the powers of the magistrates in the various States (see No. 22, p. 462), but this information is not repeated in the present volume.

3. **Cases Tried at Magistrates' Courts.**—The total number of cases tried at Magistrates' Courts in each State is given below for the five years 1934 to 1938:—

CASES TRIED AT MAGISTRATES' COURTS.

State or Territory.	1934.	1935.	1936.	1937.	1938.
New South Wales ..	127,960	134,900	144,707	125,791	115,521
Victoria ..	57,070	65,973	82,118	74,222	79,056
Queensland(a) ..	28,922	31,909	34,359	33,467	35,434
South Australia ..	15,916	17,299	17,213	19,543	20,729
Western Australia ..	(b) 14,575	19,255	22,611	24,430	24,822
Tasmania ..	7,197	8,345	8,948	8,388	9,236
Northern Territory ..	401	(a) 308	(a) 370	(a) 461	(a) 591
Australian Capital Territory	210	135	165	216	308
Total ..	252,251	278,124	310,491	286,518	285,697

(a) Year ended 30th June following.

(b) Principal offence only counted in multiple charges.

Investigation of the returns shows that considerable variations in the figures for single States are occasioned by breaches of new Acts, or the more stringent enforcement of the provisions of existing Acts. Any deductions drawn from the total returns as to the increase or otherwise of criminality must, therefore, be largely influenced by a careful analysis of the detailed list of offences. Thus, the considerable increase in the total offences in Victoria for the year 1936 as compared with the previous year was chiefly due to a rise of 14,800 in the miscellaneous class, the bulk of which consisted of charges under the Motor Car, Education and Licensing Acts, and breaches of the Traffic Code which came into operation in June, 1936.

4. **Convictions.**—The figures given in the tabulation above include, of course, a number of people who were wrongly charged, and statistically are not of general importance. A classification of convictions in connexion with the persons who appeared before the lower courts in each State during 1938 is given in the following table :—

CONVICTIONS AT MAGISTRATES' COURTS, 1938.

Offence.	N.S.W.	Vic.	Qld.(a)	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Against the Person ..	1,507	613	266	181	174	104	21	13	2,879
Against Property ..	10,030	5,448	2,199	1,104	1,952	856	40	42	21,671
Forgery and Offences against the Currency ..	114	3	2	2	I	..	i	..	123
Against Good Order ..	39,819	17,009	13,158	4,634	5,583	924	239	151	81,517
Other Miscellaneous ..	45,463	45,768	16,422	12,420	15,424	6,721	217	77	142,512
Total ..	96,933	68,841	32,047	18,341	23,134	8,605	518	283	248,702

(a) Year ended 30th June, 1939.

The following table shows the number of convictions in each year from 1934 to 1938 :—

CONVICTIONS AT MAGISTRATES' COURTS.

State or Territory.	1934.	1935.	1936.	1937.	1938.
New South Wales ..	104,018	110,135	117,490	103,272	96,933
Victoria ..	45,748	54,666	70,752	64,772	68,841
Queensland(a) ..	25,997	29,527	31,575	29,893	32,047
South Australia ..	13,728	14,838	14,920	17,297	18,341
Western Australia ..	13,585	17,966	21,120	22,777	23,134
Tasmania ..	6,464	7,658	8,347	7,927	8,605
Northern Territory ..	365	(a) 262	(a) 316	(a) 397	(a) 518
Australian Capital Territory	187	125	155	195	283
Total ..	210,092	235,177	264,675	246,530	248,702

(a) Year ended 30th June following.

5. **Convictions for Serious Crime.**—While the figures given in the preceding table refer to the entire body of convictions, the fact must not be overlooked that they include a large proportion of offences of a technical nature, many of them unwittingly committed

against various Acts of Parliament. Cases of drunkenness and minor breaches of good order, which, if they can be said to come within the category of crime at all, at least do so in a very different sense from some other offences, also help to swell the list. The following table has therefore been prepared for the purpose of showing the convictions at magistrates' courts for what may be regarded as the more serious offences, i.e., against the person and property, either separately or conjointly, and forgery and offences against the currency. Owing to the smallness of the population, the rates for the Northern Territory are subject to considerable variation.

CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS.

State or Territory.	1934.	1935.	1936.	1937.	1938.
NUMBER.					
New South Wales ..	11,920	12,069	13,220	12,468	11,651
Victoria	4,438	4,955	5,240	5,289	6,064
Queensland(a) ..	2,329	2,311	2,400	2,278	2,467
South Australia ..	1,434	1,382	1,121	1,246	1,287
Western Australia ..	(b) 1,404	1,691	1,741	2,011	2,127
Tasmania	856	936	963	1,007	960
Northern Territory ..	26	(a) 15	(a) 32	(a) 26	(a) 62
Australian Capital Territory	13	11	21	25	55
Total	22,420	23,370	24,738	24,350	24,673

PER 10,000 OF THE POPULATION.

New South Wales ..	45.43	45.62	49.55	45.99	42.82
Victoria	24.24	26.94	28.36	28.44	32.47
Queensland(a) ..	24.24	23.77	24.39	22.71	24.50
South Australia ..	24.58	23.62	19.08	21.08	21.72
Western Australia ..	(b) 31.79	37.97	38.69	43.99	46.24
Tasmania	37.35	40.76	41.68	42.14	40.73
Northern Territory ..	52.71	(a) 29.41	(a) 61.97	(a) 45.07	(a) 106.04
Australian Capital Territory	14.04	11.72	21.51	24.40	49.44
Total	33.57	34.75	36.50	35.41	35.78

(a) Year ended 30th June following.

(b) Principal offence only counted in multiple convictions.

6. Rate of Convictions, 1881 to 1938. Statistics of convictions reveal a consistent increase in the rate of serious crime from 1925 to 1931, when 37.1 convictions per 10,000 of the population were recorded. Following this comparatively high figure the rate declined to 32.43 in 1933 but has since risen considerably. The rate of convictions over a series of years is included below; only the more serious offences particularized in the preceding sub-section have been taken into consideration.

RATE OF CONVICTIONS FOR SERIOUS CRIME AT MAGISTRATES' COURTS :
AUSTRALIA, 1881 TO 1938.

Year.						Convictions per 10,000 Persons
1881 .. .. .	..	..	..	..	..	69.3
1891 .. .. .	..	..	..	..	..	44.8
1901 .. .. .	..	..	..	..	..	29.1
1911 .. .. .	..	..	..	..	..	24.6
1921 .. .. .	..	..	..	..	..	29.2
1931 .. .. .	..	..	..	..	..	37.1
1938 .. .. .	..	..	..	..	..	35.8

7. **Committals to Superior Courts.—(i) General.** In a previous paragraph it has been pointed out that comparisons of criminality based on a consideration of the total returns from magistrates' courts are somewhat inadequate, inasmuch as the figures include numbers of cases which are merely technical breaches of laws having in some instances a purely local significance. The committals to higher courts give a better basis of comparison, although even in this connexion allowance must be made for the want of uniformity in jurisdiction. A classification of the offences for which persons appearing in the lower courts were committed to higher courts in each State in 1938 is given below :—

COMMITTALS TO SUPERIOR COURTS, 1938.

Offence.	N.S.W.	Vic.	Qld.(a)	S.A.	W.A.	Tas.	N.T.(a)	A.C.T.	Aust.
Against the Person	471	247	119	73	66	18	1	2	997
Against Property	1,383	1,614	146	108	116	41	..	2	3,410
Forgery and Offences against the Currency	136	89	3	19	20	2	1	..	270
Against Good Order	12	3	4	1	1	3	..	..	24
Other Miscellaneous	46	63	10	19	3	2	..	..	143
Total	2,048	2,016	282	220	206	66	2	4	4,844

(a) Year ended 30th June, 1939.

The table below gives the number of committals in each year from 1934 to 1938, with the rate of such committals per 10,000 of the population :—

COMMITTALS TO SUPERIOR COURTS.

State or Territory.	1934.	1935.	1936.	1937.	1938.
NUMBER.					
New South Wales	1,732	1,748	1,620	1,771	2,048
Victoria	1,531	1,587	1,482	1,545	2,016
Queensland (a)	256	209	238	251	282
South Australia	325	269	237	230	220
Western Australia	144	102	113	181	206
Tasmania	62	79	71	91	66
Northern Territory	9	(a) 8	(a) 10	(a) 16	(a) 2
Australian Capital Territory .. .. .	..	1	4	3	4
Total	4,059	4,003	3,775	4,088	4,844

(a) Year ended 30th June following.

COMMITTALS TO SUPERIOR COURTS—*continued.*

State or Territory.	1934.	1935.	1936.	1937.	1938.
PER 10,000 OF THE POPULATION.					
New South Wales ..	6.6	6.6	6.1	6.5	7.5
Victoria	8.4	8.6	8.0	8.3	10.8
Queensland(a) ..	2.7	2.1	2.4	2.5	2.8
South Australia ..	5.6	4.6	4.0	3.9	3.7
Western Australia ..	3.3	2.3	2.5	4.0	4.5
Tasmania	2.7	3.4	3.1	3.8	2.8
Northern Territory ..	18.2	(a) 15.7	(a) 19.4	(a) 27.7	(a) 3.4
Australian Capital Territory ..	..	1.1	4.1	2.9	3.6
Total	6.1	6.0	5.6	5.9	7.0

(a) Year ended 30th June following.

(ii) *Rate of Committals since 1881.* With occasional variations the rate of committals for serious crime has remained fairly stable during recent years, and if the comparison be carried back further, the movement in the rate has undergone very little change during the present century. The rate at intervals since 1881 is as follows:—

RATE OF COMMITTALS TO SUPERIOR COURTS: AUSTRALIA, 1881 TO 1938.

Year	1881.	1891.	1901.	1911.	1921.	1931.	1938.
Committals per 10,000 inhabitants ..	12	11	8	6	7	8	7

8. *Drunkenness.—(i) Cases and Convictions.* The number of cases of drunkenness and the convictions recorded in connexion therewith during the period 1934 to 1938 will be found in the following table:—

DRUNKENNESS: CASES AND CONVICTIONS.

State or Territory.	1934.		1935.		1936.		1937.		1938.	
	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.	Cases.	Convictions.
New South Wales	26,872	26,344	28,450	27,823	31,383	30,297	29,672	27,651	29,610	27,181
Victoria	8,666	7,244	10,221	9,217	10,390	10,247	10,433	10,296	11,311	11,128
Queensland(a) ..	7,583	7,531	8,383	8,362	10,436	10,409	10,450	10,183	11,410	11,187
South Australia ..	2,430	2,418	2,748	2,737	2,639	2,628	2,529	2,520	2,662	2,653
Western Australia ..	2,016	1,909	2,686	2,671	2,870	2,849	2,708	2,678	2,513	2,479
Tasmania	312	309	410	411	386	384	379	365	349	334
Northern Terr. ..	159	154	(a) 134	(a) 134	(a) 87	(a) 87	(a) 145	(a) 145	(a) 156	(a) 151
Aust. Cap. Terr.	95	95	55	55	63	63	92	91	133	133
Total	48,133	46,094	53,096	51,410	58,263	56,964	56,408	53,929	58,150	55,246

(a) Year ended 30th June following.

Under the heading "drunkenness" are included cases of ordinary drunkenness, drunkenness and disorderliness, and habitual drunkenness. In the figures quoted for Western Australia, convictions for disorderliness attributable to drink were formerly included in the second category, but since 1929 the returns relate only to drunkenness either as a single or concurrent offence.

The number of convictions is, as might naturally be expected, almost identical with the number of cases. Until 1936 this was not so in the case of Victoria for in this State offenders are generally discharged on a first appearance and no conviction is recorded, a similar procedure being also adopted in the case of those arrested on Saturday and detained in custody till Monday. Since 1936, however, these cases have been included as convictions. The number of convictions recorded for New South Wales does not include cases where offenders were admonished and discharged.

(ii) *Convictions per 10,000 of Population.* The convictions for drunkenness per 10,000 of the population during each of the years from 1934 to 1938 are given hereunder:—

CONVICTIONS FOR DRUNKENNESS PER 10,000 INHABITANTS.

State or Territory.	1934.	1935.	1936.	1937.	1938.
New South Wales	100.4	105.2	113.6	102.6	100.0
Victoria	39.6	50.1	55.5	55.5	59.6
Queensland(a)	78.4	86.0	105.8	102.3	111.1
South Australia	41.5	46.8	44.7	42.8	44.8
Western Australia	45.3	60.0	63.3	58.9	53.9
Tasmania	13.5	17.9	16.6	15.6	14.2
Australian Capital Territory	102.6	58.6	64.5	89.3	119.6
Total	68.9	76.4	84.0	78.9	80.1

(a) Year ended 30th June following.

In the twenties the convictions for drunkenness averaged approximately 100 per 10,000 inhabitants, but the rate fell away considerably during the depression years and was only 57.1 in 1931. With the improvement in the social condition of the people following that year, the average rose steadily to 84.0 in 1936, but has declined somewhat since. Figures for the consumption of beer have followed a very similar course. From an average of 11½ gallons consumed per head of the population for some years prior to the depression the amount declined to 7.32 gallons in 1931, and thereafter rose each year to more than 12 gallons in 1938-39.

The convictions for drunkenness taken by themselves are not an altogether satisfactory test of the relative sobriety of the inhabitants of each State, inasmuch as several important factors must be taken into consideration. The age and sex constitution of the people, for example, are by no means identical in all the States. (Owing to the smallness of the population the figures for the Northern Territory are, of course, abnormal and have not, therefore, been included in the above table.) The avocations of the people affect the result, since persons engaged in strenuous callings are, on the whole, more likely to indulge in alcoholic stimulants than those employed in less arduous ones. The distribution of the population is also a factor, the likelihood of arrest or summons for drunkenness obviously being greater in the more densely populated regions, while allowance must be made for the attitude of the magistracy, the police and the public generally in regard to the offence. Due account also must be taken of the effect of legislation dealing with the limitation of hours during which liquor may be sold in hotels.

(iii) *Consumption of Intoxicants.* The following table shows the consumption of spirits, wine and beer per head of the population in Australia during each year of the quinquennium 1934-35 to 1938-39:—

CONSUMPTION OF INTOXICANTS IN AUSTRALIA.

Year.	Consumption per Head of Population.		
	Spirits.	Wine.	Beer.
	Imp. Galls.	Imp. Galls.	Imp. Galls.
1934-35	0.21	} 0.36	8.68
1935-36	0.21		9.60
1936-37	0.21		10.34
1937-38	0.22		11.62
1938-39	0.22		12.13

(iv) *Treatment of Drunkenness.* (a) *General.* Though the problem of the correct method of dealing with dipsomania is by no means an easy one, it seems fairly clear that the present plan of bringing offenders before magistrates, and subjecting them to the penalty of imprisonment or fine, has little deterrent effect, as the same offenders are constantly reappearing before the courts. Further, the casting of an inebriate into prison and placing him in his weakened state in the company of professional malefactors certainly lowers his self-respect, and doubtless tends to swell the ranks of criminals. Examination of the prison records in New South Wales some years ago disclosed the fact that over 40 per cent. of the gaol population had commenced their criminal career with a charge of drunkenness. During the last few years the dangers of moral contamination in this way have been more accurately appreciated, and a system of classification of prisoners has been adopted whereby the petty offender is as far as possible kept from association with the more evilly-disposed.

(b) *Remedial.* Legislation has been passed in each State providing for the commitment of inebriates to special Government institutions. The laws in the various States are as follows:—New South Wales, Inebriates Act 1912; Victoria, Inebriates Act 1928; Queensland, Inebriate Institutions Act 1896; South Australia, Inebriates Act 1908 amended in 1920 and 1934, Convicted Inebriates Act 1913 amended in 1934; Western Australia, Inebriates Act 1912-19; Tasmania, Inebriates Act 1885, Inebriate Hospitals Act 1892. Curative work was first undertaken by the Government of New South Wales in 1907. In most cases the institutes are connected with the gaols, and, naturally, custodial measures are still a strong feature in their management; nevertheless, the results of remedial measures have been encouraging.

9. *First Offenders.*—In all the States statutes dealing with first offenders have been in force for many years. Existing legislation is as follows:—New South Wales, Crimes Act 1900 amended in 1924 and 1929, First Offenders (Women) Act 1919; Victoria, Crimes Act 1928; Queensland, Criminal Code Acts 1899 to 1931; South Australia, Offenders Probation Act 1913 amended in 1934; Western Australia, Criminal Code Act 1913; Tasmania, Probation of Offenders Act 1934. The method of procedure is practically the same in all cases, i.e., with regard to most first offenders the magistrate or judge is empowered to allow the offender to go free on recognizances being entered into for his good behaviour for a certain period. In practice, this humane law has been found to work excellently, very few of those to whom its provisions have been extended having been found to relapse into crime.

10. *Children's Courts.*—Special courts for the trial of juvenile offenders have been established in New South Wales, Victoria, Queensland, Western Australia, Tasmania and New Zealand, while Children's Courts, although not under that title, are provided for by the Maintenance Act of 1926 in South Australia. The object of these courts is to avoid, as far as possible, the unpleasant surroundings of the ordinary police court.

§ 2. Superior Courts.

I. Convictions at Superior Courts.—The following is a list of the principal offences for which persons were convicted in superior courts during 1938 :—

CONVICTIONS AT SUPERIOR COURTS, 1938.

Offence.	N.S.W. (a)	Vic.	Qld. (a)	S.A.	W.A.	Tas.	N.T. (a)	A.C.T.	Aust.
I. OFFENCES AGAINST THE PERSON.									
Murder	6	1	1	2	1	..	2	..	13
Attempted Murder	4	1	2	..	1	..	..	..	8
Manslaughter	4	..	2	4	2	1	3	..	16
Rape	2	5	1	..	1	..	..	..	9
Other Offences against Females	48	51	20	18	7	10	..	..	154
Abduction .. .. .	..	1	..	..	..	..	..	..	1
Unnatural Offences	26	9	3	6	3	3	..	..	50
Abortion and Attempts to Procure	7	..	1	4	1	..	..	..	13
Bigamy	19	13	6	2	4	..	1	..	45
Suicide, Attempted .. .. .	..	..	..	3	..	3	..	..	6
Assault, Aggravated .. .. .	..	..	9	1	2	..	2	..	14
Assault, Common	28	1	7	3	5	..	..	2	46
Other Offences against the Person	44	22	2	5	2	1	5	..	81
Total	188	103	55	48	29	18	13	2	456
II. OFFENCES AGAINST PROPERTY.									
Burglary and Housebreaking	374	237	47	57	26	11	..	2	754
Robbery and Stealing from the .. .. .	..	..	..	..	..	..	..	..	..
Person	37	29	12	2	4	1	..	..	85
Horse-stealing	1	4	1	1	..	..	..	..	7
Cattle-stealing	3	2	2	..	..	..	..	..	7
Sheep-stealing .. .. .	..	5	..	5	2	..	..	..	12
Embezzlement and Stealing by .. .. .	..	..	..	..	..	..	..	..	..
Servants	10	8	6	5	3	..	..	..	32
Larceny, Other	46	148	5	6	14	3	2	..	224
Unlawfully using Horses, Cattle and .. .. .	..	..	..	..	..	..	..	..	..
Vehicles	5	..	..	..	2	..	..	..	7
Receiving	44	15	3	4	..	2	..	..	68
Fraud and False Pretences	39	38	4	12	1	5	..	..	99
Arson	6	6	1	..	1	1	..	..	15
Malicious Damage .. .. .	..	1	..	2	..	..	..	..	3
Other Offences against Property	12	5	..	1	..	..	4	..	22
Total	577	498	81	95	53	23	6	2	1,335
III. FORGERY AND OFFENCES AGAINST THE CURRENCY.									
Forgery and Uttering Forged .. .. .	..	..	..	..	..	..	..	..	..
Instruments	19	23	5	19	3	2	4	..	75
Offences in relation to the Currency	16	1	..	1	3	..	..	..	15
Total	29	24	5	20	6	2	4	..	90
IV. OFFENCES AGAINST GOOD ORDER									
Total	2	2	1	1	1	3	..	..	10
V. OTHER MISCELLANEOUS.									
Conspiracy	7	6	..	2	..	..	..	..	15
Perjury and Subornation	1	6	..	..	1	..	..	..	8
Other Offences .. .. .	..	3	..	6	..	9	..	..	18
Total	8	15	..	8	1	9	..	..	41
Grand Total	804	642	142	172	90	55	23	4	1,932

(a) Year ended 30th June, 1939.

The number of convictions at superior courts and the rate per 10,000 of the population are given below for each of the years 1934 to 1938 :—

CONVICTIONS AT SUPERIOR COURTS.

State or Territory.	1934.	1935.	1936.	1937.	1938.
NUMBER.					
New South Wales(a) ..	862	766	623	695	804
Victoria.. ..	550	569	533	565	642
Queensland(a)	129	222	154	173	142
South Australia	206	172	171	183	172
Western Australia	81	55	52	103	90
Tasmania	55	54	47	42	55
Northern Territory	4	(a) 6	(a) 10	(a) 14	(a) 23
Australian Capital Territory .. ..	..	..	2	1	4
Total	1,887	1,844	1,592	1,776	1,932

PER 10,000 OF THE POPULATION.

New South Wales(a)	3.3	2.9	2.4	2.6	2.9
Victoria.. ..	3.0	3.1	2.9	3.0	3.4
Queensland(a)	1.3	2.3	1.6	1.7	1.4
South Australia	3.5	2.9	2.9	3.1	2.9
Western Australia	1.8	1.2	1.2	2.3	2.0
Tasmania	2.4	2.4	2.0	1.8	2.3
Northern Territory	8.1	(a) 11.8	(a) 19.4	(a) 24.2	(a) 39.3
Australian Capital Territory .. ..	..	..	2.0	1.0	3.6
Total	2.8	2.7	2.3	2.6	2.8

(a) Year ended 30th June following.

The rate of convictions has improved during recent years, the figure for 1936 being the lowest on record. Owing to the smallness of the population and the particular conditions prevailing there the rates for the Territories naturally show considerable variation.

2. **Habitual Offenders.**—Some account of the methods adopted in each State in connexion with habitual offenders is given in preceding issues of the Official Year Book (see No. 22, pp. 469-70).

3. **Capital Punishment.**—There were five executions in Australia during the period 1934 to 1938. Three took place in New South Wales (two in 1935-36 and one in 1937-38) and two in Victoria (both in 1936).

Under the Criminal Code Amendment Act of 1922 capital punishment was abolished in Queensland.

In the early days of the history of Australia the penalty of death was attached to a large number of offences, many of which at the present time would be dealt with in the lower or magistrates' court. With the growth of settlement, and the general amelioration in social and moral conditions, the list was, however, considerably curtailed, and the existing tendency is practically to restrict death sentences to cases of murder. It may be remarked in cases of rape, which is a capital offence in some of the Australian States,

the penalty has been but sparingly inflicted during the last few years. Juries are reputed to be loth to convict on this charge, owing to the uncertainty whether sentence of death will be pronounced.

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; while the average for the last ten years has fallen to one.

§ 3. Civil Courts.

1. Lower Courts.—The total number of plaints entered together with the amounts awarded to plaintiffs during 1938 are given in the table hereunder. Particulars for earlier years will be found in preceding issues of the Official Year Book.

CIVIL CASES AT LOWER COURTS, 1938.

State.	1938.	State or Territory.	1938.
New South Wales	{ Cases No. 68,940 Amount £ 368,106	Western Australia	{ Cases No. 27,674 Amount £ 166,512
Victoria ..	{ Cases No. 103,718 Amount £ 710,492	Tasmania ..	{ Cases No. 17,124 Amount £ 59,187
Queensland (a) ..	{ Cases No. 15,515 Amount £ 166,660	Australian Capital Territory ..	{ Cases No. 500 Amount £ 3,267
South Australia ..	{ Cases No. 25,250 Amount £ 156,350	Total ..	{ Cases No. 258,721 Amount £ 1,630,574

(a) Year ended 30th June, 1939.

Particulars in regard to the amount of judgments involved in the 543 civil cases in the Northern Territory during the year ended 30th June, 1939, are not available.

The figures just given represent the returns from the Small Debts Courts in New South Wales, the Petty Sessions Courts in Victoria, the Petty Debts Courts in Queensland, the Local Courts of South Australia and Western Australia, the Courts of Requests in Tasmania, and the Court of Petty Sessions in the Australian Capital Territory.

2. Superior Courts.—In the next table will be found the transactions on the civil side in the Superior Courts during the year 1938. The particulars given below include the number and amount of judgments entered by default or consent, and differ from those in issues of the Official Year Book prior to No. 29 which related in most States only to cases actually tried during the year.

The New South Wales returns refer to judgments in the District Courts only, and are exclusive of 2,039 judgments signed in the Supreme Court, for which the amount is not available.

CIVIL CASES AT SUPERIOR COURTS, 1938.

State.	1938.	State or Territory.	1938.
New South Wales	{ Causes No. 6,931 Amount £ 334,169	Western Australia	{ Causes No. 136 Amount £ 142,250
Victoria ..	{ Causes No. 3,366 Amount £ 216,265	(b) Tasmania ..	{ Causes No. 273 Amount £ 23,784
Queensland (a) ..	{ Causes No. 451 Amount £ 83,338	Australian Capital Territory ..	{ Causes No. 4 Amount £ 745
South Australia ..	{ Causes No. 343 Amount £ 32,457	Total ..	{ Causes No. 11,504 Amount £ 833,008

(a) Year ended 30th June, 1939.

(b) Judgments signed and entered.

3. Divorces and Judicial Separations.—The following table shows the number of petitions for divorce filed in each State during 1938, and the number of divorces granted:—

PETITIONS FOR DIVORCE AND DIVORCES GRANTED, 1938.

State.	Petitions for Divorce.			Divorces Granted.
	By Husband.	By Wife.	Total.	
New South Wales	1,112	1,224	2,336	1,431
Victoria	399	547	946	827
Queensland (a)	147	155	302	201
South Australia	127	175	302	243
Western Australia	130	195	325	255
Tasmania	57	55	112	109
Northern Territory (a)	3	1	4	4
Australian Capital Territory	3	4	7	4
Total	1,978	2,356	4,334	3,074

(a) Year ended 30th June, 1939.

The grounds on which divorces and judicial separations were granted during 1938 in each State are given in the following table:—

GROUND ON WHICH DIVORCES AND JUDICIAL SEPARATIONS WERE GRANTED, 1938.

Grounds on which Granted.	N.S.W.		Vic.		Qld.(a)		S.A.		W.A.		Tas.		N.T.(a)		A.C.T.		Aust.	
	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
Adultery	311	3	182	3	100	..	138	..	111	..	26	..	2	..	..	..	870	9
Bigamy	7	..	6	..	..	..	..	..	..	..	..	..	..	..	..	..	13	..
Cruelty	5	3	1	..	..	..	12	1	..	..	..	..	..	..	..	..	18	4
Cruelty and Drunkenness	10	1	7	..	..	..	..	..	2	..	..	..	..	..	..	..	19	1
Drunkenness	16	1	6	..	..	..	7	..	..	..	..	..	..	..	..	..	29	1
Desertion	1,079	1	613	..	95	..	73	..	138	..	82	..	2	..	4	..	2,086	1
Imprisonment for Crime	3	..	3	..	1	..	3	..	..	..	..	..	..	..	..	..	10	..
Insanity .. ..	..	..	7	..	5	..	8	..	3	..	1	..	..	..	..	..	18	..
Other .. ..	..	..	2	..	..	..	8	..	1	..	..	..	..	..	..	..	11	..
Total	1,431	9	827	3	201	..	243	1	255	..	109	..	4	..	4	..	3,074	13

(a) Year ended 30th June, 1939.

The number of divorces and judicial separations in each State during the period 1934 to 1938 is shown below. The figures refer in the case of divorces to decrees made absolute in each year and include decrees for nullity of marriage.

DIVORCES AND JUDICIAL SEPARATIONS.

State.	1934.		1935.		1936.		1937.		1938.	
	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.	Divorces.	Judicial Separations.
New South Wales	1,092	13	1,133	15	1,160	12	1,272	11	1,431	9
Victoria	621	..	602	6	689	1	797	3	827	3
Queensland (a)	153	1	152	..	162	2	210	..	201	..
South Australia	189	1	212	1	213	..	207	3	243	1
Western Australia	157	..	159	..	192	..	236	..	255	..
Tasmania	60	..	86	1	61	1	30	..	109	..
Northern Territory (a) .. ..	..	..	2	..	4	..	4	..	4	..
Australian Capital Territory	10	..	11	..	2	..	3	..	4	..
Total	2,282	15	2,357	23	2,483	16	2,759	17	3,074	13

(a) Year ended 30th June following.

The average annual number of divorces and judicial separations in Australia at decennial periods from 1871 to 1930 and the proportion per 10,000 existing marriages were as follows:—

DIVORCES AND JUDICIAL SEPARATIONS: AUSTRALIA.

	1871-80.	1881-90.	1891-1900.	1901-10.	1911-20.	1921-30.
Averages	29	70	358	401	707	1,699
Per 10,000 existing marriages .. .	0.98	1.74	6.86	6.15	8.13	15.45

The rapid increase of divorce during the period 1891-1900 occurred largely in New South Wales and Victoria where legislation passed respectively in 1892 and 1889 made the separation of the marriage tie comparatively easy.

The following table shows the numbers and proportions of divorced males and females according to age in Australia at each Census from 1891 onwards. Prior to 1911 no record was made of divorced persons in South Australia, so that no definite comparisons can be made to extend beyond that date.

DIVORCED PERSONS: AGE DISTRIBUTION, AUSTRALIA, 1891 TO 1933.

Age last Birthday.	Number.					Proportion per 10,000 of the Sex.				
	1891. (a)	1901. (a)	1911.	1921.	1933.	1891. (a)	1901. (a)	1911.	1921.	1933.
MALES.										
Years—										
15-19 .. .. .	..	..	2	11	..	..	..	0	0	..
20-24	10	21	27	55	73	..	1	1	2	3
25-29	37	77	137	321	501	2	5	7	14	18
30-34	60	167	286	580	1,100	4	11	17	26	44
35-39	68	262	321	661	1,575	7	17	21	34	69
40-44	41	233	361	592	1,777	5	19	25	35	77
45-49	34	154	407	533	1,614	5	17	30	37	77
50-54	27	131	338	498	1,256	4	19	31	37	73
55-59	28	76	204	425	877	6	14	28	36	66
60-64	16	55	134	281	611	4	12	26	31	53
65-69	5	33	76	155	477	2	9	19	28	51
70-74	5	14	43	86	270	3	5	14	26	41
75-79	1	7	12	27	122	1	5	6	14	34
80-84 .. .. .	..	3	14	7	35	..	5	16	7	25
85 and over ..	..	1	6	1	10	..	5	17	2	17
Age 15 and over	332	1,234	2,368	4,233	10,298	3	10	15	23	42
FEMALES.										
Years—										
15-19	2	2	1	8	6	0	0	0	0	0
20-24	16	56	71	168	230	1	3	3	7	8
25-29	60	168	239	526	960	4	11	13	22	37
30-34	49	244	332	756	1,565	5	18	21	34	66
35-39	40	287	374	713	1,939	5	24	26	37	82
40-44	26	178	366	621	1,880	4	19	29	38	81
45-49	19	107	319	496	1,598	4	16	29	37	80
50-54	10	52	229	405	1,066	2	10	27	34	65
55-59	4	28	79	280	662	1	6	14	28	51
60-64	1	11	59	217	485	..	3	13	28	42
65-69 .. .. .	..	10	38	70	287	..	3	10	14	32
70-74	1	5	14	25	136	1	3	5	8	21
75-79 .. .. .	..	..	16	14	58	..	..	10	7	16
80-84 .. .. .	..	1	2	2	12	..	2	3	2	8
85 and over ..	..	..	1	3	4	..	..	3	5	5
Age 15 and over	228	1,149	2,140	4,304	10,888	3	10	15	24	46

(a) Exclusive of South Australia.

4. Probates.—Information in regard to probates and letters of administration will be found in Chapter XXV. "Private Finance."

5. Bankruptcies.—Particulars relating to bankruptcy in each State up to the end of the year 1927 were incorporated under this heading in preceding issues of the Official Year Book. Under the terms of the Bankruptcy Act 1924-1933 jurisdiction in bankruptcy and insolvency was taken over by the Commonwealth from 1st August, 1928. The Act makes provision for the declaration of districts, and each State (except Queensland) has been declared a bankruptcy district. The bankruptcy district of New South Wales includes the Australian Capital Territory, while Queensland has been divided into three districts corresponding to the three Supreme Court districts in that State. The Northern Territory was also declared a separate bankruptcy district. Operations under the Act for the year ended 31st July, 1939, are given in the following table. For the purposes of comparison, figures for each of the preceding two years have been appended to the table.

COMMONWEALTH BANKRUPTCY ACT RETURNS, 1938-39.

Heading.		N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia
Sequestration Orders and Orders for Administration of Deceased Debtors' Estates	Number ..	295	295	94	160	44	51	1	940
	Liabilities £	306,200	211,630	117,200	270,593	61,326	25,975	2,030	994,954
	Assets £	127,713	64,087	87,392	157,035	30,624	5,620	908	473,379
Compositions, etc., after Bankruptcy	Number ..	8	..	..	..	..	2	..	10
	Liabilities £	5,915	..	..	..	..	1,038	..	6,953
	Assets £	3,263	..	..	..	..	324	..	3,587
Compositions, etc., without Bankruptcy	Number ..	4	7	1	460	71	3	..	546
	Liabilities £	1,402	11,747	554	1,742,717	129,216	2,511	..	1,888,147
	Assets £	758	13,063	200	1,169,708	104,326	1,948	..	1,290,003
Deeds of Arrangement ..	Number ..	217	120	48	2	2	5	..	403
	Liabilities £	377,529	206,235	102,838	2,783	3,069	9,903	..	702,357
	Assets £	318,932	133,329	61,676	1,284	1,693	11,434	..	528,348
Total, 1938-39	Number ..	524	431	143	622	117	61	1	1,809
	Liabilities £	691,046	429,612	220,592	2,016,093	193,611	39,427	2,030	3,592,411
	Assets £	450,666	210,479	149,268	1,328,027	136,643	19,326	908	2,295,317
Total, 1937-38	Number ..	465	387	136	463	108	54	..	1,613
	Liabilities £	552,260	464,095	195,100	1,508,490	202,195	31,878	..	2,954,018
	Assets £	335,272	196,640	149,100	1,096,978	153,815	17,954	..	1,949,759
Total, 1936-37	Number ..	472	344	207	480	106	62	2	1,673
	Liabilities £	671,666	446,865	323,255	1,632,519	237,956	55,382	4,658	3,372,301
	Assets £	471,781	141,404	222,767	1,152,099	177,490	34,600	3,975	2,204,116

The Commonwealth Attorney-General's Report for the year ended 31st July, 1929, states that comparative tables have not been prepared in relation to State bankruptcy or insolvency for previous years, as the methods of collection and presentation do not afford a reliable common basis. It is also pointed out that the procedure in certain States has been largely influenced by the procedure in force prior to the passing of the Commonwealth Act, and that, therefore, no particular significance attaches to the large number of compositions, etc., in South Australia and Western Australia. The Bankruptcy Act 1930 created a Federal Court of Bankruptcy and gave power to appoint two Judges thereto. In 1930 a Federal Judge in Bankruptcy was

appointed to deal with bankruptcy work, in addition to the State Judges, in New South Wales and Victoria, the Courts in these States having been unable to cope with the business. All the bankruptcy cases in these States are now heard by the Federal Judge who sits in Sydney and Melbourne alternately.

6. **High Court of Australia.**—Under the provisions of Section 71 of the Commonwealth Constitution Act, the judicial power of the Commonwealth is vested in a Federal Supreme Court, called the High Court of Australia, and in such other courts as the Parliament creates or invests with federal jurisdiction. The Federal High Court possesses both original and appellate jurisdiction. The powers of the Court are defined in Chapter III. of the Constitution Act and in the Judiciary Act 1903-1937. At present the Court consists of a Chief Justice and five other judges. Sittings of the Court are held in the capitals of the various States as occasion may require. The High Court functions as a Court of Appeal for Australia. The following statement shows the transactions of the High Court for the years 1938 and 1939. Figures for previous years are given in preceding issues.

TRANSACTIONS OF COMMONWEALTH HIGH COURT, 1938 AND 1939.

Original Jurisdiction.	1938.	1939.	Appellate Jurisdiction.	1938.	1939.
	Number of writs issued	26		45	Number of appeals, set down for hearing..	101	110
Number of causes entered for trial ..	29	2	Number allowed ..	49	21
Verdicts for plaintiffs	15	9	Number dismissed ..	48	66
Verdicts for defendants	3	1	Otherwise disposed of	15	11
Otherwise disposed of	8	8			
Amount of judgments	£6,656	£37,481			

During the years 1938 and 1939 respectively the Court dealt also with the following : Appeals from Assessments under Taxation Assessment Act, 24, 57; Special cases stated for the opinion of the Full Court, 8, 10; Applications for Prohibitions, etc., 9, 54. The fees collected amounted to £711 in 1938 and £777 in 1939.

7. **Commonwealth Court of Conciliation and Arbitration.**—A more or less detailed statement regarding the operation of this Court, which was established under the provisions of the Commonwealth Conciliation and Arbitration Act of 1904-1934, will be found in the Chapter dealing with Labour, Wages, etc.

§ 4. Police and Prisons.

1. **General.**—In early issues of the Official Year Book (see No. 4, p. 918) a résumé was given of the evolution of the police force in Australia up to the passing of the Police Act of 1862 (25 Vic. No 16) in New South Wales.

2. **Strength of Police Force.**—(i) *General.* The strength of the police force in each State during the five years ended 1938 is given in the table hereunder. It may be mentioned that the police forces (with the exception of the small body of Commonwealth police maintained in the Northern Territory and at the Australian Capital) are entirely under State control, but, by arrangement, the Commonwealth Government utilizes their services in various directions, such as the collection of particulars for Commonwealth electoral rolls, etc.

STRENGTH OF POLICE FORCES.

State or Territory.	Area of State in Sq. Miles.	1934.	1935.	1936.	1937.	1938.
New South Wales..	309,432	3,600	3,593	3,726	3,816	3,801
Victoria	87,884	2,170	2,247	2,289	2,280	2,279
Queensland (a) ..	670,500	1,320	1,325	1,363	1,390	1,395
South Australia (a)	380,070	766	817	837	882	894
Western Australia (a)	975,920	583	592	585	582	601
Tasmania (a) ..	26,215	281	284	282	283	284
Northern Territory (a)	523,620	41	41	41	43	43
Aust. Cap. Territory	940	14	14	15	15	17
Total ..	2,974,581	8,775	8,913	9,138	9,291	9,314

(a) 30th June of year following.

The figures for New South Wales for 1938 are exclusive of 12 "black trackers", (i.e., natives employed in detection of offenders chiefly in outlying districts) and 4 matrons, while the Victorian returns are exclusive of 3 matrons and 1 black tracker. For Queensland the figures exclude 38 black trackers, for South Australia 3 wardresses and 3 black trackers, and for the Northern Territory 37 black trackers. There are also 38 black trackers and 4 female searchers in Western Australia not included in the table. According to the returns, women police are employed in all the States, the respective numbers included in the table above being:—New South Wales 8, Victoria 8, Queensland 2, South Australia 14, Western Australia 4, and Tasmania 1. Their work is mainly preventive, and the importance and usefulness of their duties have been referred to in very high terms by the Chief Officers of Police. In his Report for the year 1938 the Inspector-General of Police in New South Wales refers to the valuable assistance rendered by the women police to detectives and the ordinary police in connexion with crimes against women and children, and to the protection given to lost children at large public carnivals. They also carry out escort duties in respect of female prisoners. The experience in other States has been of a similar nature.

(ii) *Proportion to Population.*—The average number of inhabitants in the various States to each police officer during the same period is shown in the following table. In considering these figures allowance must, of course, be made for the unequal area and unequal distribution of the population of the various States.

POLICE FORCES IN RELATION TO POPULATION.

State or Territory.	Number of Persons per Sq. Mile, 1933 Census.	Inhabitants to each Police Officer.				
		1934.	1935.	1936.	1937.	1938.
New South Wales	8.41	732	740	720	710	720
Victoria	20.71	847	820	809	816	822
Queensland (a)	1.41	733	740	728	722	729
South Australia (a) ..	1.53	763	718	703	672	666
Western Australia (a) ..	0.45	764	756	777	791	774
Tasmania (a)	8.68	814	809	825	827	833
Northern Territory (a) ..	0.01	125	130	133	134	144
Aust. Cap. Territory ..	9.52	707	666	652	683	674
Total ..	2.23	764	758	745	740	744

(a) 30th June of year following.

3. **Duties of the Police.**—In addition to the ordinary employment attaching to their office, the police are called upon to perform many duties which in other countries are carried out by various functionaries. Thus, in New South Wales, it has been estimated that one-fifth of the time of the force was taken up in extraneous duties unconnected with the protection of life and property, while the cash value of the services rendered to other Government departments was stated as over £200,000 per annum. The Queensland Commissioner refers to the circumstance that in 1938-39 no less than 54 important subsidiary offices were held by the police. In South Australia, the Commissioner alludes to the large number of subsidiary duties performed by police officers, and mentions that for the year ended June, 1939, over 250,000 inquiries were made on behalf of other departments. While these special tasks doubtless involve some degree of sacrifice of ordinary routine duties, the fact that the general intelligence of the police is adequate for their performance, besides being most creditable, results in a large saving of the public money.

4. **Interstate Police Conferences.**—In February, 1921, a Conference of the chief officers of the police forces of the various States was held in Melbourne. In addition to the discussion of matters of common interest, arrangements were made for the interchange of detectives. The results were so satisfactory that it was decided to hold similar Conferences annually. Amongst other matters discussed at the Hobart Conference in 1927, particular attention was given to the subject of traffic regulation in view of the large and increasing number of motor vehicles. Conferences were held at Melbourne in 1928, and at Perth in 1929, but owing to the need for economy no further meetings have been held.

5. **Prison Accommodation and Prisoners, 1938.**—The table below shows the number of prisons in each State, the accommodation therein, and the number of prisoners in confinement at the end of 1938:—

PRISON ACCOMMODATION AND PRISONERS, 1938.

State or Territory.	Number of Prisons.	Accommodation in—		Prisoners at End of Year.
		Separate Cells.	Wards.	
New South Wales (a)	22	(b) 2,311	..	1,364
Victoria	12	1,316	446	1,084
Queensland	6	544	94	265
South Australia	15	754	173	235
Western Australia	19	607	506	294
Tasmania (a)	1	142	4	116
Northern Territory	3	14	90	17
Total	78	5,688	1,313	3,375

(a) Year ended 30th June following.

(b) Total accommodation.

The figures refer to prisoners under sentence and are exclusive of aborigines. There are no gaols in the Australian Capital Territory, but there are lock-ups attached to the police stations at Canberra and Jervis Bay, where offenders are held while awaiting trial, and sentences not exceeding one week imposed by a magistrate may be served.

6. **Prisoners in Gaol, 1934 to 1938.**—The number of prisoners in gaol at the 31st December in each of the years 1934 to 1938 and the proportion per 10,000 of the population are given in the following table. The figures refer to prisoners under sentence and are exclusive of aborigines.

PRISONERS IN GAOL.

State or Territory.	1934.	1935.	1936.	1937.	1938.
NUMBER.					
New South Wales (a) ..	1,398	1,330	1,183	1,176	1,364
Victoria.. ..	1,225	1,159	1,092	1,030	1,084
Queensland	339	301	272	276	265
South Australia	294	260	242	231	235
Western Australia	249	264	264	260	294
Tasmania (a)	100	104	114	87	116
Northern Territory	19	19	18	18	17
Total	3,624	3,437	3,185	3,078	3,375

PER 10,000 OF THE POPULATION.

New South Wales (a) ..	5.3	5.0	4.4	4.3	5.0
Victoria.. ..	6.7	6.3	5.9	5.5	5.8
Queensland	3.5	3.1	2.8	2.8	2.6
South Australia	5.0	4.4	4.1	3.9	3.9
Western Australia	5.6	5.9	5.9	5.7	6.4
Tasmania (a)	4.3	4.5	4.9	3.6	4.9
Total	5.4	5.1	4.7	4.5	4.9

(a) 30th June of year following.

After remaining stationary at 6.5 per 10,000 for the four years ended 1932 the proportion of prisoners in gaol to the total population declined to 4.9 in 1938, which figure contrasts most favourably with that obtaining in 1891 when the proportion was as high as 16 per 10,000. Rates for the Northern Territory have not been included on account of the abnormal conditions prevailing there.

7. Improvement in Prison Methods.—In previous issues of the Official Year Book a more or less detailed account was given of the improvements effected in each State during recent years in regard to methods of prison management (see Official Year Book No. 22, pp. 471-4), but this information is not repeated in the present volume.

§ 5. Cost of Administration of Justice.

1. Expenditure by the States.—The table below shows the expenditure from Consolidated Revenue during the year 1938-39 in connexion with the administration of justice in each of the States.

It is difficult to obtain comparable figures of the total costs of the various services under this heading, and net costs have been substituted for gross expenditure in this issue of the Official Year Book. It will be noted that in the States of South Australia and Western Australia the receipts for legal fees and registrations exceed the actual expenditure under "Justice".

NET EXPENDITURE ON JUSTICE IN EACH STATE, 1938-39.

State.	Net Expenditure.			Per Head of Population.		
	Justice.	Police.	Prisons.	Justice.	Police.	Prisons.
	£	£	£	s. d.	s. d.	s. d.
New South Wales ..	178,941	1,445,819	199,625	1 4	10 7	1 6
Victoria ..	104,903	796,626	103,202	1 1	8 6	1 1
Queensland ..	66,095	580,581	35,144	1 4	11 6	0 8
South Australia ..	-27,876	306,387	36,171	-0 11	10 4	1 3
Western Australia ..	-28,062	251,311	28,466	-1 3	10 10	1 3
Tasmania ..	22,780	118,478	15,071	1 11	10 0	1 3
Total ..	315,881	3,499,202	417,679	0 11	10 1	1 2

2. Commonwealth Expenditure.—The expenditure shown in the foregoing table is that incurred by the State Governments only, and does not include expenditure in connexion with the Commonwealth Attorney-General's Department, which is given hereunder for the period 1935-36 to 1938-39:—

EXPENDITURE OF THE COMMONWEALTH ATTORNEY-GENERAL'S DEPARTMENT.

Year.	Gross Expenditure.	Receipts.	Net Expenditure.
	£	£	£
1935-36	239,702	97,116	142,586
1936-37	252,158	102,613	149,545
1937-38	263,319	107,600	155,719
1938-39	281,497	111,036	170,461

The totals for each year include expenditure in connexion with patents and copyright which amounted in 1938-39 to £71,126. As pointed out previously, the Commonwealth took over jurisdiction in bankruptcy in August, 1928, and the expenditure thereon in 1938-39 amounted to £44,551, including the salary of the Federal Judge, £2,500. Expenditure in connexion with the Australian Capital Territory police amounted in 1938-39 to £7,034, while £3,429 was expended on miscellaneous items including the Law Court, Titles Office and Industrial Arbitration Board. Revenue in connexion with the Attorney-General's Department amounted for the year to £111,036, comprising £67,914 for patents, copyright, trademarks and designs, £30,770 for bankruptcy and £12,352 miscellaneous including fees and fines.

In addition to the foregoing a sum of approximately £32,000 was expended in the Northern Territory by the Department of the Interior on the administration of justice including the costs of the police force and prisons.

CHAPTER VIII.

PUBLIC BENEVOLENCE.

§ 1. Introductory.

Charity and charitable effort in Australia may be classified under three headings: (a) State; (b) public; and (c) private. To the first belong all institutions wholly provided for by the State, such as the principal hospitals for the insane in the various States, the Government and leased hospitals in Western Australia, and the Government asylums for the infirm in New South Wales. The other classes comprise public institutions of two kinds, viz. :—(i) those partially subsidized by the State or State endowed, but receiving also private aid, and (ii) those wholly dependent upon private aid. To the former division belong such institutions as the principal metropolitan hospitals. In the latter are included institutions established and endowed by individuals for the benefit of the needy generally. All charitable movements 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 regard to (c) complete tabulation is, for obvious reasons, impossible. Owing to differences in the method and date of collection and tabulation it is impossible to bring statistics of charitable institutions to a common year. In general, there is considerable want of harmony in the statistical information available for the different States.

No poor-rate is levied in Australia. Reference to old-age pensions, invalid pensions and maternity allowances, which are provided by the Commonwealth Government, will be found in the Chapter XXVI. "Public Finance".

From time to time relief funds have been organized for famine-stricken countries in various parts of the world, or for places where plagues, flood, fire, or earthquake have shown the need of urgent relief. Special funds were also raised for persons disabled or bereaved through war. Complete statistical information in regard to these forms of charity is not, however, available. It may be mentioned that the daily Press frequently accepts the duty of collectorship in charity appeals. In regard to subscriptions to the various patriotic funds which were instituted in consequence of the war of 1914-1919, the total for Australia was estimated to exceed £12,500,000.

§ 2. The Larger Charities of Australia.

1. *Public Hospitals (other than Hospitals for the Insane).*—(i) *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 hospitals for infectious diseases, consumptives, women, children, incurables, etc.

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 the hospitals for the insane and private hospitals conducted commercially. It is considered that the extension of the scope of these statistics to embrace both general and special institutions will afford a better comparison as between the various States than the statistics previously issued relating to general hospitals only. The particulars for New South Wales in the following tables relate to hospitals operating under the Public Hospitals Act, 1929-1937.

(ii) *Principal Hospitals in each State.* In earlier issues of the Official Year Book (see No. 22, pp. 481-2) particulars respecting staff, accommodation, etc., of each of the principal hospitals were given.

(iii) *Number, Staff and Accommodation, 1938.* Details regarding the number of hospitals, staffs and accommodation for the year 1938, or nearest available year, are given in the appended table:—

PUBLIC HOSPITALS : NUMBER, STAFF AND ACCOMMODATION, 1938.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of Hospitals ..	208	71	118	54	92	20	563
Medical Staff—							
Honorary	1,684	880	203	253	142	94	3,256
Salaried	287	218	175	58	27	38	803
Total	1,971	1,098	378	(b) 311	169	132	4,059
Nursing Staff	5,346	2,849	2,803	(b) 1,075	1,167	342	13,582
Accommodation—							
Number of beds and cots	14,246	7,626	6,337	(b) 2,510	3,339	1,653	35,711

(a) The figures relate to the years ended as follows:—New South Wales, Queensland, Western Australia and Tasmania—30th June, 1939; South Australia—31st December, 1938; Victoria—30th June, 1938.

(b) Exclusive of particulars of Lying-in Homes, Sanatoria and Convalescent Homes.

The figures for accommodation shown in the table above include, where available, a considerable number of beds and cots for certain classes of cases in out-door or verandah sleeping places.

(iv) *Patients Treated.* The table hereunder furnishes particulars respecting patients treated.

PUBLIC HOSPITALS : PATIENTS TREATED, 1938.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Indoor Relief—Inmates at beginning of year—							
Males	5,208	2,511	2,286	786	880	588	12,259
Females	5,585	2,817	1,987	800	973	575	12,737
Total	10,793	5,328	4,273	1,586	1,853	1,163	24,996
Admissions and Re-admissions during year—							
Males	109,691	37,091	53,944	17,040	23,480	8,411	249,657
Females	124,451	48,489	52,772	19,454	20,746	11,486	277,398
Total	234,142	85,580	106,716	36,494	44,226	19,897	527,055
Discharges—							
Males	103,509	34,075	51,303	15,885	22,244	8,028	235,044
Females	120,002	46,469	51,128	18,618	20,125	11,086	267,428
Total	223,511	80,544	102,431	34,503	42,369	19,114	502,472
Deaths—							
Males	5,899	2,869	2,533	1,059	1,170	476	14,036
Females	4,106	1,967	1,500	774	596	393	9,336
Total	10,005	4,836	4,033	1,863	1,766	869	23,372
Inmates at end of year—							
Males	5,491	2,658	2,394	850	946	495	12,834
Females	5,928	2,870	2,131	364	998	582	13,373
Total	11,419	5,528	4,525	1,214	1,944	1,077	26,207
Average Daily Number Resident	10,866	5,530	4,356	(c) 1,376	1,021	1,140	25,608

(a) See footnote (a) to previous table. (b) Not available. (c) See footnote (b) to previous table.

(v) *Revenue and Expenditure.* The revenue and expenditure for the year 1938 were as follows :—

PUBLIC HOSPITALS : REVENUE AND EXPENDITURE, 1938.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Revenue—	£	£	£	£	£	£	£
Government Aid ..	61,307,625	(c) 494,467	641,849	257,167	331,200	95,627	3,127,935
Municipal Aid ..	..	80,296	258,307	50,405	948	..	389,956
Public Subscriptions, Legacies, etc. ..	(d) 620,760	293,391	33,801	26,606	74,153	9,545	1,058,256
Fees ..	578,343	256,788	317,596	113,274	146,352	72,439	1,481,792
Other ..	(e) 474,493	253,779	254,876	10,928	37,126	14,501	1,045,703
Total ..	2,981,221	1,378,721	1,506,429	458,380	589,779	192,112	7,106,642
Expenditure—							
Salaries and Wages	1,196,490	506,157	524,516	201,960	252,939	99,669	2,781,731
Upkeep and Repair of Buildings and Grounds	91,100	13,647	20,012	26,119	4,585	7,538	163,091
All Other Ordinary Capital(f) ..	995,074	523,119	590,434	206,217	194,396	80,832	2,590,072
	(g)	337,232	301,997	35,332	112,500	..	817,061
Total ..	2,282,754	1,380,155	1,436,959	469,628	594,420	188,039	6,351,055

(a) See note (a) to table on page 213. (b) Includes State aid for buildings, £277,851.
 (c) Includes loan receipts, £169,275. (d) Includes legacies and bequests for capital purposes, £93,103.
 (e) Includes loans raised under Section 37 of the Public Hospitals Act, £304,070. (f) Includes such items as Purchases of Land, Cost of New Buildings and Additions to Buildings. (g) Not available.

(vi) *Summary for Five Years, 1934 to 1938.* Returns for the last five years of the number of hospitals in Australia, beds, admissions, indoor patients treated, deaths and expenditure are given in the following table. The figures relate to both general and special hospitals. It should be noted that the statistics for the States cannot be brought to a common year, and consequently the following particulars relate to a combination of calendar and financial years.

PUBLIC HOSPITALS : AUSTRALIA.

Particulars.	1934.	1935.	1936.	1937.	1938.
Number of institutions ..	526	526	557	560	563
Number of beds ..	31,190	31,727	33,377	34,541	35,711
Admissions during year ..	422,896	451,761	481,727	511,648	527,055
Total indoor cases treated ..	443,061	472,804	504,521	535,342	552,051
Deaths ..	19,705	20,805	21,601	22,162	23,372
Expenditure ..	£ 4,222,174	4,608,878	5,134,247	5,965,484	6,351,955

In addition to those admitted to the institutions, there are large numbers of out-patients. So far as the returns show there were 605,700 out-patients treated in New South Wales, 241,067 in Victoria, 258,450 in Queensland, 58,065 in South Australia, and 16,623 in Tasmania during the last year.

2. *Benevolent and Destitute Asylums.*—(i) *General.* The public provision for the care of indigent old people has been a feature of the social development of recent years in most countries. Numerous establishments exist in Australia for the housing and protection of persons no longer able to provide for themselves. These institutions are supported by Government and municipal aid, public subscriptions, bequests, etc.; while in many cases relatives of poor and afflicted persons contribute to their maintenance.

An entirely satisfactory statistical tabulation in regard to all forms of charitable aid is especially difficult in the case of benevolent institutions, because the services provided by these institutions are not always identical. For example, in Western Australia, the Home for Destitute Women includes a maternity ward, for which statistics are not kept separately. Since the chief function of the institution is to help the destitute, it has been included amongst benevolent asylums. In Victoria, although several of the hospitals were formerly also benevolent asylums, a separation was effected and asylum patients were transferred to appropriate institutions.

(ii) *Principal Institutions.* Particulars respecting the accommodation and the numbers of inmates of the principal institutions were published in earlier issues of the Official Year Book (See No. 22, p. 485).

(iii) *Revenue and Expenditure.* Details regarding revenue and expenditure for the year 1938 are given in the following table:—

BENEVOLENT ASYLUMS : REVENUE AND EXPENDITURE, 1938.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Revenue—							
Government Aid ..	101,554	44,789	37,182	16,993	9,927	18,281	228,726
Municipal Aid ..	..	781	..	..	5	..	786
Public Subs., Legacies	20,032	18,961	7,722	..	693	..	47,408
Fees	54,385	47,266	39,449	6,479	18,577	6,102	172,258
Other	5,922	13,825	27,564	1,936	435	1,288	50,970
Total	181,893	125,622	111,917	25,408	29,637	25,671	500,148
Expenditure—							
Salaries and Wages ..	83,935	39,485	27,005	7,743	14,879	12,345	185,392
Upkeep and Repair of Buildings ..	887	3,195	2,273	1,398	592	738	9,083
All Other(b)	90,005	81,998	86,072	16,267	14,272	12,588	301,202
Total	174,827	124,678	115,350	25,408	29,743	25,671	495,677

(a) The figures relate to the years ended as follows:—New South Wales and South Australia—31st December, 1938; Victoria—30th June, 1938; and Queensland, Western Australia and Tasmania—30th June, 1939. (b) Including £23,367 in Victoria, £31,433 in Queensland, £4,747 in South Australia, and £274 in Western Australia, covering such items as Purchases of Land, Cost of New Buildings and Additions to Buildings.

3. *Orphanages, Industrial Schools, etc.*—(i) *General.* The methods of caring for orphans and neglected children differ extensively, inasmuch as some of the children are more or less segregated 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 inspections. Apart from the amounts shown in (iii) below the gross expenditure on orphanages, etc., in 1938 was approximately £400,000.

(ii) *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).

(iii) *Transactions of State Departments.* The following table summarizes the transactions during 1938 of State Departments 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, 1938.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
<i>A. Children maintained or subsidized by the State.</i>							
In State shelters, industrial schools, reformatories, etc.(b)	1,012	529	964	229	40	220	2,994
In licensed or approved institutions .. ..	..	1,482	..	..	594	..	2,076
Boarded-out—							
With own mothers ..	9,787	8,118	5,168	} 47,257 (c)	} 2,650 267	} 43,170	41,964
With licensed foster mothers, guardians, relatives and friends	3,120	1,916	511				
Total children maintained or subsidized by the State	13,919	12,045	6,643	7,486	3,551	3,390	47,034
<i>B. Children not maintained or subsidized by the State.</i>							
In licensed or approved institutions	1,012	..	..	..	..	..	1,012
Boarded-out	195	..	..	1,221	464	..	1,880
On probation (from Institutions or Children's Courts)	1,728	1,478	108	210	410	..	3,934
In service or apprenticed	207	356	421	169	149	..	1,302
Adopted or otherwise placed	316	..	1	22	..	..	339
Total children not maintained or subsidized by the State	3,458	1,834	530	1,622	1,023	..	8,467
Total children under State control or supervision..	17,377	13,879	7,173	9,108	4,574	3,390	55,501
Gross cost of children's relief	£ 478,471	£ 326,280	£ 194,724	£ 46,998	£ 26,828	£ 14,411	£ 1,087,712
Receipts from parents' contributions, etc. ..	20,838	10,633	8,770	4,038	8,506	828	54,213
Net cost to State..	457,633	315,647	185,954	42,360	18,322	13,583	1,033,499

(a) The figures relate to the years ended as follows:—Victoria and Queensland—31st December, 1938; Other States—30th June, 1939. (b) Including inmates of hospitals. (c) Including 6,335 children in receipt of Ration Relief. (d) Mostly with own mothers. (e) In addition there were 251 children at Fairbridge Farm School and 107 at Tardun Agricultural School.

The total expenditure on children's relief in the previous 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 amounts for allowances made in respect of the dependent children only.

4. **Leper Hospitals.**—Isolation hospitals for the care and treatment of lepers 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 (Channel Island, near Darwin). At the end of 1939 there were 9 cases in residence at Little Bay, 101 in Queensland, 168 at Derby, and 110 at Channel Island. There were also 5 cases isolated in the south of Western Australia and 1 case in Victoria, which were European cases infected elsewhere. Of these 394 cases, 343 were aboriginals, 3 Asiatics and 48 Europeans.

5. **Hospitals for the Insane.**—(i) *General.* The methods of compiling statistics of insanity are fairly uniform throughout the States, but comparisons are of doubtful validity, because of an element of uncertainty as to possible differences in diagnosis in the early stages of the disease.

(ii) *Hospitals, Staff, etc., 1938.* Particulars regarding the number of institutions, the medical and nursing staffs, and accommodation are given in the appended table for the year 1938 :—

HOSPITALS FOR THE INSANE : NUMBER, STAFFS, ACCOMMODATION, 1938.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of Institutions ..	13	(b) 11	4	2	4	1	35
Medical Staff—							
Males	29	34	7	7	4	2	83
Females	7	..	1	..	..	1	9
Total	36	34	8	7	4	3	92
Nursing Staff and Attendants—							
Males	1,060	764	304	142	137	82	2,489
Females	1,067	793	250	134	105	79	2,433
Total	2,127	1,562	554	276	242	161	4,922
Accommodation—							
Number of beds and cots	11,477	6,456	3,572	1,888	1,456	805	25,654

(a) The figures relate to years ended as follows :—New South Wales, Queensland and Tasmania—30th June, 1939; other States—31st December, 1938. (b) Includes two licensed private houses, in which cases at the end of the year numbered 61; other particulars are not available.

(iii) *Patients, 1938.* Information regarding patients treated, deaths, etc., for the year 1938 is given in the table hereunder :—

HOSPITALS FOR THE INSANE : PATIENTS, DEATHS, ETC., 1938.(a)

Particulars.	N.S.W.	Vic. (b)	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of distinct persons treated during year(c)—							
Males	6,841	3,891	2,408	1,036	1,031	392	15,599
Females	6,309	4,309	1,779	927	625	393	14,342
Total	13,150	8,200	4,187	1,963	1,656	785	29,941

(a) See footnote (a) to previous table. (b) Including 24 males and 61 females in licensed private houses. (c) Exclusive of transfers to other institutions.

HOSPITALS FOR THE INSANE : PATIENTS, DEATHS, ETC., 1938(a)—continued.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Number of patients on books at beginning of year—							
Males	5,974	3,452	2,062	905	942	310	13,645
Females	5,499	3,850	1,482	804	579	325	12,539
Total	11,473	7,302	3,544	1,709	1,521	635	26,184
Admissions and re-admissions exclusive of absconders retaken and transfers from other Institutions—							
Males	867	439	346	131	89	82	1,954
Females	810	459	297	123	46	68	1,803
Total	1,677	898	643	254	135	150	3,757
Discharges (including absconders not retaken)—							
Males	400	208	151	48	45	56	908
Females	372	250	128	51	40	51	892
Total	772	458	279	99	85	107	1,800
Deaths—							
Males	363	212	157	57	63	23	875
Females	337	204	101	60	31	24	757
Total	700	416	258	117	94	47	1,632
Number of patients on books at end of year—							
Males	6,078	3,471	2,100	931	923	313	13,816
Females	5,600	3,855	1,550	816	554	318	12,693
Total	11,678	7,326	3,650	1,747	1,477	631	26,509
Average daily number resident—							
Males	5,585	(b) 2,850	2,018	921	915	316	12,605
Females	5,066	(b) 3,275	1,441	812	540	324	11,458
Total	10,651	(b) 6,125	3,459	1,733	1,455	640	24,063
Number of patients on books at end of year per 1,000 of population—							
Males	4.39	3.75	3.95	3.13	3.79	2.60	3.94
Females	4.11	4.07	3.20	2.74	2.53	2.74	3.71
Total	4.25	3.91	3.59	2.94	3.19	2.67	3.82
Average number of patients resident in hospitals for insane per 1,000 of mean population—							
Males	4.05	3.09	3.83	3.11	3.77	2.63	3.61
Females	3.74	3.47	3.00	2.74	2.49	2.78	3.36
Total	3.90	3.28	3.46	2.92	3.16	2.70	3.49

(a) See footnote (a) to previous table.

(b) Exclusive of two licensed private houses.

In some States persons well advanced towards recovery are allowed to leave the institutions and reside with their relatives or friends, but they are under supervision and their names are kept in the records.

(iv) *Revenue and Expenditure, 1938.* The revenue of Government asylums is small in comparison with their cost, and consists chiefly of patients' fees. The proportion of expenditure borne by the State amounts to about 86 per cent.

HOSPITALS (GOVERNMENT) FOR THE INSANE : FINANCES, 1938.(a)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Revenue (Exclusive of Government Grants)—							
Fees of Patients	108,918	49,580	29,082	29,114	16,326	8,637	241,957
Other	9,403	6,129	2,105	897	2,172	154	20,860
Total	118,321	55,709	31,187	30,311	18,498	8,791	262,817
Expenditure—							
Salaries and Wages	518,645	287,824	165,748	68,815	67,169	42,239	1,150,440
Upkeep and Repair of Buildings and Grounds	4,797	41,472	4,216	9,536	1,985	999	63,005
All Other(b)	313,858	164,620	85,433	59,790	43,892	22,779	690,372
Total	837,300	493,916	255,397	138,141	113,046	66,017	1,903,817
Expenditure per Average Daily Resident	£78/12/3	£80/12/9	£73/16/9	£79/14/3	£77/13/11	£103/3/0	£79/2/4

(a) The figures relate to years ended as follows:—South Australia—31st December, 1938; other States—30th June, 1939. (b) Includes the following amounts for capital expenditure on Purchases of Land, Cost of New Buildings, and Additions to Buildings: New South Wales, £21,873; Queensland, £14,082; South Australia, £3,044; Western Australia, £5,032.

(v) *Summary for Australia, 1934 to 1938.* The table hereunder gives a summary of hospitals for the insane in Australia during each of the five years 1934 to 1938. The figures for the States cannot be brought to a common year; consequently the following particulars relate to a combination of calendar and financial years. Licensed houses are included in all particulars save revenue and expenditure for New South Wales and Victoria. The figures are exclusive of reception houses and observation wards in gaols. In New South Wales the expenditure includes cost of Broken Hill patients treated in South Australian hospitals:—

HOSPITALS FOR THE INSANE : SUMMARY, AUSTRALIA.

Particulars.	1934.	1935.	1936.	1937.	1938.
Number of institutions	36	35	34	36	35
" " beds	24,217	24,880	25,017	25,287	25,654
Admissions	3,651	3,819	3,565	3,678	3,757
Discharged as recovered, relieved, etc.	1,598	1,715	1,566	1,573	1,800
Deaths	1,467	1,577	1,533	1,488	1,632
Expenditure—Total	£ 1,527,021	1,659,523	1,771,406	1,867,170	1,903,817
" —Per Average Daily Resident	£68/5/8	£72/6/4	£75/15/9	£78/8/1	£79/2/4

(vi) *Number of Insane, 1934 to 1938.* The proportion of insane, as well as the total number returned as under treatment, shows a continuous increase during the period covered by the following table. 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 earlier stage, and an increase in the number of recorded cases, therefore, does not necessarily imply an actual increase in insanity.

INSANE PERSONS IN INSTITUTIONS.

State.	1934.	1935.	1936.	1937.	1938.
NUMBER.					
New South Wales	10,681	11,009	11,145	11,473	11,678
Victoria	6,927	7,059	7,209	7,302	7,326
Queensland	3,319	3,321	3,368	3,544	3,650
South Australia	1,519	1,572	1,627	1,709	1,747
Western Australia	1,355	1,441	1,488	1,521	1,477
Tasmania	631	636	647	635	631
Australia	24,432	25,038	25,484	26,184	26,509
PER 1,000 OF POPULATION.					
New South Wales	4.04	4.13	4.14	4.22	4.25
Victoria	3.77	3.83	3.89	3.93	3.91
Queensland	3.43	3.39	3.39	3.53	3.59
South Australia	2.60	2.68	2.76	2.89	2.94
Western Australia	3.06	3.22	3.30	3.33	3.19
Tasmania	2.76	2.77	2.78	2.71	2.67
Australia	3.64	3.71	3.74	3.82	3.82

The difference between States in the number of insane persons in institutions per 1,000 of population may be due to some extent to differences in classification.

(vii) *Causes of Insanity.* The general information available respecting the causes of the insanity of persons admitted to institutions is too unsatisfactory to be given in detail.

(viii) *Length of Residence in Hospital, 1938.* (a) *New South Wales and Victoria.* Particulars are not available regarding the average length of residence in hospitals of persons who died or were discharged during the year.

(b) *Queensland.* The average residence of those who died during the year was 9 years 43 days for males, and 8 years 163 days for females; of those discharged, 1 year 64 days for males, and 1 year 84 days for females.

(c) *South Australia.* The average residence of those who died during the year was 4 years 2 months 16 days for males, and 5 years 10 months 24 days for females; of those discharged, 1 year 2 months 11 days for males, and 11 months 1 day for females.

(d) *Western Australia.* The average residence of those who died was 10 years 7 months 7 days for males, and 9 years 10 months 20 days for females; of those discharged, 3 years 15 days for males, and 2 year 9 months and 4 days for females.

(e) *Tasmania.* The average residence of those who died during the year was 5 years 7 months and 8 days for males, and 11 years and 7 months for females; of those discharged, 2 years 9 months and 7 days for males, and 1 year 10 months and 24 days for females.

6. **Care of the Feeble-minded.**—An account of the treatment of the feeble-minded, supplied by the Public Health Department of Tasmania, appeared in Official Year Book No. 19, pp. 477-8.

7. **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, whilst others but rarely come near the stations. The native race is extinct in Tasmania. The expenditure from Consolidated Revenue in 1938-39 was: New South Wales, £76,454, Victoria, £7,471; Queensland £70,931; South Australia, £33,912; Western Australia, £40,842; Northern Territory £14,622; total for Australia, £244,232. According to the latest census taken by this Bureau, the numbers of full-blood and half-caste aborigines living in supervised camps in each State at 30th June, 1939, were as follows:—

ABORIGINES IN SUPERVISED CAMPS, 30th JUNE, 1939.

Particulars.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Northern Territory.	Total.
	No.	No.	No.	No.	No.	No.	No.
Full-bloods ..	516	47	8,140	406	4,068	5,972	19,149
Half-castes ..	4,410	360	3,285	951	2,203	714	(a)12,202

(a) Including 204 in Tasmania and 75 in the Australian Capital Territory.

Particulars regarding total numbers of aborigines in each State will be found in the Chapter dealing with Population.

8. **Royal Life Saving Society.**—In each of the State capitals, "centres" of the Royal Life Saving Society have been established, and in some States sub-centres have also been established in the larger provincial districts. In 1934 an Australian Federal Council of this Society was formed with headquarters at Melbourne, and each State centre or branch as it is now called is controlled by the new organization. Saving of life from drowning and other forms of asphyxiation is the object of the Society, and its immediate aims are (a) educative and (b) remedial. The encouragement of swimming and life-saving in schools, colleges, clubs, etc., will bring about a more widespread knowledge of these necessary matters, and there is increasing provision of life-belts, reels, lines, and other first-aid appliances on ocean beaches, wharves and other suitable places. Numerous certificates of proficiency in various grades are issued annually after examination throughout Australia, the numbers for the individual States for 1938-39 being:—New South Wales, 10,142; Victoria, 2,917; Queensland, 1,130; South Australia, 745; Western Australia, 1,723; Tasmania, 349; and Fiji, which comes under the control of the Australian Federal Council, 354.

9. **Royal Humane Society.**—The Royal Humane Society of Australasia has for its objects (a) to grant awards for skill, promptness and perseverance in life-saving, where the rescuer has risked his or her life; (b) to provide assistance in cases of danger and apparent death; (c) to restore the apparently drowned; (d) to collect and circulate the latest information regarding approved methods and apparatus for life-saving. Awards of medals and certificates are made numbering about 100 annually. Swimming is encouraged amongst school children, and awards are made for proficiency.

10. **Other Charitable Institutions.**—Owing to variety of name and function of other charitable institutions it has been found impracticable to give detailed results. 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 so particularized include asylums for the deaf, dumb and blind, infant homes, homes for the destitute and aged poor, industrial colonies, night shelters, crèches, homes of hope, rescue homes, free kindergarten and ragged schools, 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 fires and mining accident relief funds, etc.

11. **Total Expenditure on Charities.**—Issues of the Official Year Book, prior to No. 24, embodied statistics of expenditure on charities. The returns available, however, included a portion only of direct expenditure by Governments, and, in general, there is lack of harmony in the information available for the different States. Pending the result of further inquiry it has been decided to omit this table from the present chapter.

CHAPTER IX.

PUBLIC HYGIENE.

§ 1. Public Health Legislation and Administration.

Reference to the various public health authorities, Commonwealth and State, their functions, and the legislation administered, may be found in earlier issues of the Official Year Book (see No. 22, pp. 493-5).

§ 2. Inspection and Sale of Food and Drugs.

Legislation in force in all States provides for the inspection of food and drugs with the object of ensuring that all those goods which are 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. For further particulars in this connexion, and with respect also to the sale and custody of poisons, reference should be made to Official Year Book, No. 22. pp. 495-7.

§ 3. Supervision of Dairies, Milk Supply, Etc.

1. **General.**—In earlier issues (see No. 22, p. 498), allusion is made to the legislation in force in the various States to ensure the purity of the milk supply and of dairy produce generally.

2. **Number of Dairy Premises Registered.**—The following table shows, so far as the particulars are available, the number of dairy premises registered and the number of cows in milk thereon. In some States registration is compulsory within certain proclaimed areas only.

DAIRY PREMISES REGISTERED, AND COWS IN MILK THEREON, 1939.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.
Premises registered . .	20,956	25,192	29,450	13,117	357	8,305
Cows in milk thereon . .	691,105	543,202	779,714	104,887	10,401	(b)

(a) Premises within a district extending 25 miles north and 90 miles south of Perth only. (b) Not available.

§ 4. The 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 Commonwealth and State Health Authorities". This Council held sessions each year except 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 as to the expenditure of money specifically appropriated as money to be spent on the advice of this Council;

To advise the Commonwealth Government as to the expenditure of money upon medical research and as to 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 constitution of the Council consists of the Commonwealth Director-General of Health as Chairman, with 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 Australian Association of Physicians, and (jointly) the four 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 met at Hobart in February, 1937; the eighth session met at Canberra in May, 1940.

Under the Medical Research Endowment Act 1937, the Commonwealth Government has made an annual appropriation of £30,000 to provide assistance—

- (a) to Departments of the Commonwealth or of a State engaged in medical research ;
- (b) to Universities for the purpose of medical research ;
- (c) to institutions and persons engaged in medical research ;
- (d) in the training of persons in medical research.

Approved Research Institutions under this system now number 26. During the year 1939, grants numbered 60 in the following fields: bacteriology, biochemistry, clinical medicine, dentistry, epidemiology, experimental pathology, industrial hygiene, leprosy, obstetrics, ophthalmology, physiology and pharmacology, poliomyelitis, tropical physiology and hygiene, tuberculosis and virus diseases. In certain instances, equipment and apparatus have been made available by the Council: this has greatly facilitated some specialized lines of research.

The work that is being done under these grants is already yielding results; 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.

§ 5. The Commonwealth Department of Health.

1. **General.**—An Order-in Council dated 3rd March, 1921, defined various functions to be performed by the Commonwealth Department of Health in addition to Quarantine which is the only specific public health power of the Commonwealth Parliament under the Commonwealth Constitution. Many essential services have been developed by the Department to meet current needs and to further public health throughout the Commonwealth. In earlier issues of the Official Year Book reference has been made to several features of this development, including: The Royal Commission on National Health, 1925 (see No. 22, pp. 509-10), the International Pacific Health Conferences (see No. 22, p. 510 and No. 29, p. 334), Industrial Hygiene (see No. 18, pp. 522-55) Tropical Hygiene (see No. 22, pp. 506-7, No. 25, pp. 416-7, and No. 32, p. 226), and the Commonwealth Advisory Council on Nutrition (see No. 32, p. 222). Reference to Quarantine is made below (see § 6, par. 2.)

2. **The Commonwealth Serum Laboratories.**—The establishment for the preparation of Jennerian vaccine situated at Royal Park, near Melbourne, formerly known as the "Calf Lymph Depot" was in 1918 greatly enlarged by the Commonwealth. The remodelled institution is designated the "Commonwealth Serum Laboratories" and is administered by the Commonwealth Department of Health. The Laboratories are now installed in fully equipped buildings and a staff of 235 is employed. At Broadmeadows a farm of 254 acres has been developed, under veterinary supervision, for the many thousands of animals requisite to the work of the laboratories.

The list of biological preparations produced by the laboratories has been extended until at the present time almost the whole range of these products is manufactured and Australia is practically independent of other countries in thus producing its own requirements. Constant research is being conducted into every relevant aspect of bacteriology and immunology and new sera and prophylactic agents are being tested as the growth of medical knowledge opens up new avenues of treatment, prevention and diagnosis. Other original and applied research relating to all aspects of public health is maintained. The laboratories serve as the national centre for the maintenance in Australia of the international standards of the Permanent Commission on Biological Standards of the League of Nations.

For the past fifteen years the production of veterinary biological products has been a feature of the work of the laboratories. In recent years an extensive development has occurred in this direction and the products are being used in greatly increased amounts in all States for the prevention or treatment of diseases in domestic animals and stock.

3. The Commonwealth Health Laboratories.—The eleven Health Laboratories of the Department are situated at strategic points throughout Australia. They are located at Darwin, Cairns, Townsville, Rockhampton, Toowoomba, Lismore, Bendigo, Launceston, Port Pirie, Kalgoorlie and Broome. These laboratories were established as an essential part of the quarantine system but were also to undertake research into local health problems and to provide medical practitioners 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 hand, is essential to the efficient investigation of disease and the effective operation of control measures.

From this standpoint, the laboratories have already proved their value in the determination of Weil's disease and endemic typhus in North Queensland, in the investigation of special local problems at 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 hitherto 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 Sydney School of Public Health and Tropical Medicine.

A major part of the work performed at the Kalgoorlie Laboratory, since its establishment in 1925, has been the medical examination, on behalf of the State Department of Mines, of employees and applicants for employment in the metalliferous mines in that State. These examinations are performed in accordance with the provisions of the State Mines Regulation Act and the Mine Workers' Relief Act, the objects of which are to provide a healthy body of men for the industry and to free the industry of, and protect the future of, those found to be suffering from serious pulmonary disease. The examinations include clinical, laboratory and radiographic investigation. By means of a mobile X-ray unit an annual tour is also made of outlying mining centres.

In the fourteen years since the inception of this service over 30,000 men have been examined.

X-ray facilities are also provided at the Bendigo Laboratory as part of the campaign against tuberculosis, for the examination of miners and other radiographic work in the district.

4. The School of Public Health and Tropical Medicine.—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 as from 4th March, 1930, 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 work of the school comprises both teaching and investigation. Courses are held for the University post graduate diploma of public health and the diploma of tropical medicine and tropical hygiene. Lectures are given in public health and preventive medicine as prescribed for the fifth year of the medical curriculum. Other classes include students in architectural, social and school hygiene, and lay officers and nurses in the tropical services and missionaries.

Investigational work covers a wide field of public health and medical subjects, both in the laboratory and in the field. Field work has been carried out not only in Australia but in co-operation with the local administrations in Papua, New Guinea, Norfolk Island and Nauru. Further details may be found in previous issues of the Official Year Book (see No. 29, p. 334).

5. **The Australian Institute of Anatomy.**—Information concerning the Australian Institute of Anatomy at Canberra is given in previous issues of the Official Year Book (see No. 32, p. 919). In 1931 the Institute became an integral part of the Commonwealth Department of Health. The work of the Institute on general problems of comparative anatomy has now been concentrated on aspects of structure and function with special reference to the development of the growing child. Biochemical and biological research in this field is being developed in close association with the model kindergarten centres established by the Department in each capital city (see par. 8 below). The background of comparative anatomy and the museums of the Institute are maintained as part of the general plan of work and an expert zoologist is a member of the team of research workers at the Institute.

6. **The Northern Territory Medical Service.**—As from 1st April, 1939, the Commonwealth Department of Health assumed administrative responsibility for the medical and health services of the Northern Territory, absorbing the Northern Territory Medical Service of the Territory Administration. The Health services of Darwin have been strengthened with the growing importance of that town as the northern gateway to Australia and as an administrative and service centre. Plans have been completed and building commenced of a new hospital at Darwin. The needs of the inland have been also carefully considered. The medical officer stationed at the hospital at Katherine, who is his own pilot, has pioneered a flying doctor service in the Territory and recently radio equipment has been installed at Katherine and on his plane to assist in this work. The hospital at Alice Springs has been enlarged and the medical officer of the hospital acts as the flying doctor for the local base of the Australian Aerial Medical Services which provide for pilot, aircraft and ground services.

7. **Physical Fitness.**—Health authorities in Australia have closely followed the world-wide movement for the advancement of physical fitness and in several States active work has been proceeding over some years. In 1938, following a recommendation of the National Health and Medical Research Council, the Commonwealth Government agreed to appoint a National Co-ordinating Council for Physical Fitness, under the Commonwealth Minister for Health, to effect collaboration of Commonwealth, State, and Local Government authorities in the movement. Meetings of this Council were held in January, May, and July, 1939. Meanwhile active State Councils had been formed in all States. As a result of the recommendations of the central Council, the Commonwealth Council 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. A meeting of representatives of the State Councils and the local State organizers was held at Canberra in May, 1940. The movement continues to develop and to gain public interest and support throughout the Commonwealth.

8. **The Pre-school Child.**—Sessions of the National Health and Medical Research Council and the reports of the Commonwealth Advisory Council on Nutrition have called attention to the need for greater effort throughout the Commonwealth directed towards the care of the growing child, especially during the pre-school period. Movements for the care of the infant and the welfare of the school child are already developed by State authorities as recorded in §§ 7 and 8 below. It was felt by the Commonwealth Government that more could be done for the child of the pre-school age, and it was decided to give a lead by making possible a demonstration of the possibilities of effort and of the practical methods which could be employed.

In pursuance of these objectives the Commonwealth Government therefore decided to establish in each capital city a pre-school demonstration centre, and in order to achieve the best results in association with those who have had experience in this field it has secured the co-operation of the federal organization of Kindergarten Unions which is operating under the title of "The Australian Association for Pre-School Child Development". A suitable piece of land was secured in each capital city and the building of the necessary school structure commenced. The administration of these buildings is under the direction of the local Kindergarten Union, but the employment of staff and the technical methods used are approved by the Commonwealth Department of Health. This applies in so far as the educational side is concerned, and in this field advantage will be taken of the opportunity to try new methods and to make systematic records of observations with the object of securing reliable knowledge of the educational technique of this pre-school period.

Along with this educational practice will proceed also the study of physiological requirements of the child and of the interaction between physical and mental health under varying conditions. In view of the importance, which has been indicated, of the study of growth and of nutrition of this age period, these centres will provide by reason of the children there available a considerable mass of human material for control and study. Not only will routine measurements be made of height, weight and other bodily data, but problems of nutrition will be studied in detail. The medical work at each of the States centres will be carried on on a uniform basis, according to a scheme formulated at, and directed from the Australian Institute of Anatomy, Canberra, where parallel investigations on the laboratory side are being undertaken.

9. **Organization for the Control of Cancer.**—The persistent increase in cancer mortality has led to the development in Australia of a national organization directed towards the control of this disease. The Commonwealth Department of Health has actively participated in this movement. Since 1928 the Australian Cancer Conferences, convened by the Department, have provided an opportunity each year for those actively engaged in the campaign against the disease to meet for the discussion of problems and the determination of lines of action and further development. The tenth conference in this series met in New Zealand in February, 1939, and so marked an association which has been maintained between the Commonwealth and the Dominion since the inception of the conferences.

A large amount 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 requiring it, irrespective of ability to pay. This work is co-ordinated by the Department. Records of treatment and the results obtained are kept by all treatment centres on uniform lines and are collected and analysed. These records, in respect of certain parts of the body, are also collated in accordance with the international inquiry carried out under the auspices of the Cancer Commission of the Health Organization of the League of Nations in collaboration with the International Radiological Association.

Close co-operation is maintained between research workers, physicists and biochemists and the medical men engaged in the clinical investigation and treatment of the disease, so that problems are mutually investigated and treatment applied with the highest attainable degree of scientific accuracy.

Realizing the essential importance of accuracy in determining the quality of radiation used in the treatment of cancer and in measuring the dosage of this radiation actually delivered to the tumour, and the need for the investigation of physical problems in connexion with the utilization of X-rays and radium in the treatment of disease, the Commonwealth Department of Health has now extended the work of the Commonwealth Radium Laboratory, which was established in 1929, to include the investigation of the physical problems of radiation therapy generally. This laboratory which is now known as the Commonwealth X-ray and Radium Laboratory was established at the University of Melbourne by agreement with the Council of the University, and is maintained, controlled and staffed by the Commonwealth Department of Health. It is accommodated in a separate laboratory building of sixteen rooms specially designed for X-ray and radium work, and is well provided with all necessary equipment for research work, including a high tension generator capable of supplying 500,000 volts to an X-ray tube. This laboratory is actively at work and its specialist officers co-operate closely with the local physical services which are being developed at the Universities in the other capital cities of the Commonwealth. The laboratory also continues its earlier work of production of radon for treatment, the repair of radium apparatus, and research into problems of treatment and protection. During the year 1939 a total quantity of 49,664 millicuries of radon was prepared and issued by this laboratory and the associated centres in Sydney, Adelaide, Brisbane and Perth. Used in the treatment of cancer and for research purposes, this production represents a continuing increase over the output of previous years.

10. **Veterinary Hygiene and Plant Quarantine.**—In 1927 Directors were appointed to control divisions of the Commonwealth Department of Health, which have been created to deal with veterinary hygiene and plant quarantine.

§ 6. Control of Infectious and Contagious Diseases.

1. **General.**—The provisions of the various Acts in 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 headings—Quarantine; Notifiable Diseases, including Venereal Diseases; and Vaccination.

2. **Quarantine.**—The Quarantine Act is administered by the Commonwealth Department of Health, and uniformity of procedure has been established in respect of all vessels, persons and goods arriving from oversea ports or proceeding from one State to another, and in respect of all animals and plants brought from any place outside Australia. In regard to interstate movements of animals and plants, the Act becomes operative only if the Governor-General be of opinion that Federal action is necessary for the protection of any State or States; in the meantime the administration of interstate quarantine of animals and plants is left in the hands of the States. The Commonwealth possesses stations in each State for the purposes of human and of animal quarantine.

Further information concerning the chief provisions of the Act and its administration is given in some detail in earlier issues of the Official Year Book (see No. 22, p. 500).

3. **Notifiable Diseases.**—A. **General.**—(i) *Methods of Prevention and Control.* Provision exists in the Health Acts of all the States for the observance of precautions against the spread and for the compulsory notification of infectious disease. When any such disease occurs, the local authority must at once be notified, and in some States notification must be made to the Health Department also. The duty of giving this notification is generally imposed first, on the head of the house to which the patient belongs, failing whom on the nearest relative present, and, on his default, on the person in charge of or in attendance on the patient, and, on his default, on the occupier of the building. Any medical practitioner visiting the patient is also bound to give notice.

As a rule the local authorities are required to report from time to time to the Central Board of Health in each State as to the health, cleanliness and general sanitary state of their several districts, and must report the appearance of certain diseases. Regulations

are prescribed for the disinfection 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 small-pox and leprosy.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, p. 501) information was given concerning the notification, etc., of diseases under State headings.

(iii) *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 the year 1939 the diseases which are notifiable in each State and Territory 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 AND NOTIFICATIONS FOR THE YEAR ENDED 31st DECEMBER, 1939.

Disease.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	Aust. Cap. Terr.	Aust.
Anchyllostomiasis ..	*	1	16	..	13	..	4	..	34
Anthrax ..	1	..	..	..	..	..	..	..	1
Beriberi ..	*	..	..	..	..	..	2	..	2
Bilharziasis ..	..	..	..	..	..	..	..	..	..
Cerebro-spinal Meningitis ..	22	14	7	1	..	2	1	..	47
Cholera ..	..	..	..	..	..	..	..	..	..
Coastal Fever(a) ..	..	..	3	..	..	..	..	..	3
Dengue ..	..	..	..	..	..	..	585	..	585
Diphtheria ..	4,101	1,617	1,014	643	595	365	..	3	8,338
Dysentery(b) ..	*	7	2	5	2	..	1	..	17
Encephalitis Lethargica ..	5	1	3	2	..	1	..	..	12
Erysipelas ..	..	..	..	96	..	..	1	..	97
Favus ..	..	..	..	..	..	..	..	..	..
Filariasis ..	..	..	..	..	..	..	..	..	..
Helminthiasis ..	..	1	..	..	..	..	..	..	1
Hydatid ..	..	10	..	..	..	..	..	..	10
Influenza ..	..	..	..	246	..	..	184	..	430
Leprosy ..	..	..	4	..	53	..	..	..	62
Malaria ..	..	3	5	2	..	..	5	..	12
Measles ..	..	..	..	6,157	..	..	2	572	6,731
Plague ..	..	..	..	..	..	..	..	..	..
Polio-myelitis ..	33	42	23	4	5	1	..	..	109
Pottacosis ..	..	2	..	1	..	..	1	..	3
Puerperal Fever ..	243	30	37	64	12	15	..	..	401
Scarlet Fever ..	3,188	3,020	359	525	205	162	..	23	7,482
Smallpox ..	..	..	..	..	..	..	..	..	..
Tetanus ..	..	10	..	..	1	..	..	..	11
Trachoma ..	..	7	..	..	..	..	..	..	7
Tuberculosis(c) ..	1,819	706	479	334	219	196	20	4	3,777
Typhoid Fever(d) ..	62	40	52	16	32	8	..	..	210
Typhus (Endemic)(e) ..	1	..	54	4	40	..	..	..	99
Undulant Fever ..	..	..	..	..	..	..	..	..	8
Varicella ..	3	4	..	1	..	..	12	..	12
Weil's Disease(f) ..	..	..	17	..	..	..	..	..	17
Whooping Cough ..	..	..	..	2,931	..	..	1	..	2,932
Yellow Fever ..	..	..	..	..	..	..	..	..	..

* Not notifiable.

(a) Includes Mossman and Sarina Fever. (b) Includes amoebic and bacillary. (c) Includes all forms except in New South Wales and Northern Territory where only pulmonary tuberculosis is notified. (d) Includes enteric fever and paratyphoid. (e) Cases reported are all of the mild type known as Brill's disease or endemic typhus. (f) Includes Leptospires, Weil's and Para-Weil's disease.

B. Venereal Diseases.—(i) *General.* 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 working of the measures taken to combat these diseases. Under these Acts notification has been made compulsory in every State except South Australia, where the Venereal Diseases Act has not yet been proclaimed. 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 only when 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 or the employment of an infected person in the manufacture or distribution of foodstuffs.

For several years the Commonwealth Government granted a subsidy to each of the States to assist in providing hospital treatment and administrative control of venereal diseases, but this subsidy has been discontinued.

In 1927 a Division of Tuberculosis and Venereal Disease was established in the Commonwealth Department of Health, with a medical officer as Director. This Division ceased to exist in April, 1932.

(ii) *Details by States.* A statement of the preventive provisions in each State together with certain statistical data, appeared in earlier issues of the Official Year Book (see No. 22, pp. 503-4).

4. **Vaccination.**—(i) *Demand for Vaccine.* In New South Wales there is no statutory provision for compulsory vaccination, though in all the other States such provision exists. Jennerian vaccine for vaccination against small-pox is prepared at the Commonwealth serum laboratories in Melbourne. A moderate demand exists for the vaccine in Victoria, but in the other States the normal requirements are small, as is also the proportion of persons vaccinated.

(ii) *Details by States.* In earlier issues of the Official Year Book (see No. 22, pp. 504-5) information was given concerning the provisions regarding vaccination in each State.

§ 7. Medical Inspection of School Children.

1. **General.**—Medical inspection of school children is carried out in all the States. 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.**—A complete system of medical inspection of school children came into operation in this State in 1913. The scheme includes, in country districts, the medical examination of every child at least twice during the usual period of school attendance (6-14 years). In the metropolitan area, the scheme provides for the full medical examination of all children in first and sixth classes, and the review of children in other classes who have been found defective in previous years. Parents are notified of the defects found, and urged to have them treated. In the metropolitan area, these notices are reinforced by "follow up" work of school nurses, who also arrange hospital and clinic treatment in many cases.

In 1939 the staff comprised 21 medical officers (including 2 psychiatrists for the Child Guidance Clinic, and 3 oculists), 18 dental officers, 8 dental assistants, 10 school nurses, 2 psychologists, 2 social workers and 6 clerical officers. Nine medical officers were engaged in country districts, and 9 in the metropolitan area, and of the 18 travelling dental clinics (8 of which were each staffed by a dental officer and dental assistant), 9 were engaged in metropolitan schools and 9 in country districts. One of the metropolitan officers was also engaged half-time at the clinic attached to the Out-patients' Department of the Royal Alexandra Hospital for Children.

Special attention is paid to the supervision of the health of High School pupils, both girls and boys, and High Schools in the metropolitan area, as well as certain country schools, are medically inspected annually.

Every student, before entering the Teachers' College, is medically examined, and any defects found must be remedied before final acceptance. Health supervision is maintained at these Colleges by women Medical Officers—whole-time at the Sydney College and part-time at the Armidale College. Also, a course of lectures on hygiene, which every student attends, is given by these officers assisted part-time at the Sydney College by two other medical officers.

The medical and psychological examination of delinquent boys brought before the Children's Court is carried out by a male Medical Officer, who examined 1,057 boys in 1938, and 970 in 1939. Similar examinations are made in the case of girl delinquents.

Towards the end of 1936 a Child Guidance Clinic was established by the Education Department. This Clinic functions as part of the School Medical Service, a psychiatrist having been appointed to take charge of the work of the clinic. Cases are referred through School Medical officers, teachers, and officers of the Child Welfare Department, no fee being charged for any examination. A second clinic was established during 1939.

The medical and/or psychological examination of many children referred from schools, also certain children under the jurisdiction of the Child Welfare Department, Widows' Pensions Branch (Family Endowment Department) and Soldiers' Children Education Board is also carried out by medical officers of this service, either at this Department or at Child Welfare Department institutions. The total examined in this way, including those examined at the Child Guidance Clinic, during 1939, was 1,905.

The following summary furnishes particulars of children medically examined in schools in 1939:—

Number fully examined (routine inspection)	..	..	81,493
Number reviewed	..	..	24,249
Of those examined—percentage notified for defects, medical and/or dental	..	..	39.24 per cent.

These figures do not include record of the medical examination and health supervision of children in residence at the Glenfield Special School for backward children, which is carried out by a woman medical officer; or a total of 205 children medically examined at Stewart House Preventorium and the Christmas Camp organized under the Far West Children's Health Scheme.

The School Medical Service carries out regular and/or periodical investigations into problems affecting the health of children, such as goitre, crippling, mental deficiency, stammering, left-handedness, nutrition, trachoma, acute rheumatism, and special investigations into outbreaks of infectious diseases occurring in schools. The sanitary condition of school buildings is also inspected and reported on.

The above statement does not include record of the numerous medical examinations of teachers, and other Departmental work of a medical nature, done by the School Medical Service.

3. **Victoria.**—Medical inspection of school children was established in 1909. One of the objectives of the system is to have each child medically examined once every three years in its school life. In 1925 the Department concentrated on country work, and medical inspection has been undertaken since that date in country and rural districts, reaching the most remote corners of the State. In spite of the comparatively small medical inspection staff, the plan for triennial visits to State schools is being fairly well maintained and all State High Schools, nearly all other State schools in the country, and some in the densely populated inner metropolitan area are visited once in three or four years. Only a few of the registered and institutional schools are, however, visited.

At the medical inspection every child is first weighed and measured, vision and hearing tested, then undressed to the waist and medically examined as for life assurance, but with a fuller investigation of many hygienic factors, which at that age greatly influence the health and growth of the child. Opportunity is also taken to teach the child healthy habits, how to correct faults, also to get its co-operation for the remedying of defects found. In schools with an attendance of 70 or more, the older boys are examined by a

medical man and the older girls by a medical woman. School nurses employed by the Department are devoted to "follow-up" work, *i.e.*, visiting the homes and getting treatment for children found defective by the school medical officers. Owing to the smallness of the staff their work is confined to the metropolitan area.

In addition to the medical examination, each child in those schools visited by the school dentist receives dental treatment on entrance to school (if under 8 years of age), and each year thereafter, until it is 12 years of age, when it is left dentally fit. The present staff is arranged so that 3 dentists and 4 dental attendants are always on duty at the Melbourne Dental Centre, where children from the inner metropolitan schools are brought by the teacher for dental treatment. Two dentists with dental attendants and equipment travel along the railway line far enough to give one year's work, using practically every town large enough to provide a day's work as a base. The school committees of the outlying schools are notified of the visit, and the parents are invited to bring to the base all children eligible for treatment, *i.e.*, all children under 8 years of age, and all other children treated by the school dentists on previous visits. The time of another dentist is fully occupied treating the children in the three largest country centres, Bendigo, Ballarat and Geelong. In each of these cities a centre with a dentist, dental attendant and equipment is established for about four months of the year, where children from the infant classes of the neighbouring schools are brought by the teacher or parents. Three dentists with dental attendants are in charge of three fully-equipped dental vans, each of which has an itinerary which it completes each year.

The staff of the medical branch consists of 7 full-time medical officers, 9 dentists, 10 dental attendants and 2 school nurses.

During the year ended 30th June, 1939, 33,332 children and 2,118 teachers were medically examined, and 32,145 children received dental treatment. In addition 7,828 homes were visited by the school nurses.

4. **Queensland.**—The School Health Services Branch, under the direction of the Chief Medical Officer, consists of three sections known as the Medical, Dental and Nursing Sections.

Medical inspection of schools and school children is carried out by one full-time medical officer and one part-time officer under the general direction of the Chief Medical Officer, School Health Services. These officers as far as possible, examine children for cardiac and pulmonary conditions, and in addition, make a thorough examination of all children referred to them by the school nurses; 3,559 were thus medically examined in 1939, and of these 1,408 were notified as suffering from some condition requiring correction.

The nurses now number fourteen. Each nurse is assigned a group of schools, and she is instructed to make a list at each school of those children who she considers should be seen by the medical inspector at his next visit. She supervises the sanitation, cleanliness and ventilation of the school and notifies the head teacher of all infectious or verminous children or those suffering from impetigo, scabies, etc., who are then excluded. During the year 1939, school nurses examined 31,354 children. In the metropolitan area the nurses examine the teeth and report all eligible carious cases to the Dental Hospital for treatment.

The Department has in its employ a staff of sixteen dentists. These officers are each assigned a district, and such district is not changed for three years unless for reasons which the Chief Medical Officer, on the recommendation of the Chief Dental Inspector, considers advisable. During the year 1939, 31,737 children were examined; 26,724 extractions were performed; and there were 57,784 fillings and 13,535 other treatments.

At the Wilson Ophthalmic School Hostel children suffering from trachoma are treated and educated. They are admitted from time to time on the recommendation of the part-time Ophthalmic Officer. Beneficial results have already been obtained. The Institution is situated at Eildon Hill, Windsor, and is fully equipped to treat all types of eye case.

The work of Hookworm Control (the dealing with *ankylostomiasis duodenale* and *Necator Americanus* infestation) throughout the State is under the control of the Director-General of Medical Services and his deputy. This activity has resulted in a marked reduction in the incidence of this dangerous menace on the northern coastal belt. Several sisters of the School Health Services are seconded for hookworm duty. The personnel consists of a microscopist, a health inspector and two trained sisters.

In order to give the same medical and dental facilities to the children of the back country as are obtainable by city dwellers, a Rail Dental Clinic equipped on the most modern lines has been constructed. A motor car is carried on a railway wagon on the rear for use at each stopping place to visit the surrounding villages served by the rail centre. Two road motor clinics have also been provided. One functions in the south-western portion of the State with Charleville as a base, while the other operates in the central-west and the north-western territory using Longreach as the centre. The staff of each clinic consists of one qualified dental surgeon and one motor mechanic.

5. **South Australia.**—The system of medical inspection in force requires the examination of all children attending primary, junior technical, high and technical high schools. Children in the primary schools are examined in grades I., IV. and VII. ; in the junior technical schools in grade X., while high school children are examined in their second and fourth years. Reports are furnished to the parents of any remediable defects found during these examinations. The medical inspectors meet the parents after the examination of the children and give an address on the prevention and treatment of the conditions which were found during the inspection. After these lectures the parents are given an opportunity to ask questions regarding their children. When there is an epidemic or a threatened epidemic in a district, similar lectures are given and special visits paid to all the schools in that locality. All students are examined before they enter the Teachers' College. Courses of lectures in Hygiene and in First Aid are given to these students.

The medical staff consists of a principal medical officer, two medical inspectors and a trained nurse. A psychologist, two dentists, two dental assistants and a speech therapist are attached to the Medical Branch. The psychologist, in addition to examining retarded children and supervising their work in the opportunity classes, lectures to the students at the Teachers' College, and examines children referred to her by the Children's Court, by the Women Police, or by the Children's Welfare Department, &c. The speech therapist examines children with defective speech, ascertains the nature of the defect and teaches the child to overcome it.

During the year 1939, 12,886 children were examined by medical inspectors ; of these 487 required notices for defective vision, 54 for defective hearing, and 1,157 for tonsils and adenoids. Six hundred and ninety-seven children were examined by the psychologist.

6. **Western Australia.**—Under the Public Health Act 1911–1935 the medical officers of health appointed by the local authorities became medical officers of schools and of school children. The principle aimed at is that each child shall be examined twice during its school life, once between the ages of 7 and 8 years and again between the ages of 12 and 13 years. In the Health Department there are two full-time medical officers for schools, whose duty is to conduct medical examinations, and two school nurses are employed. During 1939, 13,241 (8,358 country and 4,883 metropolitan) children were examined. In addition 644 metropolitan and 23 country school children were re-examined. There were 57 schools visited in the metropolitan area and 175 in country districts.

Four dental officers visited 105 schools and gave attention to 5,009 children.

7. **Tasmania.**—Tasmania was the first State in Australia to provide for the medical inspection of State school children, its system of inspection having been initiated in 1906. During the year 1931, however, for financial reasons, medical inspection ceased, and the services of all doctors were terminated. School medical and dental services are now controlled by the Department of Public Health.

At the present time (1940), one part-time medical officer conducts examinations of school children in Hobart, and fifteen full-time Government Medical Officers examine school children in the various country districts. In addition four nurses visit the homes to advise the parents as to the treatment of defects disclosed by the medical examination. There are seven full-time dental inspectors and seven dental attendants—working at dental clinics in Hobart and Launceston, and visiting the country schools.

8. Australian Capital Territory.—By arrangement education facilities are provided by the Education Department of New South Wales. The Commonwealth Department of Health, however, took over from the State in 1930 the medical inspection of school children and carried out examinations of entrants and those leaving during 1930.

Subsequent to 1931, examinations of entrants and those leaving the primary schools have taken place. During 1937 this examination was supplemented by examinations of all pupils of all rural schools (including Duntroon and Molonglo). During 1939 the examinations of entrants and those leaving the primary schools showed that 47.3 per cent. had dental defects, 9.8 per cent. had some pathological condition of the nasopharynx, 6.6 per cent. had eye defects, 8.8 per cent. had ear defects, 4.9 per cent. showed some evidence of minor deformity, and 3.5 per cent. were 10 per cent. or more underweight for their height and age. Of the pupils recommended for medical advice 61 per cent. received this advice, and 60.4 per cent. of those recommended for dental treatment received such treatment.

§ 8. Supervision and Care of Infant Life.

1. General.—The number of infantile deaths and the rate of infantile mortality for the last five years are given in the following table, which shows that during the period 1935 to 1939 no less than 22,991 children died in Australia (excluding Territories) before reaching their first birthday. With few exceptions the rate of mortality in the metropolitan area is consistently greater than that for the remainder of the State. Further information regarding infantile mortality will be found in Chapter XXI. "Vital Statistics":—

INFANTILE DEATHS AND DEATH RATES.

State.	Metropolitan.					Remainder of State.				
	1935.	1936.	1937.	1938.	1939.	1935.	1936.	1937.	1938.	1939.

NUMBER OF INFANTILE DEATHS.

New South Wales	602	738	702	712	667	1,160	1,270	1,230	1,268	1,302
Victoria ..	570	605	538	510	494	578	617	553	528	591
Queensland ..	190	185	201	215	181	469	494	482	569	541
South Australia ..	133	123	134	124	161	156	154	163	163	175
Western Australia	139	156	154	115	148	187	202	169	194	221
Tasmania ..	72	53	43	48	83	159	174	159	147	120
Australia(a) ..	1,706	1,860	1,772	1,724	1,734	2,709	2,911	2,756	2,869	2,950

RATE OF INFANTILE MORTALITY.(b)

New South Wales	35.61	41.73	38.66	38.35	34.51	41.77	44.56	41.92	44.10	45.41
Victoria ..	43.01	44.06	37.13	34.16	32.15	39.51	40.72	36.28	34.22	39.07
Queensland ..	42.41	37.95	40.21	42.36	33.93	35.51	35.59	34.03	40.89	36.04
South Australia ..	35.11	28.62	30.94	27.36	34.82	34.81	33.38	35.02	33.42	35.05
Western Australia	40.05	44.21	42.40	29.76	37.98	40.23	40.81	33.96	36.76	42.97
Tasmania ..	73.47	50.48	39.74	40.03	47.09	45.74	49.28	42.30	39.64	38.58
Australia(a) ..	39.79	41.09	37.95	35.80	34.31	39.78	41.21	38.13	39.90	40.89

(a) Exclusive of Territories.

(b) Number of deaths under one year per 1,000 births registered.

During recent years greater attention has been paid to the fact that the health of the community depends largely on pre-natal as well as after care in the case of mothers and infants. Government and private organizations, therefore, provide instruction and treatment for mothers before and after confinement, while the health and well-being of mother and child are looked after by the institution of baby health centres, baby clinics, crèches, visits by qualified midwifery nurses, and special attention to the milk supply, etc.

2. **Government Activities.**—In all the States acts have been passed with the object of supervising and ameliorating the conditions of infant life and reducing the rate of mortality. Government 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 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 VIII. "Public Benevolence".) Under the provisions of the Maternity Allowance Act 1912-1937, a sum of £4 10s. is payable to the mother in respect of each confinement at which a living or viable child is born, provided the total income of the claimant and her husband for the period of twelve months preceding the date of the birth did not exceed £247. Where there are already one or two children under 14 the amount payable is £5, with an income limit of £263, and where there are three or more other children under 14 the amount payable is £7 10s. with an income limit of £338. Further particulars regarding Maternity Allowances are given in Chapter XXVI. "Public Finance".

3. **Nursing Activities.**—(i) *General.* In several of the States the Government maintains institutions which provide treatment for mothers and children, while, in addition, subsidies are granted to various associations engaged in welfare work.

(ii) *Details of Institutions.* In earlier issues of the Official Year Book (see No. 22, pp. 515 and 516) information is given, with certain statistical data, concerning the activities of institutions in each State which may be found.

(iii) *Summary.* The following table gives particulars of the activities of the Baby Health Centres and the Bush Nursing Associations :—

BABY HEALTH CENTRES AND BUSH NURSING ASSOCIATIONS, 1939.

Heading.	New South Wales.	Victoria. (a)	Queensland. (a)	South Australia.	Western Australia. (a)	Tasmania.	Aust. Capital Territory. (a)	Total.
Baby Health Centres—								
Metropolitan No.	57	72	21	43	13	2	..	208
Urban-Provincial and Rural No.	154	135	101	24	11	22	9	456
Total No.	211	207	122	67	24	24	9	664
Attendances								
Centres .. at	852,422	520,819	241,911	116,397	95,406	39,241	3,574	1,869,770
Visits paid by Nurses .. No.	72,597	73,490	13,601	23,210	17,970	15,315	1,676	217,859
Bush Nursing Association—Number of Centres ..	46	70	12	32	6	18	..	184

(a) Year ended 30th June.

The number of attendances at the Baby Health Centres has increased very considerably in recent years. The following are the figures for the years 1934 to 1938 :—1934, 1,178,957; 1935, 1,355,306; 1936, 1,512,198; 1937, 1,657,052; and 1938, 1,597,124.

CHAPTER X. REPATRIATION.

§ 1. General.

An outline of the activities leading up to the formation of the Commonwealth Department of Repatriation was given in Official Year Book No. 15, p. 931, but limits of space preclude its repetition in the present volume. Some account was given also in the Official Year Book referred to, and in subsequent issues, of the policy and activities of the Department generally, while detailed information was incorporated in regard to such matters as sustenance rates and pensions to soldiers and dependants. (See Official Year Book No. 17, pp. 598-601). During the year ended 30th June, 1928, sustenance rates were amended to bring them into line with war pension rates, and the scale of rates in respect to war pensions was amplified by providing for an allowance to the third or subsequent child at such a rate as will provide, together with pension in respect of that child, a sum of 15s. per fortnight. During 1935, the Government decided to provide from 1st January, 1936, free medical treatment for all ex-soldiers suffering from pulmonary tuberculosis, irrespective of whether such condition was attributable to war service.

The main activities of the Repatriation Commission at 30th June, 1939, were confined to the grant, review and assessment of war and service pensions, the provision of medical treatment, the renewal and repair of artificial replacements and surgical appliances, the grant and review of sustenance and living allowances, and the administration of the Soldiers' Children Education Scheme.

§ 2. War Pensions.

1. **General.**—Provision for the payment of war pensions to soldiers and their dependants was made by the Commonwealth Parliament in the War Pensions Act 1914 which came into operation on 21st December, 1914. The maximum pension for a private was fixed at £52 per annum with higher rates for higher ranks. The definition of dependants under the original Act was broadened by a measure passed in 1915, while both these Acts were consolidated by the War Pensions Act 1914-1916, which increased the maximum pension to a private to £3 per fortnight (£78 per annum) with higher rates for higher ranks. Scale rates of pension were definitely laid down for specific disabilities such as in cases of amputation of limbs, etc.

In 1920 the passage of the Australian Soldiers' Repatriation Act repealed the existing legislation and provided, from 1st July, 1920, a flat rate of £4 4s. per fortnight for a 100 per cent. pension for all ranks up to and including that of Lieutenant. The rates for ranks higher than that of Lieutenant were not increased. The main additional increases were:—

- (a) a pension up to £4 4s. per fortnight to widows with dependent children, or, if without dependent children, where circumstances warrant the increased amount; (the invariable practice is to grant the full £4 4s. per fortnight to widows with dependent children).
- (b) a Special Rate of pension of £8 per fortnight to blinded and to totally and permanently incapacitated soldiers; and
- (c) a Special Rate pension, not exceeding £8 per fortnight to tubercular soldiers, subject to certain conditions.

Payment of pension to the full degree of a man's disability in cases where a pre-war disability has been aggravated "to any material degree" by war service was contained in an amending Act of 1921. Hitherto a pension was payable only with respect to the degree of disability actually caused by war service.

A further amendment of the Australian Soldiers' Repatriation Act in 1922 made provision for certain "amounts" and "allowances" to limbless soldiers, in addition to existing rates of war pensions, ranging from 7s. to 76s. per fortnight. In certain double amputation cases, an allowance for an attendant was provided at £2 or £4 per fortnight, according to the nature of the case. An attendant's allowance was also payable to "spinal cases" at £2 per fortnight. A special rate pension of £8 per fortnight was provided to those soldiers who, although not totally blind, had no useful vision.

During 1925 the Government decided that a permanent pension of not less than £4 4s. per fortnight should be paid to all "members" proved to be suffering from pulmonary tuberculosis on or subsequent to 1st July, 1925, as the result of war service, or as the result of a pre-existing condition having been materially aggravated by war service. On 30th September, 1925, a new Regulation was gazetted, operative from 1st July, 1925, providing for the grant of an allowance, in addition to pension, not exceeding 15s. per fortnight to a soldier in receipt of pension under the Fourth Schedule to the Act with respect to loss of vision in one eye. Both these provisions were made statutory by incorporation in the Amending Act of 1934.

The general reduction of expenditure provided by the Financial Emergency Act 1931 applied also to war pensions. No reduction, however, was made in the rate of pension payment to incapacitated soldiers. The widows and children of soldiers whose death was due to war service and the widowed mothers (who became widows either prior to, or within three years after, the death of the sons) of any deceased unmarried member of the Forces were also exempted from reductions, the necessary economies being effected in payments to other classes of war pensioners. The maximum rate of pension payable on behalf of the child of an incapacitated soldier was reduced to 12s. per fortnight, and a wife married or a child born to an incapacitated member of the Forces subsequent to 1st October, 1931, were excluded from pension benefits. Considerable modifications of the reductions were included in the Financial Relief Acts of 1933 and 1934, and some classes of pension were fully restored.

During 1934 the Second Schedule to the Act was amended to include the attendants' allowances previously payable under regulation to blinded soldiers and to provide for eligibility for such allowances in consequence of injury or disease affecting the cerebro-spinal system or disease causing incapacity similar in effect thereto. A further amendment provided that a wife married, or a child born, to a member of the Forces after 1st October, 1931, shall be deemed to be dependants and eligible for pension benefits if the member has died or dies from the results of war service. Certain anomalies concerning the continuance or regranting of pensions were removed.

In December, 1935, the Principal Act was again amended. The principal amendments were in relation to (a) reinstatement of pensions previously commuted; (b) grant of pensions to dependants of deceased members of the Forces (whatever the actual cause of death) in cases where at the date of the member's death he was in receipt of a pension under the Second Schedule to the Act or in receipt of pension as a double amputee; (c) removal of the time limit on lodgment of claims under Section 23 (2) of the Act; and (d) to provide relief by way of service pensions to aged members of the Forces, to those members and their families who are unable through mental or physical defects to engage in remunerative employment and are declared permanently unemployable, and to those members and their families who are suffering from pulmonary tuberculosis. The new provisions operated from 1st January, 1936. Financial Relief legislation, which became operative from 1st October, 1936, increased the maximum rate of pension payable to the child of an incapacitated soldier from 12s. to 15s. per fortnight.

Legislation in 1938 removed the Financial Emergency restriction on wives married or children born to incapacitated members of the forces after 1st October, 1931, and war pensions may now be granted from 1st January, 1938, provided that such marriages or births took place on or before 30th June, 1938.

2. **Appeal Tribunals.**—The principal Act was amended as from 1st June, 1929, whereby tribunals were created to hear appeals in regard to 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 an incapacity or the death of an ex-member did not arise out of war service. Two 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 an 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 applicants for service pensions.

3. **War Pensions in Force.**—At the 30th June, 1939, the number of war pensions was 249,293 with an annual liability of £7,681,095. The outstanding figures for 1938–39 were as follows :—

New claims granted during year	6,794
Claims rejected (gross) during year	7,541
Pensions reviewed during year	47,712
Pensions cancelled or discontinued during year.. .. .	12,872
Pensioners died during year	2,860
Number of pensions in force at 30th June, 1939	249,293
Annual pension liability on the 30th June, 1939	£7,681,095

At the 30th June, 1939, special rate pensions of £8 per fortnight were being paid to—

Blinded soldiers	147
Tubercular soldiers	854
Totally and permanently incapacitated soldiers	2,320

An analysis of the total number of new grants during the year reveals the following :—

Members (i.e., ex-soldier pensioners)	537
Wives of members	1,252
Children	4,599
Other dependants	406
	6,794

In the following table the number receiving pensions at 30th June, 1939, is shown for each class of pensioner :—

WAR PENSIONS IN FORCE AT 30th JUNE, 1939.

Class.	Number of Pensioners.
Orphan children	4,259
War widows	9,751
Soldiers	77,151
Children	80,756
Wives	61,735
Parents	15,202
Brothers and sisters	188
Others	251
Total	249,293

4. Number of Pensioners and Expenditure.—The following table shows the number of pensioners at 30th June, 1939, and the places where payments were made during 1938-39:—

WAR PENSIONS : NUMBER OF PENSIONERS, 1939.

Where Paid.	Incapacitated Members of the Forces.	Dependants of—		Total.	Expenditure.
		Deceased Members.	Incapacitated Members.		
New South Wales ..	25,924	8,691	46,701	81,316	£ 2,674,462
Victoria ..	25,569	8,412	48,264	82,245	2,353,107
Queensland ..	8,833	2,615	16,677	28,125	890,710
South Australia ..	4,517	2,166	8,394	15,077	947,230
Western Australia ..	7,030	2,255	13,362	22,617	696,833
Tasmania ..	3,339	1,199	7,881	12,419	403,747
Total, Australia ..	75,212	25,308	141,279	241,799	7,516,089
London ..	1,619	2,108	2,884	6,611	} 303,200
South Africa ..	49	26	59	134	
New Zealand ..	250	126	326	702	
Other Overseas ..	21	3	23	47	
Total ..	77,151	27,571	144,571	249,293	7,819,289
Payments made in Australia in respect of other countries less amounts received from other countries ..	..	..	..	..	Dr. 1,071
Total, War Pensions Trust Fund Account ..	..	..	..	..	7,820,360

The subjoined table shows the numbers of pensions granted, claims rejected, and pensions in force, together with the amount paid in pensions for the years ended 30th June, 1921 and 1931, and for each of the five years ended 30th June, 1939:—

WAR PENSIONS : SUMMARY, AUSTRALIA.

Year ended 30th June—	Pensions Granted.	Claims Rejected.	Pensions in Force.				Amount paid in Pensions.
			Incapacitated Members of the Forces.	Dependants of Incapacitated Members.	Dependants of Deceased Members.	Total.	
1921 ..	25,983	3,388	79,491	93,995	49,051	222,537	£ 7,386,842(8)
1931 ..	11,555	920	75,316	172,380	35,617	283,322	7,996,180
1935 ..	4,174	1,869	74,998	158,787	30,276	264,061	7,360,057
1936 ..	5,510	10,200	76,337	153,736	30,062	260,135	7,520,228
1937 ..	5,098	9,508	77,076	145,308	29,422	251,806	7,683,089
1938 ..	19,993	8,357	77,315	151,337	28,562	257,214	7,761,207
1939 ..	6,794	7,541	77,151	144,571	27,571	249,293	7,819,289

(a) Includes payments made (less recoveries) from Trust Fund, War Pensions Account, on behalf of other countries.

5. Cost of Administration.—The cost of administration in 1938-39 was £294,977 representing 3.28 per cent. of the total cost of benefits disbursed. The administrative costs of the three War Pensions Appeal Tribunals are included in the foregoing figure and totalled £29,535.

§ 3. Service Pensions.

1. **General.**—The payment of service pensions was provided for in the Australian Soldiers' Repatriation Act 1935, and the scheme has operated since 1st January, 1936.

Originally fixed on a lower scale the maximum rate of service pension for a single man was increased from 16th September, 1937, to £2 per fortnight, and for a man and his wife to £3 8s. per fortnight, with an additional 5s. per fortnight for each child under sixteen years of age up to four in number. The actual rate payable in any case is determined after taking into consideration all other income and property received or owned by the pensioner in question, and no service pension can be paid in any case where such other income and property has an assessable value, in the case of a single man, of £84 10s. per annum, or in the case of a man and wife, of £169 per annum between them. In addition, no service pension can be paid when the applicant is possessed of property to the value of £400 or more.

If the income from all other sources is less than the annual amounts shown above, then service pensions become payable at such rates as will, with that other income, bring the total income of the pensioner (including service pension) up to the allowed maximum, provided, of course, that such pensions cannot exceed the maximum rates of £2 per fortnight for a single man or £3 8s. per fortnight for man and wife, as hereinbefore mentioned.

A female member of the forces was made eligible in 1936 for consideration of a service pension if she embarked for service abroad; previously she must have served in a theatre of war. In the same year an institutional rate of service pension not exceeding 12s. per fortnight was made available. This pension, increased to 14s. from 16th September, 1937, benefited particularly inmates of mental asylums, who were previously excluded from the scheme.

Eligibility for service pensions may be established on the following grounds:—

- (a) Sixty years of age or more, provided the applicant served in a theatre of war, but eligibility on this ground limits payment of service pension to the ex-soldier and not to his wife or children. In the case of a female member of the forces, the qualifying age is 55 years, and service abroad, not necessarily in a theatre of war, is sufficient.
- (b) Permanently unemployable, provided the applicant served in a theatre of war (or, in the case of a female member, served abroad). Under this class pensions may be paid to the ex-soldier, his wife and children—up to four in number.
- (c) Pulmonary tuberculosis, whether the applicant served in a theatre of war or not. Under this class also pensions are payable to the wife and children—up to four in number.

Only those applicants who qualify under Class (c) are entitled to receive both service and invalid pensions at the same time.

2. **Operations during Year.**—The following figures give the important facts of the service pension scheme during 1938–39:—

Claims granted during the year—

Members of the Forces	..	..	..	..	2,027
Wives	..	..	..	..	729
Children	..	..	..	..	968
					3,724

Claims rejected during the year—

Members of the Forces	..	..	..	..	1,300
Wives	..	..	..	..	787
Children	..	..	..	..	1,480
					3,567

Pensions cancelled or discontinued during the year	..	..	..	..	1,540
Pensioners died during year	..	..	..	..	461
Pensions in force at 30th June, 1939	..	..	..	..	13,108
Annual pension liability on 30th June, 1939	..	..	..	..	£439,815
Expenditure, 1938–39	..	..	..	..	£407,127

§ 4. Medical Treatment of Returned Soldiers Suffering from War Service Disabilities.

At 30th June, 1939, there were 1,749 in-patients, and there were 159,847 out-patient attendances for treatment during the year, excluding treatments by the 814 Local Medical Officers resident in country towns. The expenditure to this date was £9,117,522.

§ 5. Miscellaneous.

1. *Summary of Other Departmental Activities.*—The following is a summary of the work of the Department from 8th April, 1918, to 30th June, 1939 :—

(i) *Employment.* Number of applications, 255,490; number of positions filled, 133,272.

(ii) *Vocational Training.* Number of men completed training, 27,696; number in training, nil.

(iii) *Soldiers' Children Education Scheme.* From the inauguration of the scheme in February, 1921, up to 30th June, 1939, 23,508 applications for assistance had been received. Of these, 21,971 had been approved, of which 13,887 recipients of the benefits had completed their training and 6,984 were undergoing training, while 38 applications were pending and the remainder had been refused or withdrawn.

Up to 30th June, 1939, the expenditure was £2,007,161.

(iv) *Assistance Granted.* The total expenditure incurred apart from war and service pensions during the period from 8th April, 1918, to 30th June, 1939, was £22,697,984, of which £1,676,014 represented loan and £21,021,970 general expenditure. Of the total, the largest amounts were absorbed by medical treatment with £9 million, vocational training with £5 million, and expenses of providing employment, £2½ million.

2. *Expenditure of Department of Repatriation.*—The expenditure of the Department during the twelve months ended 30th June, 1939, was £9,271,961, distributed as follows :—

Repatriation benefits—	£
Loans to soldiers	1
Grants to soldiers and general expenditure (including maintenance of training schools, medical institutions, etc.) ..	631,038
Assistance to soldiers in necessitous circumstances ..	27
Allowances to dependants of soldiers not provided for under the Act	975
Medical treatment to Home Service personnel	684
	632,725
Soldiers' Children Education Scheme	116,772
War and Service Pensions	8,227,487
Administrative costs—	£
Salaries	232,181
Contingencies	62,796
	294,977
Total	9,271,961

The total expenditure for the previous year was £9,108,864.

3. *Losses of Soldier Settlement.*—Reference to losses incurred in connexion with settlement of returned soldiers and sailors will be found in Chapter IV., "Land Tenure and Settlement."

CHAPTER XI.

THE TERRITORIES OF THE COMMONWEALTH.

GENERAL.

The Territories under the control of the Commonwealth are: The Northern Territory; the Australian Capital Territory; Papua (formerly British New Guinea); Norfolk Island; the Territory of New Guinea (by Mandate of the League of Nations); Nauru (under joint Mandate of the Commonwealth, Great Britain and New Zealand); the Territory of Ashmore and Cartier Islands; and the Australian Antarctic Territory.

The results of the census of the Territories at the 30th June, 1933, may be found in the separate Census bulletins and parts published by this Bureau.

In each of the external Territories Australian currency is used. In the Territory of New Guinea, however, Australian coins are being replaced by local coins consisting of silver shillings, cupro-nickel sixpences and threepences, and bronze pennies.

THE NORTHERN TERRITORY.

§ 1. Area and Population.

1. *Introductory.*—Upon the extension of New South Wales westward to the 129th meridian in 1825, the Northern Territory was incorporated in that colony, but in 1863 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, or 335,116,800 acres.

2. *Population.*—(i) *Europeans.* At the census taken in 1881 there were only 670 Europeans in the Territory. The number increased slowly, reaching its maximum in 1918 with 3,767 persons. At the census of 1933 the white population had decreased to 3,306. This number, however, was 34.5 per cent. greater than the figure at the census of 1921.

(ii) *Non-Europeans.* The number of full-blood non-Europeans, excluding Australian aboriginals, in the Northern Territory on the 30th June, 1933, was 744, of whom 462 were Chinese, the remainder being mainly Filipinos (69), Japanese (91), and Malays (59). There were at one time over 4,000 Chinese in the Territory.

The half-caste population recorded at the census of 1933 numbered 800 of whom 743 were half-caste Australian aboriginals.

(iii) *Total Population.* The highest recorded population of all races, except aboriginals, was 7,533 in 1888. The estimated population at 31st December in each of the last five years is given in the following table:—

NORTHERN TERRITORY: POPULATION (EXCLUSIVE OF ABORIGINALS).

Year.	Males.	Females.	Total.
1935	3,482	1,609	5,091
1936	3,590	1,709	5,305
1937	3,641	1,713	5,354
1938	3,825	1,820	5,645
1939	4,903	2,070	6,973

The Census population (30th June, 1933) was 3,378 males, 1,472 females, total 4,850.

(iv) *Movement of Population.* The following is a summary of the movement of population in 1939 (excluding overland migration):—

NORTHERN TERRITORY: MOVEMENT OF POPULATION, 1939.

Immigration ..	4,190	Emigration ..	2,912	Excess of immigration over emigration ..	1,278
Births ..	138	Deaths ..	88	Excess of births over deaths ..	50
Increase ..	4,328	Decrease ..	3,000	Net Increase ..	1,328

The immigration and emigration figures for the Territory during the five years ending 1939 are shown in the following table:—

NORTHERN TERRITORY: IMMIGRATION AND EMIGRATION.

Year.				Immigration.	Emigration.
1935 ..	..	..	..	1,014	881
1936 ..	..	..	..	1,429	1,268
1937 ..	..	..	..	1,733	1,720
1938 ..	..	..	..	2,601	2,343
1939 ..	..	..	..	4,190	2,912

(v) *The Aborigines.* A special article contributed by Dr. W. Ramsay-Smith on the subject of the Australian aborigines was incorporated in Official Year Book No. 3 (pp. 158). The Chapter "Population," in Official Year Book No. 17, contained information regarding the number and distribution of aborigines and the measures taken by the States (in the case of the Northern Territory, by the Commonwealth) to protect them and to conserve their interests. Large numbers of the aborigines in the Territory are still outside the influence of Europeans. The total number of full-blood and half-caste aborigines at 30th June, 1939, was estimated at 15,002, of whom 3,445 were in regular employment. There are fifteen "aboriginal" reserves, comprising an area of 67,244 square miles. (See also Chapter XX. "Population" hereinafter.)

§ 2. Legislation and Administration.

On 1st. January, 1911, the Territory was transferred by South Australia to the Commonwealth. The terms are outlined in Official Year Book No. 15, p. 940. By the Northern Australia Act 1926, the Territory was divided into two parts, Central Australia and North Australia, separated by the 20th parallel of south latitude, each administered by a Government Resident. In addition, Advisory Councils and a Development Commission were provided for. The Act of 1926 was repealed by the Northern Territory (Administration) Act 1931. The administration of the Territory was placed in the hands of an Administrator, residing at Darwin, assisted by a Deputy Administrator, residing at Stuart (Alice Springs). The designation of the latter office was later changed to that of District Officer. The Governor-General is empowered to make ordinances having the force of law in and in relation to the Territory, subject to disallowance by either House of the Commonwealth Parliament. The Territory elects a member to the House of Representatives, who may take part in the debates, but may not vote, except on a motion for the disallowance of any ordinance of the Northern Territory or on any amendment of any such motion.

§ 3. Physiography.

1. *Tropical Nature of the Country.*—The Territory is within the torrid zone, with the exception of a strip $2\frac{1}{2}$ 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 ironstone 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 principal features of the coast line are enumerated in Official Year Book No. 1, p. 66; the rivers in No. 2, p. 76; the mountains in No. 3, p. 67; the lakes in No. 4, pp. 77, 78; the islands in No. 5, pp. 71, 72; and the mineral springs in No. 6, p. 65.

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 of 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. Fuller particulars will be found in Official Year Book No. 6, p. 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 freshwater fish and littoral mollusca. Butterflies and beetles are strongly represented. The white ant is a pest, anthills in the Territory sometimes attaining great dimensions. Mosquitoes and sandflies are very troublesome, particularly in the wet season. Native fauna are in some cases protected. Buffalo formerly existed in large herds, but, as pointed out later, their number has been greatly reduced by indiscriminate shooting.

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. On the wide expanses of plain country in the interior there is little vegetation, the principal orders represented being:—*Euphorbiaceae*, *Compositae*, *Convolvulaceae*, *Rubiaceae*, *Goodenoviaceae*, *Leguminosae*, *Urticaceae*.

Fuller particulars regarding fauna and flora are given in Official Year Book No. 6, pp. 1116-7.

§ 5. Production.

1. *Area.*—At the 30th June, 1939, there were 213,899 square miles held under lease, licence and permit in the Northern Territory, comprising 162,793 square miles of pastoral leases, 696 square miles of pastoral permits, 47,150 square miles of grazing licences, 262 square miles of agricultural leases and 2,998 square miles of miscellaneous leases.

2. *Agriculture.*—Up to the present agriculture has made little progress in the Territory, although it has been proved that rice, tobacco, coconuts, mangoes, bananas, cotton, various fodder plants, and peanuts can be successfully grown. Expense of

harvesting is, at present, an obstacle to the economic production of rice, and until labour-saving machinery is procured it cannot be produced with profit. There is a large stretch of first-class coconut land on the coast, but hitherto planting has not been attempted on a commercial scale. For the encouragement of primary production a Primary Producers' Board was established in 1931. Peanuts have become the principal crop. In 1937-38 the yield was 495,040 lb. from 1,500 acres. The estimated crop for 1938-39 was 486,080 lb. An area of 1,040 acres was planted, but about 100 acres were not dug. Market conditions are most unsatisfactory, as the southern markets prefer red-shelled nuts to the white-shelled variety grown in the Territory.

3. **Pastoral Industry.**—The pastoral possibilities of certain parts of the Northern Territory were recognized at an early date, and in 1866 stock was 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 Mr. 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 progressed and became the mainstay of the Territory, a great impetus being given to it in 1917 by the opening of extensive meat works at Darwin. Unfortunately the works closed down in 1920, and are still idle. The number of cattle exported by land from the Northern Territory during the year 1938-39 was about 78,200, and the number imported about 430. A favorable season was experienced in the southern portion of the Territory and over 12 inches of rain were recorded in the six months ending June, 1939. Good prices at the opening of the 1939 trucking season caused a rush of fat cattle to the Adelaide market, and consignments were generally of excellent quality. An increasing interest in sheep-raising is being maintained, and the wool clip realized £6,500. Buffaloes thrive in the coastal districts, but their number has been greatly reduced by indiscriminate shooting to obtain the hides.

The estimated number of live stock in the Territory in the last five years is given in the table hereunder :—

NORTHERN TERRITORY : LIVE STOCK.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Goats.	Camels.	Donkeys.	Mules.
1934 ..	35,094	899,679	23,356	626	20,044	319	1,196	496
1935 ...	35,152	900,535	25,483	555	20,455	298	1,056	512
1936 ...	31,056	855,398	11,162	470	17,306	310	1,503	530
1937 ..	31,662	891,640	26,856	388	17,894	311	1,301	404
1938 ..	33,191	899,472	29,901	355	19,427	162	1,323	443

4. **Mining.**—(i) *General.* Alluvial gold-digging in the Northern Territory commenced in 1869, and up to the end of 1880 gold to the value of £79,022 had been produced. In 1881 the gold production reached its maximum, the value for that year being £111,945. During the following years it fluctuated considerably, but as long as the alluvial deposits lasted the output was satisfactory. In the transition period from alluvial to reef mining the industry declined considerably. The production of metals other than gold has suffered on account of the vagaries of prices, and the high cost of transport and of white labour. Owing to the exceptionally high price of gold the search for the precious metal has been stimulated in recent years with an increasing annual production. The principal producer of gold is the Tennant Creek field which gives every indication of increasing production for a number of years to come. Although the mica deposits in the Territory are not exploited systematically or on a large scale, a number of men have been engaged in this class of mining and during the year produced nearly £20,000 worth of mica. Wolfram prices declined during the year and the value of the output was less than that of last year.

(ii) *Mineral Production.* The following table shows the value of the total mineral production for the last five years:—

NORTHERN TERRITORY : MINERAL PRODUCTION.

Year.	Gold.	Tin Ore.	Silver-lead Ore.	Copper Ore.	Mica.	Wolfram.	Tantalite.	Total Value all Minerals.
	£	£	£	£	£	£	£	£
1934-35 ..	44,458	6,036	..	..	15,762	10,380	264	76,900
1935-36 ..	76,001	4,176	..	1,871	7,805	8,748	..	98,601
1936-37 ..	91,543	7,696	..	101	11,003	16,349	226	126,918
1937 ..	100,462	7,205	328	55	12,524	84,832	445	205,851
1938 ..	109,168	3,205	..	4,362	19,712	78,277	..	214,724

The value of all minerals produced to the end of 1938 was approximately £4,209,000.

In 1934 the Governments of the Commonwealth and the States of Queensland and Western Australia agreed to co-operate in the conduct of a geological and geophysical survey of certain areas in the northern parts of Australia, including the Northern Territory. More detailed reference to the survey and its progress will be found in Chapter XII. "Mineral Industry".

5. *Pearl, Bêche-de-Mer, and Other Fisheries.*—In 1884 mother-of-pearl-shell was discovered in the harbour of Port Darwin. Difficulty in working, principally through heavy tides and muddy water, retarded the development of the industry for many years. The production of pearl-shell in 1938-39 amounted to 410 tons of an approximate gross value of £31,500, which represents a decrease of £35,500 on the value for the previous year. Most of the yield was obtained from beds north of King and Liverpool Rivers, and 13 pearling vessels were licensed. The local pearlers, however, encounter considerable opposition from efficient Japanese fleets.

Three fishing licences and two boat licences were issued during 1938-39 in connexion with bêche-de-mer fisheries. Prices were not remunerative, however, and the production was valued at only £252.

The increase in population at Darwin created a firm local demand for fish and, in consequence, the number of persons engaged in the industry increased also. Fourteen half-yearly fishing licences were issued as against five in 1937-38. The price of this commodity averaged between 6d. to 8d. per lb., according to season.

The production of raw salt from the tidal salt pans at Fannie Bay during 1938-39 was 280 tons, valued at £5 12s. per ton. The salt is comparatively free of foreign matter, an analysis revealing an actual sodium chloride content of 98.05 per cent.

§ 6. Land Tenure.

A description of the system of land tenure in force in the Territory will be found in Chapter V. "Land Tenure and Settlement", Official Year Book No. 22.

§ 7. Commerce, Shipping and Air Services.

1. *Trade.*—No record is kept of the trade between the Commonwealth States and Territories. The value of the direct oversea imports and exports for 1901 and for each of the last five years is given hereunder:—

NORTHERN TERRITORY : OVERSEA IMPORTS AND EXPORTS.

Items.	1901.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£	£
Imports (a) ..	37,539	13,221	58,120	44,703	29,406	61,691
Exports (b) ..	29,191	42,330	26,645	6,053	12,729	12,814

(a) British currency values.

(b) Australian currency values.

The oversea imports into the Northern Territory consist largely of petroleum spirit, residual oil and machinery.

2. **Shipping.**—The Territory is dependent for its shipping facilities chiefly on the services of vessels trading between Melbourne and Singapore. In addition to pearlers and other small craft, larger vessels make occasional visits, while a sixty-days' service between Fremantle and Darwin is carried out by the *Koolinda*, belonging to the Western Australian State Shipping Service.

NORTHERN TERRITORY : SHIPPING.

Period.	Arrivals.		Departures.	
	No. of Vessels.	Tonnage.	No. of Vessels.	Tonnage.
1934-35	58	108,306	47	108,909
1935-36	55	117,757	55	117,757
1936-37	100	125,840	104	122,505
1937-38	99	122,960	101	122,961
1938-39	161	181,961	172	179,422

The foregoing figures are exclusive of particulars of coastwise shipping. During 1938-39 fourteen vessels of 285 tons net were entered at Darwin as coastwise.

3. **Air Services.**—Darwin is the first port of arrival in Australia of aircraft from Europe, Singapore and Netherlands East Indies. The air services affecting Darwin at 30th June, 1940 were as follows:—Qantas Empire Airways Ltd., under contract to the Commonwealth Government, operates the Sydney-Darwin-Singapore section of the Empire Flying Boat Service with a regular weekly service in each direction. The MacRobertson-Miller Aviation Co. Ltd. operates twice weekly in each direction between Perth and Darwin, linking up with the Qantas service at the latter point. Guinea Airways Ltd. operates a twice weekly service in each direction between Adelaide and Darwin, and the K.N.I.L.M. Company extended their Amsterdam-Batavia air route to Sydney via Darwin in 1938, with a weekly service in each direction as at 30th June, 1940. On the average six machines arrive at and depart from Darwin during each week.

§ 8. Internal Communication.

1. **Railways.**—Under the agreement made between the Commonwealth and the State of South Australia for the surrender and acceptance of the Northern Territory, which was ratified by the Northern Territory Acceptance Act 1910, the Commonwealth is to construct the Northern Territory portion of the transcontinental railway line (connecting Adelaide and Darwin, via Port Augusta).

The Northern line from Adelaide terminated at Oodnadatta, about 100 miles south of the southern boundary of the Territory, but has been extended to Alice Springs, an addition of 292 miles. The line from Darwin to Katherine River, about 200 miles, has been extended as far as Birdum, 316 miles from Darwin. The completion of the remainder of the gap would give access to broad belts of pastoral and mineral country towards the centre of Australia. The Commonwealth Government acquired on 1st January, 1911, the property in the line from Port Augusta to Oodnadatta (478 miles), and on 1st January, 1926, the control thereof was transferred to the Commonwealth Railways Commissioner.

2. **Posts.**—Postal communication is maintained by vessels belonging to Burns, Philp and Co., Ltd., which carry on a monthly service between the Territory and the Eastern States. In addition, the vessels belonging to the State Steamship Service of Western Australia give a service once every 60 days between Fremantle and Darwin. Mail is carried between Sydney and Darwin by the Qantas Empire Airways Ltd., and between Perth and Darwin by the MacRobertson-Miller Aviation Co. Ltd. Inland, the northern part of the Territory receives its mail via Darwin or by means of the aerial services, while the southern districts are served via Adelaide.

3. **Telegraphs.**—The transcontinental telegraph line, covering a length of 2,230 miles, was completed on the 22nd August, 1872, at a cost of nearly £500,000. The line runs in a northerly direction from Adelaide to Darwin, whence telegraphic communication is provided with Asia and Europe, via Banjoewangie (Java), Singapore and Madras. Between Darwin and Banjoewangie the submarine cable is duplicated.

High-power wireless stations have been constructed by the Commonwealth Government at Wave Hill in the Territory, and at Camooweal, just over the eastern boundary, in Queensland.

§ 9. Finance.

In the Commonwealth finance statements separate accounts are given for Northern Territory administration. Revenue and expenditure for 1938–39 are given below :—

NORTHERN TERRITORY : REVENUE AND EXPENDITURE, 1938–39.

REVENUE.	£	EXPENDITURE.	£
Taxation—		Northern Territory Adminis-	
Customs and excise ..	7,916	tration	280,243
Sales tax	757	Other departments	29,712
Land and income tax ..	9,306	New works	243,980
Probate and stamp duties	1,486	Repairs, maintenance, &c. ..	21,189
Postal, telegraph, and tele-		Railways—	
phone	21,352	Working expenses	269,560
Railways—		New works	29,204
North Australia	50,471	Interest	274,537
Central Australia	137,521	Sinking fund	51,966
Territorial	27,994	Post, telegraph and telephone	25,423
Miscellaneous	36,738	Interest	66,757
Deficiency on year's trans-		Sinking fund	14,044
actions	1,032,304	Unemployment relief	5,890
		Miscellaneous	13,340
Total	1,325,845	Total	1,325,845

AUSTRALIAN CAPITAL TERRITORY.

1. **Introductory.**—In Official Year Books Nos. 4 and 5, information was given in Section XXXI., in regard to the events leading to the selection of the Australian Capital Territory and the necessary legislation and the progress of operations in connexion with the establishment of the capital city. The physiography of the Territory was dealt with extensively and topographical and contour maps accompanied the letterpress, as well as reproductions of the premiated designs for the laying out of the city. Considerations of space, however, preclude the repetition of this information. On the 12th March, 1913, the official ceremony to mark the initiation 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. The Seat of Government Acceptance Act 1938 provides that the Territory shall be known as the Australian Capital Territory. (A special article contributed by Dr. F. Watson, entitled "Canberra Past and Present", appears on p. 454 of Official Year Book No. 24.)

2. **Transfer of Parliament.**—On 9th May, 1927, Parliament House at Canberra was officially opened by His Royal Highness Albert, Duke of York, 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 the 9th May, 1901. (For particulars of the opening ceremony see Official Year Book No. 21, p. 604.)

3. **Administration.**—In Official Year Book No. 18, a summary is given of the development of the administration prior to the taking over of the control of the Territory by the Federal Capital Commission, 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 the Federal Capital Commission was continued until the 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. The new Administration provided for the general control of the Territory by the Minister for Home Affairs, with the assistance of the Department of Public Health in health matters, the Department of Works in the operation of the engineering services and in the construction of works, and the Attorney-General's Department in the administration of the Courts, Police and Probate, and the Registration of Titles.

An Advisory Council to advise the Minister on matters of local concern was established on the 1st May, 1930, by Ordinance under the Act, and a Civic Administrator was appointed under the Ordinance as Chairman of the Advisory Council and to carry on the general administration of the Territory under the Minister and subject to the specific services being undertaken by the other Commonwealth Departments mentioned.

The Advisory Council consisted of the Secretary, Department of Home Affairs; the Director-General of Health; the Secretary, Department of Works; the Civic Administrator; and three residents elected for two years under a system of adult franchise.

On the 12th April, 1932, the Departments of Home Affairs and Works were abolished and the Department of the Interior was established in lieu thereof. The office of Civic Administrator was abolished, and the constitution of the Advisory Council was altered to provide that the nominated members of the Council should consist of the Director-General of Health, and three officers of the Department of the Interior, namely, the Assistant Secretary (Works and Services), the Surveyor-General and Chief Property Officer, and the Assistant Secretary (Civic Administration). Subsequently the Constitution of the Council was altered to provide for the replacement of the Director-General of Health by an Officer nominated by the Minister for Health, and for the altered designation of the Assistant Secretary (Works and Services), to that of Assistant Secretary (Canberra Services).

Under the new administration, the general control of the Territory is exercised by the Minister for the Interior, but the specific services undertaken by the Department of Health and the Attorney-General's Department are being continued by those Departments.

4. **Progress of Work.**—The general progress of the work of construction up to the time the Territory was taken over by the Commission is outlined in Official Year Book No. 18. Later progress made under the Commission is described in Official Year Book No. 22.

Structures completed after the commencement of the Departmental form of administration comprised the Australian Institute of Anatomy with laboratories and accommodation for the museum of Australian fauna; laboratories of the divisions of Economic Entomology and Plant Industry of the Council for Scientific and Industrial Research; and a public swimming pool equipped with a modern filtration chlorination plant.

During the year 1939–40 the following buildings were completed:—299 residences, alterations and additions to Government House, a new High School at Acton, Technical Buildings and residences for personnel at the Naval Transmitting and Receiving Stations, and a Drill Hall. The following architectural works were in progress:—Canberra Royal Australian Air Force Station, various buildings at No. 2 Empire Air Training Depot, additions to complete the National War Memorial, Transport Building extensions at Kingston, Barton Hostel, and 129 residences.

The following engineering works were commenced or completed:—Tennis courts were constructed at the Royal Military College, and practically all internal roads at the College were surfaced with bitumen. Water Supply, sewerage and stormwater drainage services were provided for the Harman and Belconnen Naval Radio Stations and for the

Canberra Royal Australian Air Force Station, where also a large amount of work was done on grading of pavement areas around hangars. The concrete floors of the hangars were commenced and a start was made on the road system for the station, including an approach road. The roads surrounding Acton High School were constructed, and the sports fields at the school, including a football ground, hockey ground, three basket ball courts and five tennis courts, were graded, as was the whole of the landing field surface at the Canberra Aerodrome. Construction of sub-divisions was carried out at Sections 35, 74 and 21 Ainslie, the whole of the southern half of Turner between University-avenue and Haig Park, Sections 33 to 39 and 45 to 48 Griffith, Sections 9 to 11, 33, 35 and 40 to 44 Forrest, Sections 4 to 8 Deakin, and Section 20 Kingston; these areas were provided with water supply, sewerage and stormwater drainage services, and roads, streets, footpaths and kerbing were either constructed or commenced.

Other city works were some thousands of feet of kerbing and a large amount of bituminous surfacing of existing streets, a large stormwater drain between the War Memorial and Reid, roads, streets and services at the Fire Station block, extensive improvements to the water supply for the Golf Links, a new water supply ring connecting the northern suburbs with Black Mountain Reservoir, the piping of a section of the creek through Manuka, a new main sewer to serve the north-western suburbs, a new service reservoir at Red Hill and a new 30-in. main between Mount Stromlo and Red Hill, and the duplication of the Canberra sewerage works. Further works in connexion with services include a water supply to the Oaks Estate and the provision of improved roads within that subdivision, an improved water supply to the Cotter River recreation area and gauging weirs on the upper Cotter and upper Condor Rivers, a new pump for the Cotter Pumping Station and the necessary enlargement of the station buildings, and about 10 miles of water main were cement lined *in situ*.

Improvements to country roads were carried on generally throughout the Territory. The worst section of the Cooma Road was brought up to highway standard and an additional 2 miles surfaced with bitumen, the Cotter Road was further straightened and improved and about 3 miles were surfaced with bitumen, several difficult turns were eliminated from the Brindabella Road, the Mount Franklin Road was extended to the Chalet, and a bituminous road was provided to the summit of Red Hill and to the aerodrome. New bridges were erected over the Gudgenby River at Naas and on Majura Lane, while new concrete piers were provided for the Burbong Bridge as a first stage in its reconstruction.

Electrical works carried out comprise the following:—Extension of high tension mains to Turner, North Ainslie, Griffith, Oaks Estate, Kingston, and the Royal Australian Air Force Station, and completion of ring mains—Acton to City and Fyshwick to Molongo farms; extension of low tension reticulation to Turner, North Ainslie, Braddon, Reid, Oaks Estate, Kingston, Griffith and Forrest. Two additional sub-stations were installed at the Royal Australian Air Force Station, Griffith and Turner, and one each at the Patents Office, Oaks Estate, North Ainslie, Kingston, Reid and control station, Kingston. Electrical installations were carried out to the Canberra Technical College, Royal Australian Air Force Station, cottages, public offices and training camps, and extensions were made to street lighting.

Mechanical engineering services included the following:—Petrol and oil supply at hangars and emergency sites, kitchen equipment and hot water supply at Mess buildings and Ablution block serving hutments, and installation of sewerage pump at the Royal Australian Air Force Aerodrome. Installation of mechanical services were commenced at the No. 2 Training Camp, Kingston. Installations of heating and or hot water services were completed at the War Memorial, Hotel Canberra, Government House, the new section at Acton Offices and the Insectary at the Council for Scientific and Industrial Research Institute. Other installations in hand were a semi air conditioning plant lift and other mechanical services at the Patents Office, a new coal room and refrigerating plant at Brassey House, a ventilating fan in the kitchen at the Hotel Ainslie, an incinerator with sawdust extraction plant at the stores yard, a new pumping plant at the Cotter pumping plant, and standby Diesel driven generating sets with auxiliary equipment at the Royal Australian Naval Wireless Station, Belconnen.

Private building was again active during the year. The most important works consisted of the erection of several blocks of residential flats and extensive alterations and additions to Hotel buildings. The building of the first portion of a new Anglican Church was completed. Progress in cottage construction by private individuals was maintained.

5. **Forestry.**—A considerable amount of reforestation work has been undertaken, and plantations have been established at Uriarra, Mount Stromlo, Pierce's Creek and Kowen. Experimental plots have also been established in the Brindabella mountains and silvicultural work is being carried out at Black Mountain.

The total area of plantations to 30th June, 1939, was 11,000 acres. Forestry operations were begun on Mount Stromlo in 1915, and up to 1925 approximately 700 acres had been planted with pine and other trees. The plantings up to this time were chiefly on aesthetic lines, but since the initiation of the wider programme, arrangements have been made for pruning and thinning, and sawmill timber is now being obtained from the logs resulting from thinning operations. The output of sawmill logs from thinnings is gradually improving and has increased from 21,762 super. feet in 1930-31 to 500,000 super. feet in 1938-39.

In 1926 a comprehensive review was undertaken of the Territory's potentialities in regard to forest development. A system of forestry management was instituted in the existing forest areas, and a considerable amount of survey and assessment work has been completed. In the initial stages *pinus radiata* was most extensively planted, but, as a result of experimental work, plots of better quality pines on a longer rotation, such as *pinus ponderosa* and *laricio*, were planted during recent years.

6. **Lands.**—(i) *In the Australian Capital Territory.* 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.

As considerable portions of the Territory lands are not required in connexion with the establishment of the city, large areas have been leased under special improvement conditions in regard to the extermination of noxious weeds and the destruction of rabbits and other pests. The lands are classified into three grades of agricultural and three grades of grazing land. About 319,469 acres comprising 440 leases are at present held under lease for periods varying from quarterly tenure to 25 years.

Auction sales of city leaseholds are described in Official Year Book No. 22, p. 599.

Five leases under the Church Lands Leases Ordinance 1924-1932, which requires 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 six leases under the Leases (Special Purposes) Ordinance 1925-1936 and two leases under the Leases Ordinance 1918-1937 have been granted for church and scholastic purposes.

The total number of leases granted under the City Area Leases Ordinance, not including surrendered leases, at the end of the financial year 1938-39 was 439, representing a capital value of £209,763. During the year 66 new leases were granted. The number of business and residential blocks surrendered to or determined by the Commonwealth to the end of the year was 263.

Under the terms of the City Area Leases Ordinance 1936-1938 each block is leased for a period of 99 years at a rental of £5 per cent. per annum of the unimproved capital value as assessed by the Commonwealth or bid at auction. In conformity with the general reduction of interest in consequence of the financial crisis rentals under this Ordinance have been reduced to 4 per cent. of the unimproved capital value until 30th June, 1941.

(ii) *In the Jervis Bay Territory.* The Commonwealth has 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. 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. Leases have been granted over an area of approximately 12,812 acres in the Jervis Bay Territory.

A scheme for the use by tourists of the residences and other buildings at Jervis Bay has been put into operation, and it has proved a considerable attraction, affording a seaside resort for residents of the Territory as well as for visitors from other places.

7. **Railways.**—Canberra is connected with the railway system of New South Wales by a line $4\frac{1}{2}$ miles long to Queanbeyan. This line was opened for goods traffic on the 25th May, 1914, and for passenger traffic on the 15th October, 1923. The railway terminus is situated in the area known as Kingston.

A direct passenger service is in operation connecting Canberra with Sydney and Melbourne, and trains leave both cities for Canberra daily. Improved facilities for goods traffic have also been provided.

A trial survey of a line between Canberra and Jervis Bay has been made, and plans prepared to enable an estimate of the cost of the line to be obtained, but no action in regard to this project is contemplated at present.

Under the provisions of the Seat of Government Surrender Act 1909 of New South Wales and the Seat of Government (Acceptance) Act 1909 of the Commonwealth an agreement exists between the Commonwealth and the State of New South Wales in relation to the construction of a railway from Canberra to Yass—a distance of approximately 43 miles, of which about 32 miles extend through New South Wales. The State is required to construct its portion of the line as soon as the Commonwealth builds a line to the boundary of the Territory.

8. **Population.**—The census return of population on the 30th June, 1938, was 11,290 in the Australian Capital Territory and 272 in the Jervis Bay Territory, or a total of 11,562 persons. The estimated population at 30th June, 1940, was 12,755.

9. **Live Stock.**—The number of live stock depastured at 31st March, 1939, were:—Horses, 1,195, cattle, 7,957, and sheep, 245,540.

10. **Educational Facilities.**—Arrangements have been made with the New South Wales Education Department to continue for the time being the administration of education in the Territory, the expenditure involved being refunded annually to the State. There are eleven schools in the Australian Capital Territory and two in the Jervis Bay Territory. The largest primary school is situated at Telopea Park, Barton, with accommodation for 600 scholars. Secondary education is provided at the Canberra High School, Acton. It has accommodation for 550 scholars, and its curriculum provides a standard of education comparable in range of subjects with that provided at the best of the Government High Schools in New South Wales, thus permitting scholars to qualify for entrance to the Universities. The School also provides for Commercial and Junior Technical Classes, and there is an Evening Continuation School attached with Evening Commercial and Matriculation Classes.

The Canberra Technical College at Kingston is provided with modern equipment and machinery for supplementary courses for apprentices, journeymen desirous of improving their trade qualifications, and others desirous of taking any of the special courses available.

The supplementary trade courses include fitting and machining, motor mechanics, carpentry and joinery, bricklaying, plastering, house painting and paperhanging, electrical fitting and electrical mechanics, and plumbing and sheet metal work. Special courses include autogenous welding, drainage, radio mechanics and telegraphy, show card writing, signwriting, woolclassing, dressmaking, cookery and housecraft.

Provision has been made at the Canberra Technical College for the technical training of aircraftsmen for the Royal Australian Air Force under the Commonwealth Training Scheme, in batches of 200 in a course of sixteen weeks duration. In addition provision has been made for special evening classes to afford assistance to members of the forces in passing technical trade tests.

Education facilities from kindergarten to secondary are provided free of cost and comparatively low fees are charged for tuition at the Canberra Technical College and Evening Continuation School.

A technical school has been established at the Canberra Technical College to prepare youths who have completed two years super-primary school work for apprenticeship

trades and semi-skilled occupations. The course of study includes Mathematics, English, Civics, and workshop practice in carpentry, bricklaying, motor mechanics and plumbing and sheet metal work.

There are at present four private schools in the Territory. The Canberra Grammar School, the Canberra Church of England Girls' Grammar School, and St. Christopher's Convent School provide for primary and secondary education, and St. Patrick's School provides primary and sub-primary education.

Reference to the establishment of the Canberra University College will be found in Chapter VI. "Education".

II. Finance.—(i) *Financial Year 1938-39.* Receipts and Expenditure for the financial year 1938-39 are given in the table hereunder:—

AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND EXPENDITURE, 1938-39.

Receipts.		Expenditure.				
Items.	Amount.	Items.	Capital.	Main-tenance.	Other.	Total.
	£		£	£	£	£
Rent and rates ..	165,097	Architectural services ..	290,095	31,770	..	321,865
Electricity ..	49,920	Engineering services ..	151,407	84,882	..	236,289
Motor registration and fees ..	15,073	Lands, Forestry ..	12,461	..	..	12,461
Hospital tax ..	10,748	Loans for housing, net ..	23,922	..	..	23,922
Hotels ..	26,403	Sundry works and services ..	10,512	42,320	..	52,832
Transport and City Bus Service ..	107,838	Education ..	..	..	37,518	37,518
Sales of goods, manufactured products, etc. ..	847,212	Hospital—Working expenses ..	..	..	13,250	13,250
Miscellaneous ..	58,489	Interest and Sinking Fund ..	..	..	291,664	291,664
		Administrative ..	..	..	81,873	81,873
		Hotels—Working expenses ..	..	..	27,312	27,312
		Transport and City Bus Service—Working expenses ..	..	..	111,766	111,766
		Factory Stores, etc.—Working expenses ..	..	..	847,519	847,519
		Miscellaneous—Police, Fire Brigade, etc. ..	..	..	55,059	55,059
Total Receipts ..	1,280,780	Total Expenditure ..	488,397	158,972	1,465,961	2,113,330

(ii) *From 1901-2 to 30th June, 1939.*—The total receipts and expenditure from 1901-2 to the 30th June, 1939, were as follows:—

AUSTRALIAN CAPITAL TERRITORY: RECEIPTS AND EXPENDITURE TO 30th JUNE, 1939.

Receipts.		Expenditure.	
Items.	Amount.	Items.	Amount.
	£		£
Commonwealth Treasury—		Lands ..	906,639
Parliamentary Appropriations—		Engineering works ..	4,269,496
Revenue ..	5,265,698	Architectural works ..	2,890,539
Loan ..	5,826,051	Other capital expenditure, sundry debtors, etc. ..	979,127
			9,045,801
		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. ..	2,045,948*
Total Receipts ..	11,091,749	Net Expenditure ..	11,091,749

* Exclusive of interest, £3,073,024 net.

The foregoing table was prepared by the Department of the Interior and does not include part cost of National Buildings—Parliament House, the Secretariats, etc., £1,731,914, Federal Highways within the Territory, Queenbeyan—Canberra Railway and Housing Loan, etc., £2,180,802, and Loans for Housing, £207,054.

NORFOLK ISLAND.

1. **Area, Location, etc.**—Norfolk Island, discovered by Captain Cook in 1774, is situated in latitude 29° 3' 45" South, longitude 167° 56' 29" East. 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, 630 miles. The length of the coast line is 20 miles, and its form that of an irregular ellipse. Except on the south-west, inaccessible cliffs rise from the water's edge. The climate is equable, the temperature ranging between 49° and 85°; with a mean of 68°. The average annual rainfall is 52 inches. It has been said that the salubrious climate, coupled with the beauty of its land and sea scapes, should combine to render Norfolk Island "the Madeira of the Pacific." The island is visited annually by a number of tourists, and with improved shipping facilities this traffic is likely to increase. A tourist bureau has been established on the Island.

2. **Settlement.**—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 made 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 thence to Norfolk Island in 1856. The new community numbered 94 males and 100 females—and were the descendants of British sailors and Tahitian women. Two of these were still alive at 30th June, 1939.

3. **Administration.**—In 1856 the 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 by the Federal Parliament as a territory of the Commonwealth. From July, 1914 until 1st January, 1929, Norfolk Island was administered by the Department of Home and Territories, but it is now administered by the Territories Branch of the Prime Minister's Department through an Administrator. An amending measure, the Norfolk Island Act 1935, provides for the establishment of an Advisory Council of eight elected members to advise the Administrator on any matter affecting the Island.

4. **Population.**—The population at the 30th June, 1939, was 983, consisting of 513 males and 470 females. In the year 1938–39, 17 births, 10 deaths, and 5 marriages were recorded. The average age of the persons who died was 58 years. Departures from the Island exceeded arrivals by 83, the respective figures being departures 335, arrivals 252.

5. **Live Stock.**—The latest returns of live stock show that in May, 1938, there were on the island 1,972 cattle, 679 horses, 235 sheep and 82 pigs. In addition, there were 4,873 head of poultry.

6. **Production, Trade, etc.**—The soil throughout is good and is specially suitable for the cultivation of bananas, citrus and other fruits. The Canadian Wonder bean seed is one of the staple crops of the Island. Since the promulgation of the Ordinance regulating the export of seed the area planted with bean seed has increased, but the crop in 1938–39 was affected by dry weather conditions and the exports amounted to only 568 bushels, compared with 923 bushels in 1937–38 and 1,453 bushels in 1936–37.

Apart from the bean, agriculture generally has been depressed, but the prospects are now brighter. A modern pulping factory has been erected on the Island and 20,729 gallons of passion fruit pulp were exported during 1938–39. The pulping of cherry guavas for jelly was also experimented with and 6,270 lb. were shipped to Sydney.

The citrus trees on the island in full bearing are capable of producing over 3,000 cases of fruit, but owing to adverse weather conditions the crop will not exceed 600 cases in 1938-39. A ready market is available in New Zealand, where the embargo on Norfolk Island citrus fruits and bananas has been removed.

A demonstration farm was established in 1938 for the study of crop diseases and suitable farming methods for the island.

Large numbers of whales pass the island throughout the season, but whaling has not been conducted for a number of years. The industry was recently revived by the formation of a whaling company. Three boats have been fitted out and manned by full crews, and it is hoped that the venture may prove successful. The preserved fish industry which was established some years ago has been abandoned, and the fish-freezing factory has also ceased operations. Such fish as trevalla, kingfish, schnapper and many others abound in the waters around the Island.

On the 30th June, 1939, the total area of land held under freehold and Crown leasehold amounted to 6,767 acres, consisting of 4,520 acres freehold and 2,247 leasehold.

Imports and exports for the last five years are given hereunder; the values are expressed in Australian currency:—

NORFOLK ISLAND : IMPORTS AND EXPORTS.

Country.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
IMPORTS.					
From—	£	£	£	£	£
Australia	26,260	28,657	33,825	31,188	27,427
New Zealand .. ..	..	..	2	119	..
Pacific Islands	258	140	210	239	163
Total	26,518	28,797	34,037	31,546	27,590
EXPORTS.					
To—	£	£	£	£	£
Australia	8,170	8,283	11,611	10,328	16,110
New Zealand .. ..	..	921	..	911	623
Pacific Islands	148	203	268	268	237
Total	8,318	9,407	11,879	11,507	16,970

Duties of Customs are levied on the following goods imported into Norfolk Island for home consumption:—

IMPORT DUTIES SCHEDULE.

Article.	Unit.	Rate of Duty.	Article.	Unit.	Rate of Duty.
Spirits	pr. gal.	s. d. 30 0	Chicory	lb.	0 3
Ale, beer, porter and cider	gal.	2 6	Petroleum, etc.	gal.	0 3
Wine, still—			Kerosene, etc. .. ..	..	0 3
Australian .. ..	..	5 0	Residual oil, etc. .. ..	..	0 3
Other .. ..	..	10 0	Oil, n.e.i. .. ..	..	0 3
Wine, sparkling—			Lubricating oils .. ..	..	0 3
Australian .. ..	..	15 0	Sugar	cwt.	3 0
Other .. ..	..	25 0	Molasses, etc. .. ..	..	2 0
Tobacco, manufactured or unmanufactured—			Biscuits	lb.	0 1
Australian leaf	lb.	2 0	Candles .. ..	..	0 1
Other leaf .. ..	..	4 0	Confectionery .. ..	..	0 3
Cigars and cigarettes .. ..	..	6 0	Dried fruits—		
Tea .. ..	..	0 3	Australian .. ..	..	0 1
Coffee .. ..	..	0 3	Other .. ..	..	0 3
			Jams, jellies and pre- serves .. ..	..	0 1

No duties are chargeable on goods imported into Australia from Norfolk Island if the goods (a) are the produce or manufacture of Norfolk Island; and (b) are shipped direct to Australia; and (c) are not goods which if manufactured or produced in Australia would be subject to any duty of excise.

7. **Communication.**—The “all-red” cable from Great Britain via Vancouver, Fanning Island and Fiji, bifurcates at Norfolk Island, one line connecting with New Zealand, the other with Brisbane.

An alternate 12 and 30 days’ shipping service to the Territory is maintained by the vessels of Burns, Philp & Co. Ltd., Sydney, under the terms of the contract with the Commonwealth Government for the maintenance of shipping services to the Pacific Islands.

On one voyage the SS. *Morinda* leaves Sydney, calls at Lord Howe Island and Norfolk Island and then proceeds to the New Hebrides, returning to Sydney by the same route. The same vessel then makes a short trip to Norfolk Island and returns to Sydney calling at Lord Howe Island on both the outward and inward voyages.

The journey from Sydney to Norfolk Island occupies four days.

8. **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 agriculture, woodwork, metalwork, etc. The headmaster and one assistant teacher 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, 1939, was 145.

The Court of Norfolk Island presided over by a Chief Magistrate 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 has 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.

9. **Finances.**—The whole of the Territorial revenue together with an annual grant from the Commonwealth Government in aid of the administrative expenses is paid to the credit of the Norfolk Island Trust Fund Account, and all administrative and developmental expenses are paid from that account. The operations for the year 1938-39 were as follows:—

NORFOLK ISLAND TRUST FUND ACCOUNT, 1938-1939.

Items.		Receipts.	Items.		Expenditure.
		£			£
Balance carried forward	..	6,834	Salaries .. .. .	..	5,513
Commonwealth Grant—			Purchase of liquor .. .. .	..	1,832
Ordinary .. .. .	..	4,000	Assistance to passion fruit	..	
Customs duties .. .. .	..	2,390	industry .. .. .	..	687
Sale of liquor .. .. .	..	2,865	Repairs and maintenance .. .. .	..	1,411
Miscellaneous .. .. .	..	2,530	Miscellaneous .. .. .	..	4,122
			Balance .. .. .	..	5,054
Total		18,619	Total		18,619

PAPUA.

§ 1. General Description.

1. **Early Administration.**—Particulars of the early administration of Papua were given in Official Year Book No. 19, p. 576.

2. **Administration by 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 the 18th March, 1902, and was accepted by the Commonwealth by the Papua Act 1905, which came into force by virtue of the proclamation aforesaid. The transfer was made under the authority of Section 122 of the Constitution. The Territory is now under the administration of the Commonwealth, but not included within it, and is divided into magisterial districts.

3. **Area, etc.**—Papua lies wholly within the tropics. The northernmost point touches 5° S. latitude; its southernmost portion, comprising Sudest 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 800 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 90,540 square miles, of which 87,786 are on the mainland, and 2,754 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.

The white population of Papua at the census of the 30th June, 1939, was 1,608, made up of 1,047 males and 561 females. The numbers recorded in previous years were:—1936, 1,203; 1937, 1,323; and 1938, 1,488.

It is not possible to give exact data regarding the number of natives, because a large area of the interior is not yet under complete Government control. The official estimate is 300,000. Such censuses of the native population as have been taken during recent years point to a slight increase. The coloured population, other than Papuans, on 30th June, 1933, was 786, and included many mission teachers from Samoa, Fiji and other Pacific Islands. On the same date, half-castes, with one of the parents a European, were 227. An Immigration Restriction Ordinance prohibits the immigration of persons who fail to pass the dictation test, or who are of bad character, or likely to become a charge upon the public. Exemptions may, however, be granted by the Lieutenant-Governor to persons of special skill required for employment as overseers or foremen.

§ 3. Native Labour, Taxation, Health, etc.

1. **Native Labour.**—Information regarding the conditions connected with the employment of native labour will be found in Official Year Book No. 22, p. 607.

The number of natives who served under contracts of service for various periods during 1938–39 was 16,984 and the approximate number of non-indentured labourers was 2,749; the latter is of course only estimated, and cannot be taken as quite reliable.

2. **Native Taxes.**—Under the Native Taxes Ordinance, 1917–1936, a tax not exceeding £1 per annum may be imposed on natives, excepting native constables, mission teachers, natives unfit for work, and those who have four living children. The proceeds of the tax must be expended on native education, or devoted to purposes directly benefiting the natives, as may be prescribed.

The taxes collected in 1938–39 amounted to £17,089, of which £6,438 was transferred to the Native Education Fund, and £8,666 to the Native Benefits Fund. The Native Education Fund during the year 1938–39 disbursed to primary and technical education £3,652, and to agricultural education £931, leaving a credit balance of £22,753. From the Benefits Fund the expenditure included:—Anthropology, £752; health, £6,339; village improvements, £134; family bonus, £1,467; games in villages, £27; and clerical expenses, £25.

3. **Care of Half-caste Children.**—An Ordinance was passed in 1922 to provide for the care and maintenance of neglected half-caste children. The Ordinance provides that a sum of £26 per annum shall be paid to the Commissioner for Native Affairs by the adjudged father of the child until the child, if a boy, shall reach the age of 16 years, or, if a girl, 18 years.

4. **Health.**—The two principal native hospitals are in Port Moresby and Samarai; but minor hospitals are attached to the out-stations. Hospitals are also conducted by the various mission societies and plantation companies. The mission societies employ two doctors and a number of trained nurses. Several European medical assistants are employed by the Government. In recent years parties of natives have received a six months course of instruction in first aid and in elementary physics, chemistry, anatomy, physiology and pathology at the School of Public Health and Tropical Medicine, University of Sydney. On their return to the Territory the natives are employed as travelling native medical assistants. The chief complaints treated are yaws, ulcers, lung affections, hookworm, venereal and skin diseases. The death rate amongst native labourers was 1.35 per cent. in 1938–39.

§ 4. Land Tenure.

1. **Method of Obtaining Land.**—The broad principles upon which the land laws of Papua are based are (a) no land can be alienated in fee simple; (b) the rental of the land leased is assessed on the unimproved value of the land, and is subject to re-appraisal at fixed periods. The terms upon which land may be leased are very liberal. Leaseholds of the best class of agricultural land may be obtained for 99 years. No rent is payable during the first ten years of the lease on areas less than 1,000 acres. During the following ten years the rent is charged at the rate of 5 per cent. on the unimproved value of the land. The unimproved value of the land is appraised every twenty years and the rent determined accordingly. If on any appraisal the rent is raised by more than one-third the lessee may disclaim the lease and shall be entitled to receive compensation for his improvements. The unimproved value of agricultural land has been fixed at 5s. per acre. Rent is immediately payable on areas exceeding 1,000 acres, and survey fees on areas exceeding 100 acres.

2. **Crown Lands.**—Private sales of land in the Territory have now ceased. The Government buys from the natives, and then leases to planters, who are forbidden to have direct dealings in land with Papuans. The amount of Crown Land purchased from the natives in 1938–39 was 5,871 acres, and the total to 30th June, 1939, 1,796,705 acres. The tenures under which surveyed areas were held at 30th June, 1939, were leasehold 192,099 acres, freehold 23,490 acres, and Crown Land 172,226 acres. The latter area is inclusive of reserves and areas available for leasing. The area of leases granted during 1938–39 was 21,814 acres most of which was intended for rubber plantations. The low price of copra and the more favorable prospects of rubber has diverted attention to the latter culture. More than 70,000 acres are now held under leases for the cultivation of rubber. Crown rents on leaseholds for 1939 amounted to £6,200.

§ 5. Production.

1. **General.**—The products of the Territory are obtained from its agricultural, timber, fishing, mining and manufacturing industries. Gold is the principal mineral mined, and copra occupies the foremost position amongst plantation products followed by rubber. Portions of the Territory appear well suited for cotton cultivation, and there is a possibility of obtaining petroleum in marketable quantities. Bounties are paid by the Commonwealth Government on cocoa beans and shells, hemp and coir, sago, vanilla beans, bamboos and rattans, spices and kapok produced in the Territory and imported direct to Australia for home consumption.

2. **Agriculture.**—(i) *Soil and Rainfall.* Rich soils at varying elevations and heavy and evenly distributed rainfall favour the cultivation of a variety of tropical products including sugar-cane, coconuts, sago palm, bread fruit, dyewoods, spices, ginger, nutmegs,

bananas and other fruits. There are large areas of rich alluvial and volcanic soils along the coast, and fertile land is found at elevations up to 6,000 feet. Heavy rainfalls occur, except over a belt of country which runs back from the coast to the hills, and which has its dry season from May to November. This "dry" area is admirably suited for the production of tobacco, fibres, cotton, etc. There are 21 meteorological stations throughout the Territory, and an economic museum and agricultural library have been established.

(ii) *Plantations.* Agricultural settlement has been mostly in the Central and Eastern Divisions with coconuts and rubber as the principal crops. The natives are compelled by an ordinance to plant coconuts for food supply. In addition to the coconuts in these plantations, many more are planted over small and widely scattered areas by the older natives in accordance with custom. The Native Plantations Ordinance provides for the establishment of plantations in which half of the proceeds is paid to the natives entitled thereto, and the remaining half paid into the Native Education Fund. The following table shows the areas under the different crops during the past five seasons :—

AREA UNDER CULTIVATION.

Crop.	1934.	1935.	1936.	1937.	1938.
	Acres.	Acres.	Acres.	Acres.	Acres.
Coconuts	49,033	47,642	48,188	45,207	44,719
Rubber	8,933	9,591	10,270	10,956	12,809
Sisal hemp	362	150	150	150	700
Kapok	86	128	168	119	84
Coffee	398	388	368	271	248
Rice	21	27	..	..	..
Sugar	54	50	..	..	..
Mauritius beans	80	..	..	..	..
Other	479	652	801	933	664
Total	59,446	58,628	59,945	57,636	59,224

At 30th June, 1939, the London market price for hot-air dried copra was £11 7s. 6d. per ton as compared with £10 12s. 6d. at 30th June, 1938. Rubber at the later date was 8d. per lb. compared with 7½d. per lb. on 30th June, 1938.

(iii) *Government Plantations.* There are two Government plantations, the Orangerie Bay coconut plantation and the Kemp Welch rubber plantation, both of which reported net profits on the year's undertakings.

3. *Forestry.*—According to the Commonwealth Inspector-General of Forests the principal softwood timber is known as "ilimo," while among satisfactory timbers of the lowlands are "nara," "medobi," and "melila." There are a large number of woods, varying from the softest to the hardest, including beautiful cabinet woods, but research is necessary to determine their usefulness. The development of a coniferous belt at the higher altitudes offers great possibilities. It is believed that teak and sandalwood are well suited for cultivation.

4. *Live Stock.*—At 31st December, 1938, the live stock in the Territory consisted of 355 horses, 8,567 head of cattle, 120 mules, 1,495 goats, 677 pigs, 31 sheep and 5,107 fowls. The introduction of rabbits, foxes, hares and monkeys is prohibited.

5. *Fisheries.*—Pearl-shell fishing occupies an important place in the industries of Papua. Considerable numbers of luggers are licensed, but the returns are mostly credited to Queensland, whose boundary approaches to within a few miles of the Papuan coast. The species of tortoise which supplies the commercial tortoise-shell is also a native of Papua. Bêche-de-mer and trochus are found along the shores and reefs, and form valuable articles of export.

6. Mining.—(i) *Variety of Minerals.* Minerals have been found over a wide range of country. Those discovered so far are gold, copper, tin, lead, zinc, cinnabar, iron, osmiridium, gypsum, manganese, sulphur, graphite, chromite, lignite, platinum and petroleum.

The existence of petroleum has been traced at scattered intervals over a large area. Three companies hold permits under the provisions of the Petroleum (Prospecting and Mining) Ordinance 1938-39 and oil prospecting is being carried on in the Western, Delta, Gulf and Central Divisions.

Of precious stones, only the topaz and beryl have been obtained. Large beds of apparently good coal also exist.

(ii) *Gold.* Gold was discovered in 1888 and the search gradually spread over every division, finds being reported wherever the explorers went. The estimated quantity in fine ounces and the value of the gold yield for the last five years are given below :—

PAPUA: GOLD YIELD.(a)

1934-35.		1935-36.		1936-37.		1937-38.		1938-39.	
Quantity. (b)	Value.								
Fine oz. 16,487	£ 144,073	Fine oz. 19,254	£ 167,046	Fine oz. 21,605	£ 187,975	Fine oz. 25,835	£ 223,160	Fine oz. 35,808	£ 325,116

(a) Valued at average price realized for fine gold in Australia.

(b) Estimated.

Most of the rivers, with the exception of those flowing into the Gulf of Papua, have been declared open to gold-dredging, and good yields have been obtained. The total value of gold won to 30th June, 1939, was £2,842,317.

(iii) *Copper.* Exports of copper during 1938-39 amounted to £5,041. In addition copper matte to the value of £29,614 was also exported. The principal value of the latter item is its gold content.

(iv) *Other Minerals.* Some good samples of galena (sulphide of lead) have been obtained, while cinnabar (sulphur of mercury), graphite (or plumbago), zinc-blende, native sulphur, and other minerals are known to exist. In 1924 a deposit of lignite was discovered on Smoky Creek, a tributary of the Era River.

A mineral laboratory and museum have been fitted up, and are available to prospectors and others interested.

7. *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 are at least 10,000,000 h.p. available for this purpose.

§ 6. Trade.

1. *Customs Tariff.*—In the Schedule to the Customs Tariff of Papua 136 items are mentioned of which approximately one-third are on the free list consisting of a number of foodstuffs and certain manufactures for use in the development of the Territory or its industries. Where duties are imposed they are generally on a 10 per cent. ad valorem basis, with the exception of ale, spirits, beverages and tobacco on which high revenue rates are imposed. Preference is given to Australian wines. On the 16th July, 1931, a primage duty of 4 per cent. ad valorem was imposed on all goods whether dutiable or not in addition to the ordinary customs dues; the rate was subsequently reduced to 2½ per cent. and the duty ceased to operate on 1st July, 1937. The value of imports into Papua during 1938-39 was £514,808 and the duty collected, £54,606.

The sum of £161 was received in export duties which are levied on pearl-shell, gold and copra, in the latter case only on the excess above £20 per ton of a certain declared value deemed to be the London market price.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced and imported direct from Papua (see Chapter XXIV. "Trade"), and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territory.

2. Imports and Exports.—Comparative tables of imports and exports during the past five years are given hereunder. The values of exports are expressed in Australian currency but it is not possible to determine accurately the meaning of the £ in the table of imports.

PAPUA: IMPORTS AND EXPORTS.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
IMPORTS.					
	£	£	£	£	£
Ale, spirits and beverages ..	8,732	9,170	11,362	14,453	14,818
Tobacco and manufactures ..	23,297	21,075	25,637	24,213	27,466
Agricultural products and groceries	74,945	85,205	114,621	143,937	138,551
Textiles, felts, furs, attire, etc. ..	30,127	30,985	40,987	45,492	37,712
Metals and machinery ..	49,551	49,389	98,875	124,277	76,068
Oils, paints and varnishes ..	14,179	17,327	27,519	37,139	33,331
Earthenware, cement, glass, etc.	2,730	2,687	5,078	6,969	5,585
Drugs and chemicals ..	8,143	7,444	9,596	12,904	12,828
Wood, wicker and cane ..	3,385	4,729	7,620	14,918	13,076
Jewellery and fancy goods ..	4,699	7,722	9,171	9,495	7,756
Leather and rubber ..	5,182	5,204	6,288	6,748	8,076
Paper and stationery ..	4,264	5,105	6,317	8,569	8,521
Miscellaneous ..	23,510	49,748	58,633	126,479	94,273
Government stores ..	16,555	22,025	30,352	55,904	36,747
Total ..	269,299	317,815	452,056	631,497	514,808
EXPORTS.					
	£	£	£	£	£
Bêche-de-mer ..	4,455	1,802	3,939	1,363	2,506
Coffee beans ..	7,083	5,217	7,536	6,606	6,911
Copra ..	57,597	100,681	191,808	91,166	57,999
Coconut, desiccated ..	37,895	42,467	47,137	52,628	48,140
Gold ..	68,922	81,034	87,003	108,141	152,103
Pearls ..	5,742	2,395	1,956	2,400	15
Rubber ..	79,031	89,467	124,174	129,448	114,949
Trochus-shell ..	11,750	13,609	12,581	8,578	9,200
Other ..	22,268	18,485	47,857	35,263	98,335
Total ..	294,743	355,157	524,001	435,593	490,158

The trade of the Territory reached its maximum in 1925-26 when imports were valued at £470,774 and exports at £685,896. Prices for both copra and rubber were high about that time and the copper mines were producing freely.

3. *Direction of Trade.*—Particulars of the countries of origin of the imports into Papua and the destination of the goods shipped therefrom are shown below for the past three years:—

PAPUA : DIRECTION OF TRADE.

Country.	Imports.			Exports.		
	1936-37.	1937-38.	1938-39.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£	£
Australia	219,007	305,894	239,105	332,165	352,923	409,408
United Kingdom ..	72,580	87,910	56,699	55,338	32,622	25,840
Other British	20,717	22,453	45,313	6,245	6,477	17,030
Europe	18,761	35,839	23,966	97,392	29,915	11,024
Japan	12,888	17,969	14,858	8,381	5,509	7,582
Asia, excluding Japan	30,549	35,730	38,960	3,080	1,363	2,425
Dutch East Indies and Philippine Islands ..	20,657	34,381	21,288	..	3,017	11,519
U.S.A.	56,470	89,847	73,446	21,400	55	576
America, Other	427	1,474	1,173	..	..	..
Morocco .. ..	..	..	..	..	3,712	4,154
Total	452,056	631,497	514,808	524,001	435,593	490,158

§ 7. Finance and Shipping.

1. *Finance.*—The revenue and expenditure for the last five years were as follows:—

PAPUA : REVENUE AND EXPENDITURE.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Revenue—					
Customs	43,428	46,132	57,443	58,539	54,606
Commonwealth Grant ..	42,500	42,500	42,500	42,500	42,500
Lands	5,319	5,177	6,531	6,708	6,013
Fees, fines, etc.	6,199	5,600	6,148	7,065	9,501
Other	(a) 55,165	(a) 66,279	(a) 59,169	67,996	53,203
Total	152,611	165,638	171,791	182,808	165,823
Expenditure—					
Medical	13,398	16,203	16,718	20,884	22,075
Ordinary Votes	(b) 120,723	(b) 129,282	(b) 127,926	122,536	116,277
Public Works	15,504	17,597	23,503	35,828	25,457
Native Affairs	2,848	2,739	2,773	3,854	2,522
Total	152,473	165,821	170,920	183,102	166,331

(a) Includes Commonwealth grant to rubber growers £19,023 in 1934-35, £19,747 in 1935-36 and £6,871 in 1936-37, and Commonwealth grant for mining development, £5,000 in 1935-36.
(b) Includes expenditure of Commonwealth special grants.

2. *Shipping.*—The following table shows the number and tonnage of oversea vessels entered and cleared at ports during the past five years. All the vessels recorded in 1938-39 except 57 were of British nationality.

PAPUA : OVERSEA SHIPPING.

Year.	Vessels.	Tonnage.
1934-35	177	341,537
1935-36	194	371,980
1936-37	181	356,476
1937-38	243	482,981
1938-39	215	461,199

Throughout, the figures are exclusive of ships of war and Government vessels.

§ 8. Progress of Papua.

As already stated in § 1, *supra* the Territory was placed under the Commonwealth control on 1st September, 1906. The following table indicates the progress that has been made since that date :—

PAPUA : STATISTICAL SUMMARY.

Items.	Year ended 30th June—			
	1907.	1937.	1938.	1939.
White population	690	1,323	1,488	1,608
Native labourers employed	2,000	15,942	18,478	19,733
Territorial revenue	£21,813	£122,420	£140,308	£123,323
„ expenditure	£45,335	£164,048	£183,102	£166,331
Value of imports	£87,776	£452,056	£631,497	£514,808
„ exports	£63,756	£524,001	£435,593	£490,158
Area of plantations acres	1,467	59,945	57,636	59,224
Meteorological stations established	3	20	21	21
Gold yield fine oz.	12,439	21,605	25,835	35,808

MANDATED 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 1,000,000 square miles. The coast of the Territory not having 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 :—

AREA OF TERRITORY OF NEW GUINEA.

Particulars.	Approximate Area.	
	Sq. Miles.	
North East New Guinea (also called "The Mainland")	69,700	
Bismarck Archipelago—		
New Britain	14,600	
New Ireland	3,340	
Lavongai	460	
Admiralty Islands	800	
	19,200	
Solomon Islands—		
Bougainville	3,880	
Buka	220	
	4,100	
Total	93,000	

Information regarding physiography and climate will be found in Official Year Book, No. 22, p. 613, and in the *Official Handbook of the Territory*.

§ 2. Government.

1. **The Military Occupation.**—On the 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 in May, 1921.

2. **Mandate.**—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 under Mandate from the League of Nations to the Government of the Commonwealth. 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 hereunder:—

THE COUNCIL OF THE LEAGUE OF NATIONS:—

Whereas by Article 119 of the Treaty of Peace with Germany signed at Versailles on 28th June, 1919, Germany renounced in favour of the Principal Allied and Associated Powers all her rights over her overseas possessions, including therein German New Guinea and the groups of islands in the Pacific Ocean lying south of the Equator other than German Samoa and Nauru; and

Whereas the Principal Allied and Associated Powers agreed that in accordance with Article 22, Part I. (Covenant of the League of Nations), of the said Treaty, a Mandate should be conferred upon His Britannic Majesty to be exercised on his behalf by the Government of the Commonwealth of Australia to administer New Guinea and the said islands, and have proposed that the Mandate should be formulated in the following terms; and

Whereas His Britannic Majesty, for and on behalf of the Government of the Commonwealth of Australia, has agreed to accept the Mandate in respect of the said territory and has undertaken to exercise it on behalf of the League of Nations in accordance with the following provisions; and

Whereas, by the aforementioned Article 22, paragraph 8, it is provided that the degree of authority, control or administration to be exercised by the Mandatory not having been previously agreed upon by the members of the League, shall be explicitly defined by the Council of the League of Nations;

Confirming the said Mandate, defines its terms as follows:—

ARTICLE 1.

The territory over which a Mandate is conferred upon His Britannic Majesty for and on behalf of the Government of the Commonwealth of Australia (hereinafter called the Mandatory) comprises the former German Colony of New Guinea and the former German islands situated in the Pacific Ocean and lying south of the Equator, other than the islands of the Samoan group and the island of Nauru.

ARTICLE 2.

The Mandatory shall have full power of administration and legislation over the territory subject to the present Mandate as an integral portion of the Commonwealth of Australia, and may apply the laws of the Commonwealth of Australia to the territory, subject to such local modifications as circumstances may require.

The Mandatory shall promote to the utmost the material and moral well-being and the social progress of the inhabitants of the territory subject to the present Mandate.

ARTICLE 3.

The Mandatory shall see that the slave trade is prohibited, and that no forced labour is permitted, except for essential public works and services, and then only for adequate remuneration.

The Mandatory shall also see that the traffic in arms and ammunition is controlled in accordance with principles analogous to those laid down in the Convention relating to the control of the arms traffic, signed on 10th September, 1919, or in any convention amending the same.

The supply of intoxicating spirits and beverages to the natives shall be prohibited.

ARTICLE 4.

The military training of the natives, otherwise than for purposes of internal police and the local defence of the territory, shall be prohibited. Furthermore, no military or naval bases shall be established or fortifications erected in the territory.

ARTICLE 5.

Subject to the provisions of any local law for the maintenance of public order and public morals, the Mandatory shall ensure in the territory freedom of conscience and the free exercise of all forms of worship, and shall allow all missionaries, nationals of any State Member of the League of Nations, to enter into, travel and reside in the territory for the purpose of prosecuting their calling.

ARTICLE 6.

The Mandatory shall make to the Council of the League of Nations an annual report to the satisfaction of the Council, containing full information with regard to the territory, and indicating the measures taken to carry out the obligations assumed under Articles 2, 3, 4, and 5.

ARTICLE 7.

The consent of the Council of the League of Nations is required for any modification of the terms of the present Mandate.

The Mandatory agrees that if any dispute whatever should arise between the Mandatory and another Member of the League of Nations relating to the interpretation or the application of the provisions of the Mandate, such dispute, if it cannot be settled by negotiation, shall be submitted to the Permanent Court of International Justice provided for by Article 14 of the Convention of the League of Nations.

The present Declaration shall be deposited in the archives of the League of Nations. Certified copies shall be forwarded by the Secretary-General of the League of Nations to all Powers Signatories of the Treaty of Peace with Germany.

Made at Geneva the 17th day of December, 1920.

3. **New Guinea Act and Statute Law.**—In anticipation of the issuing of the Mandate the Commonwealth Parliament in September, 1920, passed the New Guinea Act 1920, by which the Governor-General was authorized to accept the Mandate when issued. The Territory was, by the Act, declared to be a Territory under the authority of the Commonwealth, with the name of the Territory of New Guinea.

The Act provided for an Administrator, while power to legislate for the Territory was to be exercised by the Governor-General, and provision was made for the observance of safeguards in the interests of the natives as set out in the Mandate.

In 1932 the Act was amended to provide for the establishment of a Legislative Council and an Executive Council for the Territory, the Executive Council to consist of nine members appointed by the Governor-General of whom one shall not be an officer of the Territory. The Legislative Council is empowered to make Ordinances for the peace, order and good government of the Territory. Such Ordinances are subject to

disallowance by the Governor-General who, however, is not now empowered to make Ordinances for the Territory. The amending Act was proclaimed to commence on 2nd May, 1933, and the Act is now entitled the New Guinea Act 1920-1935. The Acts of the Commonwealth Parliament do not (unless expressly so stated) extend to the Territory, but the Laws Repeal and Adopting Ordinance 1921-1937 provides that certain Acts and Ordinances shall be applied thereto.

4. *Legislative Council.*—The Legislative Council consists of the Administrator, the eight official members of the Executive Council and seven non-official members, the latter nominated by the Administrator and appointed by the Governor-General.

5. *Expropriation.*—The Treaty of Peace provided that German nationals resident in her former colonies might be repatriated, and that the property rights and interests of German nationals in former colonies might be retained and liquidated by the Allies, the proceeds being credited to Germany in part payment of the reparation payable by her under the Treaty. In pursuance of these powers, in September, 1920, the property of the principal German companies in the Territory, and in March, 1921, that of a large number of German planters, was vested in the Public Trustee. In 1926 and 1927 these plantations were transferred to private owners.

6. *Departments and Districts.*—The Administration is organized in eight Departments—Government Secretary; Treasury; District Services and Native Affairs; Public Health; Customs; Lands, Surveys, Mines and Forests; Agriculture; and Public Works.

For administrative purposes the Territory is divided into the seven following districts :—New Britain, comprising New Britain and adjacent islands; Morobe; Madang; Sepik (on the mainland); New Ireland, comprising New Ireland, Lavongai and adjacent islands; Manus, comprising the Admiralty Group; and Kieta, the former German portion of the Solomon Islands. Each district is under a District Officer, assisted by a small staff.

7. *Reports to the League of Nations.*—Nineteen reports have been rendered to the League of Nations in compliance with Article 6 of the Mandate, the latest being for the year ended 30th June, 1939.

§ 3. Population.

1. *White Population.*—The number of the white population at various intervals since 1885 is shown in the following table. At the 30th June, 1939, the white population was 4,608, of whom 3,547 were British subjects.

TERRITORY OF NEW GUINEA: WHITE POPULATION.

Year.	Number.	Year.	Number.
1885	64	1936	4,281
1932	3,100	1937	4,286
1933	3,191	1938	4,445
1935	4,176	1939	4,608

2. *Asiatic Population.*—Malays seem to have been the first Asiatics 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 Asiatics 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 Census in 1933 and at 30th June, 1939, numbered 1,930, of whom 1,890 were Chinese and 40 Japanese. The Japanese at the 1933 Census numbered 73. The Chinese provide the skilled artisans of the Territory, and many of them are small traders. Most of the Japanese residents are employed on the plantations, or in shipyards and stores.

3. **Native Population.**—As a large portion of the Territory is not under Government influence it is not possible to obtain reliable figures in regard to the number of the natives.

The following table shows the number enumerated as at 30th June, 1939 :—

TERRITORY OF NEW GUINEA : NATIVE POPULATION AT 30th JUNE, 1939.
(Inclusive of Indentured Labourers.)

District.	Children.			Adults.			Total.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
Kiata ..	10,089	9,026	19,115	15,587	14,677	30,264	25,676	23,793	49,379
Madang ..	24,457	20,222	44,679	37,516	34,849	72,365	61,973	55,071	117,044
Manus ..	2,718	2,344	5,062	5,347	4,695	10,042	8,065	7,939	15,104
Morobe ..	30,434	26,976	57,410	43,812	49,011	92,823	74,246	66,987	141,233
New Britain ..	22,405	19,734	42,139	35,608	26,846	62,454	58,013	46,580	104,593
New Ireland ..	7,423	6,606	14,029	16,916	11,868	28,784	24,339	18,474	42,813
Sepik ..	33,231	27,631	60,862	45,106	45,118	90,224	78,337	72,749	151,086
Total ..	130,757	112,539	243,296	199,892	178,064	377,956	330,649	290,603	627,252

(a) Including 6,031 Mission scholars, constabulary, etc.

The total native population of New Guinea is estimated roughly at about 666,000. Whether the number is increasing or decreasing cannot be ascertained with certainty. The number of natives indentured as labourers, mostly for plantation work, on 30th June, 1939, was 41,675, compared with 41,849 in the previous year.

§ 4. The Natives.

1. **General.**—The natives are divided into two main groups—Melanesian and Papuan—the former, with a few exceptions, constitute the population of the Bismarck Archipelago, the Solomon Islands, and of the coastal districts of the New Guinea mainland, while the latter inhabit the interior of the mainland. Odd tribes of Negrïtes 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*, Pt. V.)

2. **Land Tenure.**—Native customs in regard to the ownership and use of land may be briefly outlined as follows : The ownership and use of the land are generally individual, although, in some rare cases, particularly in North Bougainville, the communal system exists. In districts where a great many coconut palms are growing on native lands it is often found that the land is the property of a chief or of one of the old men of the tribe, and that the coconut palms growing thereon are divided into small groves, and are the property of several members of the tribe. Customs with regard to the use of unoccupied forest lands vary. Right of inheritance to land is almost invariably through the maternal branch. (See Official Year Book No. 17, p. 634, and *Official Handbook of the Territory*.)

3. **Research Work.**—During the German occupation of the Territory a certain amount of research work was carried out, partly by scientific expeditions, and partly by missionaries and by a local resident. For many years an anthropologist was engaged consolidating the work already done, and extending it throughout the Territory. The results of his work appear in special reports.

4. **Education.**—The education of the natives is provided for in the Education Ordinance of 1922–1938 under which the Administrator is authorized to establish schools, grant money therefor, prescribe instruction, and arrange for the training of teachers and other matters. The expenditure on native education in 1938–39 was

£7,946. Though the natives are liable to pay education tax, none has been collected since 1922-23. The European teachers have been seconded from the Education Department of Queensland. During the year ended 30th June, 1939, the following schools were maintained by the Administration:—Native elementary schools and native day schools, Malaguna and Nodup, near Rabaul, and Kavieng and native elementary school at Chimbu (Morobe); native technical school, Malaguna; native agricultural school, Keravat. In addition there are schools for Europeans at Rabaul, Kavieng and Wau. A new school for natives was opened at Tavui during the year.

A considerable amount of educational work is carried out by the missions, the schools maintained being of three classes: (a) elementary schools in villages; (b) intermediate boarding schools at headquarters; and (c) high schools and technical schools. At the end of June, 1939, the various missions maintained 55 training centres, 55 high and technical schools, 150 elementary schools, and 2,290 village schools. The pupils numbered 68,773.

The missions also conduct schools for Chinese children in Rabaul and Kavieng.

The granting of assistance to mission schools is provided for by the Education Ordinance, but no grants have hitherto been made.

5. *Health of Natives.*—In a report dealing with the health of the natives in New Britain submitted before the war, it was stated that “the natives in the districts examined are not degenerate; but they are sick.” The same qualification undoubtedly applies to the native population throughout the Territory.

The diseases taking the greatest toll of native life directly or through lowering vitality are:—Malaria, respiratory diseases, dysentery, frambœsia, yaws, tropical ulcer, hookworm, filariasis and beriberi.

The Health Department of the Administration consists of (i) a staff of medical officers and orderlies, including travelling doctors; (ii) native hospitals at Government stations and sub-stations (its staff also supervises hospitals on plantations); (iii) a laboratory; (iv) training system for natives as medical orderlies; (v) scheme of distribution of medical necessaries; and (vi) two leper-stations. It also undertakes the general oversight of sanitary conditions. The first Infant Welfare Centre in the Territory was opened in Malabunga in August, 1931.

6. *Missions.*—Several mission societies are operating in the Territory. The Society of the Sacred Heart of Jesus works in the Bismarck Archipelago, the Society of the Holy Ghost along the coast of North-East New Guinea from Sek to the Dutch border, the Marists in Buka and Bougainville. These are Roman Catholic Missions. The Protestant Missions are the Australian Methodist Mission in New Britain and New Ireland, the New Zealand Methodist Mission in Bougainville, the Liebenzell Mission in the Admiralty Group, the Lutheran Mission (supported and staffed by the Lutheran Churches in Australia and America), which works along the coast of North-East New Guinea from Sek to the Papuan border, the Melanesian Mission (Anglican) in New Britain, and the Seventh Day Adventist Mission in Bougainville and New Britain. All these societies combine teaching and planting with their missionary work.

§ 5. Land Policy.

1. *Acquisition of Land.*—A short account of the modes of acquiring land appears in Official Year Book No. 19, p. 590, but considerations of space preclude its repetition.

2. *Land Policy of the Present Administration.*—The Land Ordinance 1922-1939 provides for sale as well as leasing of land belonging to the Administration. The divergence from the policy usually adopted by the British in the Pacific (including Papua), which provides for leasehold only, was made with a view to disposal by sale of the freehold properties taken over from Germans, and which until 1927 were controlled by the Expropriation Board. The general land policy of the Administration is based on the leasehold principle. All Administration grants or leases contain a reservation to the Administration of all minerals, including mineral oil. Leases are for

a term of 99 years except where a shorter period is provided. Administration lands, except in towns, are classified by a Land Board into land suitable for agriculture (Class A) and land not so suitable (Class B), and the unimproved value of the land is assessed. In the case of agricultural leases for more than 30 years the rent is 5 per cent. of the unimproved value, with power to remit during the first ten years, and subject to reappraisal every 20 years. Pastoral leases of lands of Class B may be granted for terms not exceeding 30 years, at a rental of 2½ per cent. of the unimproved value, subject to reappraisal every 10 years. Agricultural leases are subject to improvement conditions and pastoral leases to stocking conditions. Leases of town allotments may be granted for terms not exceeding 99 years, at a rent to be fixed at such percentage of the unimproved value as is prescribed.

The following table shows the leases in force on the 30th June, 1939:—

TERRITORY OF NEW GUINEA : LEASES IN FORCE, 30th JUNE, 1939.

Tenure.	No. of Leases.	Area.
		Acres.
Agricultural leases	412	132,443
Pastoral leases	3	9,496
Residence and business leases	330	363
Special leases	90	704
Mission leases	418	1,465
Chinatown leases	188	45
Long period leases from German regime	115	5,189

The area of the Territory is estimated at 59,517,593 acres, of which 894,059 acres had been purchased from the natives by the Administration to the 30th June, 1939. This alienated land comprised 521,057 acres of freehold, 149,705 acres of leasehold, 197,104 acres held by the Administration, and 26,193 acres vested in the Director of District Services and Native Affairs as a trustee for natives. The area alienated in 1938-39 was 152,615 acres.

3. **Registration of Titles.**—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 1924-1939.

§ 6. Production.

1. **General.**—The natives have been described as a people of peasant proprietors, practising a crude form of agriculture. Their gardens and groves furnish but a small amount of produce for oversea trade, and the exports of the Territory grew only as European plantations were made, and natives were employed to work them. In recent years scientific methods of cultivation have been adopted, and production has been greatly increased thereby. Bounties are paid by the Commonwealth Government on cocoa beans and shells, hemp and coir, sago, vanilla beans, bamboos and rattans, spices and kapok produced in the Territory and imported direct to Australia for home consumption.

2. **Agriculture.**—(i) *General.* Under the supervision of the Director of Agriculture soil analysis has been undertaken in different parts of the Territory. A demonstration plantation has been established at Keravat where natives are being trained in tropical agriculture. A laboratory and a herbarium have been established, an entomologist and economic botanist engaged, and travelling inspectors appointed for the purpose of combating plant pests. Experiments are being carried on with a variety of crops. The foregoing measures, in conjunction with the Papua and New Guinea Bounties Act 1937 and the preference given by the Commonwealth Tariff to certain produce grown in the Territories, have greatly stimulated tropical agriculture.

(a) *Coconuts*. Coconut-growing is by far the most important industry in the Territory, but low prices have checked expansion during recent years. Although the price rose sharply during 1936-37 it was not maintained and the exports of copra declined from £1,231,309 in 1936-37 to £727,949 in 1938-39, with a fall in quantity of only 3,064 tons.

(b) *Tobacco*. Many planters are cultivating tobacco to cater for the local market. Two companies have manufactured tobacco suitable for issue to the natives or for trade. In some instances planters are issuing the dry leaf to the native labourers who make their own cigars and cigarettes.

(c) *Cotton*. In 1924-25 the Government obtained 1,615 lb. of cotton seed, and cultivation was tried at the experimental stations as well as by private planters, including a few natives, but little progress has been made.

(d) *Kapok*. The cultivation of kapok was continued on a small scale. The local demand is more than sufficient to absorb the available crop.

(e) *Cocoa*. Greater interest is being displayed in the cultivation of cocoa. The quality of the beans produced is good, and 235 tons, or an increase of 56 tons over the previous year's figures, were exported during the year.

(f) *Desiccated Coconut*. Three desiccated coconut factories are established in the Territory. The quantity exported during 1938-39 was 1,590 tons.

(g) *Coffee*. Two plantations of coffee are in satisfactory condition and are commencing to yield. Thirty-eight tons of coffee valued at £843 were exported during the year. The coffee is of good quality and is well received on the Australian market.

(h) *Rubber*. The area under Para rubber did not increase during the year, but a number of planters are displaying an interest in this product, and it is anticipated that new plantations will be commenced during the next season with seed purchased from the Department.

(i) *Other Crops*. The climate and soil of New Guinea are suitable for the cultivation of rice, Manilla hemp, cinchona, nutmeg, vanilla, peanuts and maize, but hitherto their cultivation has either not advanced beyond the experimental stage or has been attempted on a small scale only. Sugar-cane of many varieties flourishes, and the natives cultivate extensive areas for their own use; other indigenous food-producing plants include the sago palm and the cassava.

(j) *Plants Yielding Power Alcohol*. It seems probable that alcohol for power purposes will be obtainable economically from the Territory. The sago palm and nipa palm yield as much as 60 gallons a ton, and in places are abundant.

(ii) *Plantations*. During the year 1934-35 the Administration disposed of the several plantations maintained by it with the exception of the demonstration plantation at Keravat. The principal crops grown on plantations are shown in the table hereunder for the year ended 30th June, 1939. The figures are not complete, but they give an indication of the state of agriculture in the Territory.

TERRITORY OF NEW GUINEA : PLANTATIONS, 1938-39.

(Exclusive of Native Reserves.)

Crop.	Area Planted.(a)	Area Bearing.	Yield.
	Acres.	Acres.	Tons.
Coconuts	253,235	201,122	(b)68,499
Cocoa	4,838	2,024	291
Coffee	1,082	549	83
Rubber	2,688	860	54
Kapok	551	356	5
Native Food (c)	1,794	983	1,508
Other	689	77	..
Total	264,877	205,971	..

(a) Includes inter-planted crops. (b) Copra; Desiccated coconut, 696 tons, also produced.
(c) Native food of all kinds is mostly grown between young coconut palms not yet in bearing.

The area of plantations at various periods from 1885 to 1939 is shown hereunder. As in the case of the previous table, the figures are exclusive of native plantations:—

TERRITORY OF NEW GUINEA: PLANTATIONS.

Year ended June.				Total Area.	Area Planted.	Area under Coconuts (including Area not in Bearing).
				Acres.	Acres.	Acres.
1885	..	..	..	148	(a)	(b)
1895	..	..	..	2,152	(a)	(b)
1911	..	..	..	58,837	(a)	51,510
1914	..	..	..	84,488	(a)	76,847
1924	..	..	..	411,275	(a)	172,373
1932	..	..	..	460,942	216,730	211,882
1933	..	..	..	514,250	219,490	214,290
1934	..	..	..	486,404	218,648	210,849
1935	..	..	..	473,260	227,697	218,779
1936	..	..	..	484,358	239,867	229,227
1937	..	..	..	487,375	244,066	234,189
1938	..	..	..	496,118	262,547	239,976
1939	..	..	..	504,000	264,877	253,235

(a) Not available.

(b) Not recorded.

3. **Live Stock.**—The coconut plantations are now of a sufficient area to maintain numerous live stock, the stock being depastured on the indigenous grasses growing between the rows of palms. In 1938-39 there were 1,309 horses, 20,565 cattle, 1,293 sheep, 9,791 goats, and 6,460 pigs (exclusive of the large number of pigs kept by the natives).

4. **Timber.**—An investigation of the timber resources has been made by the Commonwealth Inspector-General of Forests, and a report in connexion therewith was published in 1926. According to this report, while offering no prospects of immediate gain to large sawmilling interests, the Territory possesses forest potentialities of a high order. A recent survey of the timber resources of the Morobe District has indicated, however, that a pine forest in the Bulolo Valley contains approximately 200 million super. feet of millable timber; it is proposed to harvest this forest over a period of years and progressively to re-forest the area. In North-East New Guinea the Lutheran Mission and the Holy Ghost Mission both possess up-to-date sawmilling plants, while most of the timber required in the Archipelago is supplied by the Sacred Heart Mission's sawmill and three privately owned mills in New Britain. The quantity of sawn timber produced by sawmills was approximately 1,500,000 super. feet, all of which was absorbed by the local market. The exports confined almost entirely to timber in the log amounted to 1,718,916 super. feet.

The Forestry Ordinance 1936-1937 provides for the issue of permits and licences to cut timber. Timber growing on native lands cannot be acquired by private purchasers directly from the natives, but must be obtained through the Administration. A royalty is payable on all forest produce taken under a permit or licence. Four timber permits were issued during the year 1938-39, and twelve permits were in force at 30th June, 1939, embracing an area of approximately 65,358 acres.

5. **Fisheries.**—The wealth of the waters of the Territory has so far been little exploited. Fish is caught at many places along the coast to supply the small local demand of the natives and of the few resident Europeans. Pearl-shell is exported in fair quantities, while bêche-de-mer, trochus-shell and tortoise-shell also figure amongst the exports. The value of marine products exported in 1938-39 was £12,674, compared with £14,819 in the previous year.

6. **Mining.**—Except for gold there has been little mining in New Guinea. Gold has been discovered on the Waria, the Ramu, the Francisco, and the Markham Rivers, and recently in tributaries of the Sepik River. Rich gold was discovered in the Morobe District in 1926; the field is situated about 60 miles (35 by air) inland from Salamaua, the nearest coastal port. Communication has been established with the coast by a

regular aeroplane service. 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 magnesite and hematite 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.

Mining is regulated by the Mining Ordinance 1928-1939. Copies of the Ordinance and Regulations made thereunder may be obtained from the Secretary, Prime Minister's Department, Canberra, or the Administrator, Rabaul.

The following table shows the production of gold during the past five years :—

TERRITORY OF NEW GUINEA : GOLD PRODUCTION.

Year.				Quantity.	Value.(a)
				Fine oz.	£
1934-35	..	..	..	196,483	1,715,600
1935-36	..	..	..	190,848	1,657,071
1936-37	..	..	..	223,120	1,938,694
1937-38	..	..	..	223,929	1,935,954
1938-39	..	..	..	237,705	2,153,018

(a) Valued at average price realized for fine gold in Australia.

Since the high market price of gold has been maintained, the search for profitable areas in various parts of the Territory has not diminished and systematic testing by drilling and other means has been undertaken on alluvial areas previously considered unworthy of attention. Although there were no new discoveries of alluvial or reef gold during the year work proceeded steadily on the known gold-bearing areas.

A search for petroleum is being actively conducted on the mainland. The Petroleum Ordinance 1936 has been superseded by the Petroleum (Prospecting and Mining) Ordinance 1938-1939, which has facilitated the carrying out of geological surveys and prospecting activities generally. On the 30th June, 1939, two permits to search for petroleum were in force.

§ 7. Trade.

1. Customs Tariff.—With the exception of high revenue rates on ale, spirits, beverages and tobacco and a duty of 3d. per gallon on petrol, kerosene and lubricating oil, the tariff of the Territory of New Guinea is generally on a 10 per cent. ad valorem basis. Only 55 items are mentioned in the import schedule, of which approximately 32 are on the free list consisting of articles for use by the Administrator, the Trade Commissioners and the Missions, medical supplies, live stock, meat, fish, fresh fruit, vegetables and certain essential manufactures for use in the Territory. The rate of duty for the remaining items as well as for all other goods not mentioned in the schedule is 10 per cent. ad valorem. No preferential tariff rates are provided in the schedule.

Export duties are levied on copra, trepang, shell, feathers and sulphur. When the price, or the assessed value of copra is less than £5 15s. per ton no tariff is imposed, but when the price exceeds this figure up to £11 per ton 2s. 6d. per ton is charged, which increases on a sliding scale to 11s. 6d. per ton as the price rises to £18, with an additional 2s. per ton for every further increase of £1 in the price of copra. The imports in 1938-39 amounted to £1,340,835 on which £193,666 was received in import duties, while £8,768 was paid in export duties and royalties.

Provision is made in the Australian Customs Tariff (Papua and New Guinea Preference) 1936 for the free entry into Australia of certain goods produced and imported direct from the Territory of New Guinea (see Chapter XXIV. "Trade"), and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territory.

2. Imports and Exports.—Values of the principal items of imports and exports for the last five years are shown hereunder. The values of exports are expressed in Australian currency, but it is not possible to determine accurately the meaning of the £ in the table of imports :—

TERRITORY OF NEW GUINEA : IMPORTS AND EXPORTS.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38	1938-39.
IMPORTS.					
	£	£	£	£	£
Foodstuffs of animal origin ..	94,417	127,110	142,943	157,391	152,023
Foodstuffs of vegetable origin ..	121,146	159,287	186,732	190,657	158,895
Spirituous and alcoholic liquors ..	44,215	50,665	50,550	52,385	54,909
Tobacco and preparations thereof	38,777	53,213	59,045	58,155	63,122
Live animals	1,630	1,617	1,870	1,843	1,328
Animal substances	223	636	1,227	961	1,124
Vegetable substances and fibres	2,355	3,884	3,539	4,191	3,307
Apparel, textiles and manufac- tured fibres	117,670	171,092	152,923	182,590	138,077
Oils, fats and waxes	41,374	72,956	56,982	72,080	65,901
Paints and varnishes	10,472	13,599	14,422	11,044	10,934
Stones and minerals	8,741	12,291	14,039	16,030	8,164
Metals, manufactures and mach- inery	312,218	426,007	431,216	635,991	470,781
Rubber and leather and manu- factures	12,028	15,222	13,810	15,663	16,365
Wood and wicker	13,650	26,279	28,860	33,565	29,195
Earthenware, cement, glass, etc.	18,236	13,897	17,113	14,251	13,215
Paper and stationery	16,777	23,583	22,917	24,026	22,829
Jewellery and fancy goods	11,014	12,764	11,282	21,328	14,133
Optical and scientific instruments	17,521	22,019	18,610	21,377	22,318
Drugs, chemicals and fertilizers ..	30,905	38,716	44,907	46,878	46,163
Miscellaneous	35,935	45,951	38,636	50,561	47,992
Specie	4,589	133,600	80,400	31,500	..
Total	952,993	1,424,388	1,392,023	1,642,467	1,340,835
EXPORTS.					
	£	£	£	£	£
Copra	361,413	761,309	1,231,309	847,734	727,949
Cocoa	3,479	3,810	6,600	4,475	6,580
Ivory nuts	186	552	767	162	..
Trepang	5,800	5,025	1,350	2,250	2,025
Shell (trochus, etc.)	20,115	24,570	26,960	12,478	10,560
Tortoise-shell	82	103	50	91	89
Gold	1,897,244	1,704,498	2,020,667	2,028,980	2,129,263
Desiccated coconut	45,080	65,880	86,930	73,423	69,960
Rubber .. .. .	..	..	..	242	4,050
Miscellaneous	7,225	7,504	45,073	25,334	23,419
Total	2,340,624	2,573,251	3,419,706	2,995,169	2,973,895

3. **Direction of Trade.**—Particulars of the countries of origin of the imports into the Territory of New Guinea and the destination of the goods shipped therefrom during the past three years are as follows:—

TERRITORY OF NEW GUINEA : DIRECTION OF TRADE.

Country.	Imports.			Exports.		
	1936-37.	1937-38.	1938-39.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£	£
Australia ..	620,079	604,523	563,594	2,359,261	2,253,304	2,326,269
United Kingdom	148,551	159,215	154,501	289,210	172,355	337,605
Other British ..	83,490	04,920	48,163	6,523	480	..
China ..	57,705	67,165	69,831	3,445	2,528	17,428
Japan ..	73,747	98,585	46,627	10,027	8,620	7,445
France ..	2,955	3,875	3,806	..	16,480	6,193
Germany ..	63,084	70,886	71,245	95,991	75,124	31,829
U.S.A. ..	215,223	434,129	265,591	40,359	..	..
Other ..	127,189	139,169	117,477	614,890	466,278	247,126
Total ..	1,392,023	1,642,467	1,340,835	3,419,706	2,995,169	2,973,895

The bulk of the imports into the Territory of foodstuffs, beer, coal, paints, boats, launches and soap comes from Australia, which also supplies large quantities of machinery and metal manufactures, drugs, explosives, tobacco, cigarettes, apparel, boots, leather manufactures, timber, stationery and polishes. In 1938-39 the imports from the United States of America consisted largely of mining machinery, followed by other machinery, tobacco, oils, and vehicles in that order.

The principal export from the Territory to Australia is gold which comes for refinement and reshipment abroad.

§ 8. Shipping and Communication.

1. **General.**—A subsidized mail service between New Guinea and Australia is maintained by Burns, Philp and Coy. Ltd., which Company also operates a two-monthly non-subsidized service between Australia, New Guinea, Hong Kong and Saigon. The vessels of the Eastern and Australian Steamship Company call at Rabaul each way on their monthly service between Australia and Japan. The Dutch Royal Packet Navigation Company's vessel also calls at Rabaul every five weeks en route from Singapore to Australia. Norddeutscher Lloyd maintained a five-weekly service throughout the year between certain proclaimed ports in the Territory and Hong Kong, while the vessels of Osaka Shosen Kaisha made regular monthly calls at Rabaul en route from Japan to New Zealand. W. R. Carpenter and Coy. Ltd. continued their service with two vessels between Europe, Australia and the Territory. Shipping within the Territory is regulated by the Shipping Ordinances 1936 and the Coastal Shipping, Ports, and Harbours Regulations.

2. **Oversea Tonnage in 1938-39.**—The number and net tonnage of oversea vessels which entered and cleared the Territory during the year 1938-39 are shown hereunder:—

TERRITORY OF NEW GUINEA : SHIPPING, 1938-39.

Nationality.	Vessels Entered.		Vessels Cleared.		Total.	
	Number.	Tonnage.	Number.	Tonnage.	Number.	Tonnage.
British	84	273,706	85	275,369	169	549,075
Dutch	5	15,303	5	15,303	10	30,606
Norwegian	2	4,733	2	4,733	4	9,466
German	7	10,290	7	10,290	14	20,580
Japanese	14	21,897	14	21,897	28	43,794
Total	112	325,929	113	327,592	225	653,521

3. **Local Shipping.**—Inter-island shipping services were maintained by the steamers and motor vessels of Burns, Philp and Coy. Ltd., and W. R. Carpenter and Coy. Ltd. A number of smaller motor vessels was also engaged in this trade.

4. **Land Communication.**—Means of communication on land are scanty. There are no railways. Roads lead from Rabaul to places within 30 or 40 miles, and there is a road 200 miles long in New Ireland. Elsewhere there are few roads outside plantations and the stations of the District Officers. The large rivers of the mainland are as yet but little used.

There is a high power wireless station at Rabaul, and low power installations at the out-stations, including Salamaua and Wau.

5. **Communication by Air.**—The discovery of gold in New Guinea has resulted in great aviation activity in the vicinity of the gold-fields. On account of the mountainous country and dense undergrowth between the coast and the gold-fields the task of transporting food and stores to the fields and of bringing the gold to the seaboard by land is an irksome and costly process. The fields are situated about 60 miles (35 by air) inland from Salamaua, and whereas aircraft cover the distance in approximately an hour, the nature of the country is such that a journey by other means occupies more than a week. During 1931-32 an air service was established between Port Moresby and the gold-fields, reducing the time occupied by the journey from Australia by about seven days. At 30th June, 1939, 47 aeroplanes were operating in the Territory.

A weekly subsidized air service between Sydney and Rabaul came into operation on the 30th May, 1938. Passengers and mails are carried and the route followed is Sydney, Brisbane, Rockhampton, Townsville, Cairns, Cooktown, Port Moresby, Salamaua and Rabaul.

Further reference to New Guinea air activities is contained in Chapter V. "Transport and Communication" (see p. 149.)

§ 9. Revenue and Expenditure.

Details of the revenue collected from various sources and the expenditure during each of the last five years are given hereunder :—

TERRITORY OF NEW GUINEA: REVENUE.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Taxation—					
Customs (a)	164,481	207,172	233,657	247,062	214,629
Licences	10,097	10,900	12,654	13,087	13,796
Native Head Tax	19,805	19,641	21,859	20,481	21,417
Stamp duties	8,716	5,689	8,861	6,182	6,467
Postal	11,534	16,333	25,208	47,240	27,163
Lands	14,558	15,485	17,006	16,179	18,416
Mining—					
Royalty on gold	88,233	81,169	97,622	97,464	107,975
Other	27,591	18,996	24,154	19,479	16,403
Fees and fines	29,829	29,342	24,377	19,285	17,947
Sales of stores, etc.	2,215	1,615	2,605	2,472	2,170
Miscellaneous	11,112	13,578	15,067	17,467	14,453
Total	388,171	419,920	481,070	506,398	460,836

EXPENDITURE.

	£	£	£	£	£
Treasury and Audit	33,444	44,851	66,177	52,570	54,736
Agriculture	13,389	14,001	15,851	17,722	19,424
Public Justice	21,839	30,549	31,209	32,809	34,245
Public Health	61,851	68,153	73,191	80,377	89,784
Public Works	17,104	27,260	29,228	30,954	34,802
District Services and Native Affairs	99,318	97,694	109,705	115,648	125,877
New Works	61,806	76,760	66,223	70,011	69,145
Native Welfare	7,202	6,993	6,177	7,185	6,453
Other	51,517	59,533	62,357	110,133	68,114
Total	367,470	425,794	460,118	508,613	502,580

(a) Including harbour dues, wharfage and storage fees.

(b) Including £40,011, expenditure in connexion with the volcanic eruption.

NAURU (Mandated).

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 longitude 166° E., and is 26 miles south of the Equator. Portion of the island between the sandy beach and the coral cliffs is fertile, and it is there that 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 average shade temperature ranges between 72° and 95° F., and the average humidity between 70 and 80. The average rainfall is 85 inches, but droughts occasionally occur, and in 1916 and 1917 only 40 inches were received for the two years. Similarly in 1938 only 20.94 inches were 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, which is in similar terms to that for the Territory of New Guinea, was confirmed by the Council of the League of Nations on the 17th December, 1920. On 2nd July, 1919, the British, Australian and New Zealand Governments agreed that the administration of the island (which, since 1915, had been in charge of an official appointed by the British Colonial Office) should be vested in an Administrator who entered on duty in June, 1921. The first Administrator was appointed for a term of five years by the Australian Government; his term of service having expired, it was extended for another five years, but he resigned in 1927. The second Administrator was appointed in June, 1927. The third Administrator was appointed by the Commonwealth of Australia in January, 1933, and the fourth in October, 1938. The Agreement between the three Governments was approved by the Commonwealth Parliament in the Nauru Island Agreement Act 1919, and is printed 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.

3. **Administration.**—The administration of the Island is vested in the Administrator, who is obliged to conform to instructions issued by the Government which appointed him, and all ordinances made by him are subject to confirmation or disallowance by the Governor-General of Australia (for the time being) acting on the advice of the Federal Executive Council. All expenses of administration are met from local revenue. 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 the natives. The 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.

4. **Population.**—The population figures on 1st April in each of the years from 1935 to 1939 are given hereunder:—

NAURU : POPULATION.

Nationality.	1935.	1936.	1937.	1938.	1939.
Europeans	158	179	194	179	171
Chinese	931	1,092	1,261	1,533	1,512
Nauruans (a)	1,003	1,647	1,658	1,727	1,765
Other Pacific Islanders ..	4	4	4	27	44
Total	2,696	2,922	3,117	3,466	3,492

(a) The natives of Nauru are Micronesians.

Births in 1939 numbered 77 (75 Nauruans, 1 European, and 1 Chinese). There were 8 marriages (6 Nauruans), and 53 deaths (45 Nauruans, 2 Europeans, and 5 Chinese).

5. **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 lepers, and the latest methods of treatment are applied. The total number of persons receiving treatment at 31st December, 1939, was 163, of whom 45 were in the Leper Segregation Hospital. Two hospitals are maintained on the island, one by the Administration for Nauruans, and one by the British Phosphate Commission for its employees. In common with other natives, the Nauruans are very susceptible to tuberculosis and influenza, and in 1921 an influenza epidemic caused the deaths of 230 islanders. Dysentery, both amoebic and bacillary, is endemic. A regular anti-mosquito campaign is conducted. The usual steps have been taken by the authorities to improve the water supply and to provide efficient sanitation generally. Every Nauruan is required to undergo a medical examination once a month. Baby clinics have been established to give help and advice to Nauruan mothers in regard to infant nurture.

6. **Education.**—Formerly the education of Nauruan and other native children was undertaken by the Missions subsidized by the Administration, but on 1st October, 1923, the Administration assumed responsibility for education. At the close of 1939 there were eight primary and two post-primary schools for natives and a primary school for European children. A total of 39 European children and 526 native children were receiving instruction. The school for European children is presided over by a teacher on loan from the Education Department of Victoria who also supervises educational matters generally. The curriculum is similar to that of corresponding schools in Australia, and the teaching is, as far as possible, wholly in English. Education is compulsory between the ages of six and sixteen for Nauruan and other native children; after the termination of ordinary school attendance, twelve months are devoted to technical training. Arrangements are made to permit the children to attend classes in religious instruction conducted at the Mission churches. Educational classes for adults have been inaugurated. Units of the Boy Scouts and Girl Guides (Nauruan) have been established on the island.

7. **Judiciary.**—The judicial power is vested in the Administrator in a Central Court and a District Court. The right of appeal is provided.

8. **Religion.**—The London Missionary Society (Protestant) and the Sacred Heart of Jesus Mission (Roman Catholic) operate in Nauru.

9. **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 on Nauru has been estimated at not less than 50,000,000 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 in 1919 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 the British Phosphate Commission of three members, one appointed by each Government; and the three countries are to receive the output in the same proportions of 42, 42, and 16 per cent.

(ii) *Royalty on Phosphate.* By an agreement entered into between the British Phosphate Commissioners and the Nauruan landowners in 1927 provision was made, *inter alia*, for the payment of a royalty of 7½d. per ton of phosphate exported as follows:—

(a) 4d. per ton to be paid to the Nauruan landowner concerned;

(b) 1½d. per ton to the Administrator for the benefit of the Nauruan people;

- (c) 2d. per ton to the Administrator to be held in trust for the Nauruan landowner concerned and invested at compound interest for a period of 20 years. The capital will then remain invested and the interest thereon will be paid to the landowner.

The rates specified above were to have effect for a period not exceeding 20 years on and from 1st July, 1927, but the royalty of 4d. per ton to the Nauruan landowner was subject to adjustment for the second, third and fourth five-yearly period by increasing or decreasing it pro-rata to any increase or decrease of the export price of the phosphate. The royalty for the second five-yearly period was increased to 4½d. per ton.

In June, 1937, the price of phosphate had fallen to 14s. per ton and consequently under the terms of the original Agreement the royalty would have been reduced to 1½d. per ton. By an amendment of the Lands Ordinance in 1939 the agreement was extended for a period of 20 years, or to 30th June, 1967. The royalty of 2d. per ton paid to the Administrator to be held in trust and invested was increased from 1st July, 1937, to 2½d. per ton. From the same date a royalty of 4d. per ton was paid to the Nauruan landholders instead of 1½d. per ton under the original Agreement. This rate is subject to adjustment at the end of five years, and from 1st July, 1947, is to be 5d. per ton if the price of phosphate is 12s. per ton or less, with an additional ½d. per ton for each 1s. above 12s. up to a maximum royalty of 6d. per ton.

The amending Ordinance also increased, from 1st July, 1947, the lump sum to £45 per acre and to £7 10s. for areas less than 1 acre, payable to landowners from whom phosphate-bearing lands are leased.

(iii) *Nauru and Ocean Island Phosphate Industry.*—The following table gives particulars regarding exports of phosphate during the last five years :—

NAURU AND OCEAN ISLAND : EXPORTS OF PHOSPHATE.

Year.	Total.	To Australia.	To New Zealand.
	Tons.	Per cent.	Per cent.
1934-35	694,726	61.14	30.43
1935-36	831,847	67.34	23.94
1936-37	1,007,990	67.86	24.22
1937-38	1,169,361	66.17	24.81
1938-39	1,228,590	67.06	23.63

From Nauru alone during the calendar year 1939 the export was 932,100 tons

(iv) *Accounts of Commission.* A statement for the five years ended June, 1939, is given hereunder :—

NAURU AND OCEAN ISLAND : SALES OF PHOSPHATE.

Heading.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Receipts from Sales, etc. ..	769,483	835,148	916,690	944,068	909,027
F.o.b. cost, including interest on capital, sinking fund, etc.	758,845	828,818	910,673	940,059	906,133

The amount due by the British Phosphate Commission to the partner Governments for purchase-money and other capital sums was £3,666,457 on 30th June, 1921, and at 30th June, 1939, this had been reduced to £3,120,860. The f.o.b. cost in 1938-39 includes a sum of £224,054 consisting of interest at 6 per cent. upon the purchase-price and a contribution to a sinking fund for the redemption of the capital debt in 50 years. The redemption fund now totals £410,640.

(v) *Employees.* Apart from a limited number of Europeans and a few Pacific Islanders, the employees are Chinese engaged under a three years' contract. A few Nauruans are employed occasionally.

10. *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. Information regarding imports and exports for the years 1935 to 1939 is appended :—

NAURU : IMPORTS AND EXPORTS.

Heading.	Year ended 31st December—				
	1935.	1936.	1937.	1938.	1939.
Imports	£ 168,595	154,940	144,454	272,256	170,624
Exports—					
Phosphate	tons 480,950	547,400	688,900	841,050	932,100
	£ 474,393	469,607	513,989	546,683	605,974

Of the total imports Australia supplied £94,267 or 55 per cent. during 1939; the balance came mainly from Borneo, United Kingdom, China, United States of America and New Zealand in that order.

Phosphates were exported principally to Australia, 588,150 tons, and New Zealand 258,950 tons.

11. *Revenue and Expenditure.*—The revenue and expenditure of the Administration during the years 1935 to 1939 were as follows :—

NAURU : REVENUE AND EXPENDITURE.

Heading.	Year ended 31st December—				
	1935.	1936.	1937.	1938.	1939.
Revenue	£ 23,487	£ 24,906	£ 53,343	£ 29,428	£ 33,084
Expenditure	20,666	23,989	29,311	30,287	29,391

Of the revenue in 1939, royalty on phosphate amounted to £25,066, Post Office receipts £900, capitation tax £1,706, import duty £1,245, interest on investments £1,828, and harbour dues and shipping fees £235. At the close of the year 1939 the accumulated funds of the Administration amounted to £86,735.

CHAPTER XII. MINERAL INDUSTRY.

(NOTE.—A table showing particulars of mineral production for the year 1939 will be found in the Appendix. With the exception of gold this information was not available at the time this chapter was compiled. Details of gold production are included in § 2 hereinafter.)

§ 1. The Mineral Wealth of Australia.

1. **Place of Mining in Australian Development.**—The value of production from the mineral industry is now considerably less than that returned by the agricultural or the pastoral industry, nevertheless it was the discovery of gold in payable quantities that first attracted population to Australia in large numbers and thus accelerated its national development.

2. **Extent of Mineral Wealth.**—The extent of the total mineral wealth of Australia cannot yet be regarded as completely ascertained, as large areas of country still await systematic prospecting. More detailed reference to this matter will be found in preceding issues of the Official Year Book. (See No. 22, p. 755.)

3. **Quantity and Value of Production in 1938.**—The quantities (where available) and the values of the principal minerals produced in each State, and in Australia as a whole, during the year 1938 are given in the tables immediately following. It must be clearly understood that the figures quoted in these tables refer to the quantities and values of the various minerals in the form in which they were reported to the State Mines Departments, and represent amounts which the Mines Departments consider may fairly be taken as accruing to the mineral industry as such. They are not to be regarded as representative of Australia's potentiality as a producer of *metals*, this matter being dealt with separately in § 17 hereinafter. New South Wales is, of course, in normal times, a large producer of iron and steel from ironstone mined in South Australia. As the table shows, the latter State receives credit for this ironstone in its mineral returns. The iron and steel produced therefrom cannot be assigned to the mineral industry of New South Wales, but the value of the transformation from ore to metal is credited to the manufacturing industry of that State. Similarly lead, silver-lead, cadmium, cobalt and zinc are credited in the form reported to the State of origin—chiefly New South Wales—although the actual metal extraction is carried out principally in South Australia and Tasmania.

The quantity of cadmium and cobalt recovered in Tasmania from zinc ores mined in New South Wales during 1938 is given in § 9 pars. 2 and 3 hereafter.

MINERAL PRODUCTION : QUANTITIES, 1938.

Mineral.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
Antimony ..	ton	144	398	16	..	339	..	..	897
Arsenic ..	..	..	..	..	..	3,999	..	..	3,999
Asbestos ..	cwt.	..	..	..	960	6,680	83	..	7,723
Barytes ..	ton	317	..	..	2,863	..	..	..	3,180
Bismuth ..	cwt.	1	..	115	..	..	17	..	133
Brown coal ..	ton	..	3,675,450	..	..	..	..	..	3,675,450
Coal ..	..	9,570,930	307,258	1,113,426	..	604,702	83,753	..	11,680,159
Cadmium ..	..	(a)	..	..	..	..	980	..	(b) 980
Copper (ingot, matte, etc.) ..	ton	1,963	..	4,459	254	29	12,729	252	19,686
Diatomaceous earth ..	..	3,451	190	51	..	..	..	..	3,692
Gold ..	fine oz.	88,698	144,243	151,432	5,293	1,167,791	22,200	12,378	1,592,034
Gypsum ..	ton	12,511	13,381	..	146,590	13,429	..	..	185,911
Ironstone ..	..	108	..	5,125	2,245,366	..	..	..	2,250,599
Kaolin ..	..	16,101	5,656	80	..	..	..	..	21,897
Lead ..	..	(a)	..	41,196	..	1	10,652	..	(b) 51,849
Lead and silver-lead ore, concentrates, etc. ..	..	317,230	..	..	..	352	..	..	317,582

MINERAL PRODUCTION: QUANTITIES, 1938—continued.

Mineral.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
Limestone flux ..	ton	158,381	..	16,529	26,170	..	281,859	..	482,939
Magnesite ..	"	19,158	121	..	227	..	..	..	19,506
Manganese ore ..	"	218	..	376	..	..	..	..	594
Molybdenite ..	cwt.	173	710	278	..	..	..	..	1,161
Osmiridium ..	oz.	..	..	..	..	..	191	..	191
Phosphate ..	ton	240	..	..	..	..	..	..	240
Pigments ..	oz.	553	..	..	..	..	..	..	553
Platinum ..	"	8	..	..	..	..	..	..	8
Salt ..	ton	..	(c)	..	74,812	..	..	..	(b) 74,812
Shale (oil) ..	ton	..	..	..	..	..	..	..	536
Silver ..	oz.	(a) 83,822	5,898	3,533,490	503	271,346	1,219,550	..	65,114,609
Tin and tin ore ..	ton	1,190	169	1,005	..	68	1,279	21	3,732
Wolfram ..	cwt.	1,877	..	3,015	..	..	5,982	8,694	19,568
Zinc and concentrates ..	ton	265,296	..	23,735	..	..	25,366	..	314,397

(a) See letterpress preceding this table. (b) Incomplete. (c) Not available.

The values of the minerals raised in each State in 1938 are given in the following table:—

MINERAL PRODUCTION: VALUES, 1938.

Mineral.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
	(a)					(a)		
	£	£	£	£	£	£	£	£
Antimony ..	3,444	10,619	194	..	3,859	..	..	18,116
Arsenic ..	..	..	..	..	71,982	..	..	71,982
Asbestos ..	..	..	..	599	17,711	68	..	18,378
Barytes ..	538	..	..	6,334	..	..	..	6,872
Bismuth ..	4	..	1,968	..	..	396	..	2,368
Brown coal ..	..	351,721	..	..	..	..	..	351,721
Coal ..	5,603,842	188,101	958,884	..	375,083	61,991	..	7,187,901
Cadmium ..	(b)	..	..	..	..	18,636	..	(c) 18,636
Copper (ingot and matte) ..	87,905	..	203,967	15,333	1,275	580,238	4,362	893,080
Diamonds ..	300	..	..	..	..	..	..	300
Platinoaceous earth ..	3,184	786	89	..	..	..	..	4,059
Gems ..	..	..	2,166	..	..	..	..	2,166
Gold ..	780,958	1,273,351	1,334,788	46,922	10,286,349	195,079	109,168	14,026,615
Gypsum ..	10,671	14,826	..	109,942	12,409	..	..	147,848
Ironstone ..	43	..	3,365	2,582,171	..	..	..	2,585,579
Kaolin ..	10,458	5,020	160	..	..	..	..	15,638
Lead ..	(b)	..	628,025	19	..	163,102	..	(c) 791,146
Lead and silver-lead ore, concentrates, etc. ..	3,513,108	..	..	..	625	..	..	3,513,733
Limestone flux ..	35,113	..	12,268	9,814	..	85,624	..	142,819
Magnesite ..	41,744	458	..	191	..	..	..	42,393
Manganese ore ..	740	..	1,811	..	..	..	..	2,551
Molybdenite ..	1,759	7,306	2,900	..	..	..	..	11,965
Opal ..	4,226	..	80	4,570	..	..	..	8,876
Osmiridium ..	..	..	..	..	..	2,976	..	2,976
Phosphate ..	1,150	..	..	..	..	..	..	1,150
Pigments ..	848	..	..	..	..	..	..	848
Platinum ..	52	..	..	..	..	..	..	52
Salt ..	..	(d)	..	149,624	..	..	..	(c) 149,624
Shale (oil) ..	337	..	..	..	..	..	..	337
Silver ..	(b) 7,357	647	298,589	51	28,852	104,671	..	(c) 440,167
Tin and tin ore ..	286,768	28,650	141,547	..	7,421	244,037	3,205	711,628
Wolfram ..	25,740	..	30,779	..	..	63,348	78,277	198,144
Zinc and concentrates ..	230,989	..	329,464	..	..	356,452	..	916,905
Other ..	(e) 80,113	2,530	15,075	6,903	38,903	13,186	19,712	176,422
Total ..	10,731,391	1,884,015	3,966,119	2,932,473	10,844,469	1,889,804	214,724	32,462,995

(a) For items excluded see letterpress below. (b) See letterpress above preceding table. (c) Incomplete. (d) Not included with mineral production. (e) Includes dolomite £32,715, silica £19,634, fireclay £16,532, and zircon-rutile-ilmenite £4,005. (f) Mica.

It should be pointed out in connexion with the figures given in the foregoing table that the totals are exclusive of certain commodities, such as stone for building and industrial uses, sand, gravel, brick and pottery clays, lime, cement and slates, which might be included under the generic term "mineral." Particulars of the production of some of these items are given in paragraph 6, Quarries, below. Items excluded, such as cement, carbide and sulphuric acid, are included in manufacturing production, and, in any case, only the raw material could properly be included in mineral production. The items excluded from the total for New South Wales in 1938 consisted of—lime, £54,349; building stone, £124,088; Portland cement, £1,515,744; coke, £1,100,266; road material and gravel, £1,083,286; shell grit, £22,842; sulphur and sulphuric acid, £44,206; and brick and pottery clays, £302,319. Carbide and cement, £378,258, have been excluded from the Tasmanian figures.

4. Value of Production, 1934 to 1938.—The values of the minerals produced in each State during the past five years are given in the table hereunder:—

MINERAL PRODUCTION: VALUES.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
	£	£	£	£	£	£	£	£
1934 ..	7,766,504	1,092,029	2,713,135	1,713,537	5,884,430	750,389	28,806	19,948,830
1935 ..	9,210,820	1,394,253	2,387,440	2,498,617	6,107,990	1,071,807	76,090	23,247,527
1936 ..	10,136,789	1,623,003	3,613,511	2,513,359	7,771,154	1,624,036	98,601	27,330,753
1937 ..	11,081,891	1,832,195	4,392,492	2,509,449	9,230,182	2,282,365	205,851	32,434,425
1938 ..	10,731,391	1,884,015	3,966,119	2,032,473	10,844,469	1,889,804	214,724	32,462,995

The value of mineral production in Australia during 1938 exceeded that of 1937 by £29,000. Increases were recorded in Victoria, South Australia, Western Australia and the Northern Territory, and decreases in the remaining States. In the latter, lower values for zinc, lead, copper and tin were mainly responsible for the reductions. The effects of these lower values on the total value of production would have been much more pronounced but for the larger output of gold and its enhanced value in Australian currency.

Of all the minerals gold and ironstone were the only ones to show any appreciable increase in value during 1938. The production of the former increased by 211,000 fine oz. and its value by £2,934,000, while ironstone increased by 370,000 tons for an added value of £436,000.

As already mentioned lower prices contributed to the reduced values shown for some metals. Zinc declined in value by £873,000 although the quantity produced rose by more than 43,000 tons. Similarly lead and silver-lead ores and concentrates decreased by £317,000 and £794,000 respectively, despite an increase of 4,000 tons in the output of lead and 30,000 tons in that of ores and concentrates. Copper and tin decreased both in quantity and value but more markedly in value: copper declined by 1,900 tons and in value by £270,000, while the output of tin was only 11 tons less than last year, but the value was lower by £152,000. There was a small reduction in the quantity and value of coal produced, but the average price was slightly higher than in 1937.

More detailed particulars of the production in the various States are given in later sections.

5. Total Production to end of 1938.—In the next table will be found the estimated value of the total mineral production in each State up to the end of 1938. The items excluded from the preceding table are also omitted here, and consequently the total for

New South Wales is £66,000,000 less than that published by the State Department of Mines. The principal items excluded from the table below are coke, £19,809,000; cement, £25,484,000; lime, £2,014,000; and considerable values for marble, slate, granite, chert, gravels, etc., which the State Department now includes in the returns for quarries.

MINERAL PRODUCTION: VALUES TO END OF 1938.

Mineral.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	£	£	£	£	£	£	£	Million £
Gold ..	67,118,536	309,584,931	92,260,985	2,027,662	215,196,620	9,754,996	2,669,950	699
Silver and lead ..	141,474,520	268,250	10,386,731	384,345	2,385,684	10,125,626	66,652	165
Copper ..	15,920,956	216,686	27,843,509	33,230,566	1,812,318	24,232,730	239,992	103
Iron ..	7,754,107	15,641	509,813	21,248,714	36,722	91,229	..	30
Tin ..	16,422,868	1,084,744	12,213,702	..	1,654,389	18,799,261	664,965	51
Wolfram	329,438	11,835	1,133,232	301	1,441	463,722	414,532	2
Zinc ..	26,358,324	..	1,471,293	15,993	5,437	2,161,458	..	30
Coal ..	228,855,931	17,629,187	25,877,648	..	9,142,735	2,516,596	..	284
Other ..	9,090,110	989,919	2,969,636	6,295,827	873,245	2,607,921	152,808	23
Total ..	513,324,790	329,801,243	174,666,549	63,203,408	231,108,591	70,753,539	4,208,900	1,387

The "other" minerals in New South Wales include alunite, £213,000; antimony, £377,000; arsenic, £194,000; bismuth, £245,000; chrome, £136,000; diamonds, £148,000; magnesite, £384,000; molybdenite, £218,000; opal, £1,627,000; scheelite, £202,000; and oil shale, £2,695,000. In the Victorian returns antimony ore was responsible for £629,000. The value for coal in this State includes £3,710,000 for brown coal. Included in "other" in the Queensland production were opal, £188,000; gems, £645,000; bismuth, £143,000; cobalt, £158,000; molybdenite, £613,000; limestone flux, £828,000; and arsenic, £124,000. The chief items in South Australian "other" minerals were salt, £3,955,000; limestone flux, £331,000; gypsum, £1,252,000; phosphate, £135,000; and opal, £165,000. In Western Australia arsenic, £327,000; gypsum, £94,000; and asbestos, £88,000 were the principal items included with "other" minerals. In the Tasmanian returns osmiridium was responsible for £626,000, scheelite for £119,000, and limestone for £942,600.

6. **Quarries.**—As mentioned in previous issues of the Official Year Book, the data published in regard to the mineral industry contained no details of the output of quarries. In 1935 a Conference of Australian Statisticians resolved to include statistics of quarrying with those of mining, and it is now possible to present some details of the output of quarries in each State.

For the purpose of these statistics the Conference defined a quarry as an establishment in which four hands or more are employed, or in which power other than hand-power is used. The details given in the following table represent the output of quarries conforming to this definition, although in a few relatively unimportant cases details of other establishments have been included.

The authority responsible for the collection of these statistics is the Government Statistician in the States of New South Wales, Victoria, Queensland and Western Australia, and the Department of Mines in South Australia and Tasmania.

It should be noted that the inclusion of returns from certain small establishments tends to inflate the figures in the following tables, but there is possibly a compensating factor in that some quantities used by shires and Municipalities in the repair of roads have not been returned to the collecting authority.

OUTPUT OF QUARRIES: AUSTRALIA, 1938.

Description.	New South Wales.		Victoria. (a)		Queensland. (a)		South Australia.	
	Quantity.	Value.	Quantity.	Value.	Quantity (b)	Value (b)	Quantity.	Value.
	Tons.	£	Tons.	£	Tons.	£	Tons.	£
Building Stone	367,772	146,666	18,373	23,255	3,684	1,759	27,226	17,785
Macadam Ballast, etc. ..	6,371,232	1,088,353	1,297,618	394,255	701,836	195,859	1,533,134	295,625
Limestone (c)	849,546	178,191	305,147	76,066	23,852	15,700	7,580	1,023
Clays	1,734,127	228,349	(d)	(d)	..	..	197,047	24,631
Other	78,853	13,328	..	..	..	..	..	..
Total	9,401,530	1,654,887	1,621,138	493,576	729,372	213,318	1,764,987	339,064

Description.	Western Australia.(a)		Tasmania.		Australia.		
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	
	Tons.	£	Tons.	£	Tons.	£	
Building Stone	33,293	12,825	173	885	450,521	203,175
Macadam Ballast, etc.	420,084	164,304	..	..	10,323,904	2,138,396
Limestone (c)	46,435	8,108	281,859	85,624	1,514,419	364,712
Clays	1,931,174	252,980
Other	6,126	3,146	84,979	16,474
Total	499,812	185,237	288,158	89,655	14,304,997	2,975,737

(a) Year ended June, 1939. (b) Estimated. (c) Limestone used for the manufacture of lime and cement and as a flux. It omits quantities used as building stone and as macadam, ballast, etc., which are already included under those headings. (d) Not collected.

In the following table corresponding details are given for each State for a series of years.

OUTPUT OF QUARRIES: AUSTRALIA.

State.	1934.		1935.		1936.		1937.		1938.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	'000 tons.	£	'000 tons.	£	'000 tons.	£	'000 tons.	£	'000 tons.	£
New South Wales	4,630	875,413	6,142	1,052,989	7,260	1,261,301	8,616	1,662,135	9,402	1,654,887
Victoria (a)	61,340	6374,454	61,609	6476,293	61,673	6514,984	61,573	6474,303	61,621	6493,576
Queensland (a)	(c)899	188,316	(c)902	168,030	(c)934	255,040	(c)776	242,093	(c)729	213,318
South Aust. (a)	735	122,645	1,005	170,273	1,154	196,957	1,244	226,696	1,765	339,064
Western Aust.(a)	171	60,006	164	68,201	272	94,975	367	137,672	500	185,237
Tasmania	174	44,877	254	68,357	262	71,243	309	86,986	288	89,655
Total	7,949	1,665,711	10,076	2,004,143	11,555	2,394,500	12,885	2,830,485	14,305	2,975,737

(a) Year ended June following. (b) Omits clays. (c) Estimated.

7. Geophysical Methods for Detection of Ore Deposits.—Reference to the application of geophysical survey methods in Australia will be found in Official Year Book No. 24, p. 570. See also § 16 hereinafter.

§ 2. Gold.

1. **Discovery in Various States.**—The discovery of gold in payable quantities was an epoch-making event in Australian history, for, as one writer aptly phrases it, this event "precipitated Australia into nationhood." A more or less detailed account of the finding of gold in the various States appears under this section in Official Year Books Nos. 1 to 4.

2. **Production at Various Periods.**—In the following table will be found the values of the gold raised in the several States and in Australia as a whole during each of the eight decennial periods from 1851 to 1930, and in single years from 1927 to 1938. Owing to the defective information in the earlier years the figures fall considerably short of the actual totals, for during the first stages of mining development large quantities of gold were taken out of Australia by successful diggers who preferred to keep the amount of their wealth secret.

GOLD : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	£	£	£	£	£	£	£	£
1851-60..	11,530,583	93,337,052	14,565	..	..	788,564	..	105,670,764
1861-70..	13,676,103	65,106,264	2,076,494	..	..	12,174	..	80,871,035
1871-80..	8,576,654	40,625,188	10,733,048	579,068	..	700,048	79,022	61,293,028
1881-90..	4,306,541	28,413,792	13,843,081	246,668	178,473	1,514,921	713,345	49,216,821
1891-1900	10,332,120	29,904,152	23,989,359	219,931	22,308,524	2,338,336	906,988	89,999,410
1901-10..	9,569,492	30,136,686	23,412,395	310,080	75,540,415	2,566,170	473,871	142,009,109
1911-20..	4,988,377	13,354,217	9,876,677	238,808	46,808,351	873,302	a 100,652	76,240,384
1921-30..	940,946	2,721,309	1,976,715	47,564	20,462,937	193,833	(a) 9,894	26,353,218
1927 ..	76,595	163,699	161,321	1,776	1,734,571	20,646	(a) 468	2,159,076
1928 ..	54,503	144,068	56,395	2,258	1,671,093	15,306	(a) 431	1,944,054
1929 ..	31,842	111,609	40,250	4,289	1,602,142	23,772	(a) 553	1,814,457
1930 ..	53,066	102,456	33,224	5,560	1,773,500	18,976	(a) 57	1,986,849
1931 ..	118,623	262,488	79,652	17,328	3,054,743	12,150	(b) 2,535	3,585,518
1932 ..	203,622	351,586	173,144	22,018	4,413,809	43,137	(a) 4,196	5,211,512
1933 ..	226,068	448,228	710,168	49,619	4,915,950	51,579	(a) 4,449	6,406,061
1934 ..	307,662	597,040	982,636	58,582	5,534,491	48,139	(a) 8,124	7,536,674
1935 ..	439,140	768,401	904,755	64,109	5,677,328	73,143	(a) 44,458	7,971,334
1936 ..	525,792	1,018,702	1,048,748	66,593	7,326,309	152,291	b 112,786	10,251,189
1937 ..	595,855	1,266,507	1,104,760	60,372	8,688,921	176,130	100,462	11,993,007
1938 ..	780,958	1,273,351	1,334,788	46,922	10,286,349	195,079	109,168	14,026,615
Total—								
1851-1938	67,118,536	309,584,931	92,260,985	2,027,662	215,196,620	9,754,996	2,669,950	698,613,680

(a) Period ended June of year stated.

(b) Eighteen months ended December of year stated.

The values quoted on this page are in Australian currency throughout.

Owing to the exhaustion of the more easily worked deposits and the unprofitableness of gold-mining during the era of high prices following the Great War, the production of gold in Australia declined from 3,838,029 fine oz. in 1903 to 427,159 fine oz. in 1929, the lowest output since the discovery of the precious metal.

Increased activity in prospecting due to prevailing economic conditions resulted in some improvement in 1930, but the marked development since that year received its impetus from the heavy depreciation of Australian currency in terms of gold. Oversea and local capital were attracted to the industry, and the employment of advanced geological methods and technical improvements brought many difficult or extinct propositions into profit. The output of gold rose from 466,593 fine oz. in 1930 to 1,592,034 fine oz. in 1938, and further increases are forecast. Values per fine oz. in Australian currency assigned to the production of gold during recent years in the table above are £5 19s. 9d. in 1931, £7 5s. 11½d. in 1932, £7 14s. 3½d. in 1933, £8 10s. 0½d. in 1934, £8 15s. 1½d. in 1935, £8 13s. 2d. in 1936, £8 13s. 8d. in 1937 and £8 16s. 2½d. in 1938. Monthly fluctuations in the price of gold in London and in Australia are shown in Chapter XXVI. "Public Finance."

The amount of gold raised in Australia in any one year attained its maximum in 1903, in which year 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, 1894; and Tasmania, 1899.

The following table shows the quantities of gold raised in the various States and in Australia during each of the five years ending 1938. A separate line is added showing the total production in thousands of fine ounces from 1851 to 1938:—

GOLD : QUANTITY PRODUCED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Australia.
	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
1934 ..	36,123	70,190	115,471	6,870	651,338	5,622	(a) 989	886,609
1935 ..	50,102	87,609	102,990	7,333	649,049	8,343	(a) 5,066	910,492
1936 ..	60,739	117,596	121,174	7,681	840,208	17,600	b 12,998	1,183,996
1937 ..	68,607	145,799	127,281	6,962	1,000,647	20,276	11,563	1,381,135
1938 ..	88,698	144,243	151,432	5,292	1,107,791	22,200	12,378	1,592,034
Total (c)								
1851-1938	15,382	72,064	20,881	431	44,373	2,201	582	155,914

(a) Year ended 30th June.
omitted in each case.

(b) Eighteen months ended December 1936.

(c) '000

3. **Changes in Relative Positions of States as Gold Producers.**—The figures in the table showing the value of gold raised explain the enormous increase in the population of Victoria during the period 1851 to 1861, when an average of over 40,000 persons reached the Colony each year. With the exception of the year 1889, when its output was exceeded by that of Queensland, Victoria maintained its position as the chief gold producer for a period of forty-seven years, until its production was surpassed by that of Western Australia in 1898. From that year onward Western Australia contributed practically half, and so far as the last ten years are concerned nearly four-fifths, of the entire yield of Australia.

4. **Place of Australia in the World's Gold Production.**—The table given below shows the world's gold production, and the share of Australia therein in decennial periods since 1851 and during each of the last eight years for which returns are available. The figures given in the table have been compiled from the best authoritative sources of information.

GOLD : WORLD'S PRODUCTION.

Period.	World's Production of Gold.	Gold Produced in Australia.	Percentage of Australia on Total.
	Fine oz.	Fine oz.	%
1851-60	61,352,295	24,877,013	40.55
1861-70	53,675,679	19,038,661	35.47
1871-80	50,473,314	14,429,599	28.59
1881-90	51,998,060	11,586,626	22.28
1891-1900	102,695,748	21,187,661	20.63
1901-10	182,891,525	33,434,009	18.28
1911-20	206,114,773	17,426,466	8.45
1921-30	186,091,278	5,841,902	3.14
1931	22,786,773	595,123	2.61
1932	24,204,275	713,882	2.95
1933	25,568,920	830,332	3.25
1934	27,032,084	887,490	3.28
1935	29,434,127	914,736	3.11
1936	33,167,494	1,178,581	3.55
1937	34,543,360	1,381,135	4.00
1938	37,110,594	1,592,034	4.20

For the year 1938 the world's production of gold in fine oz. was 37,100,000, as compared with a return of 34,500,000 fine oz. in 1937. It is estimated that the world's production in 1939 approximated 39,150,000 fine oz. of which Australia's share amounted to 1,645,697 fine oz. or 4.2 per cent.

The quantities of gold produced in the ten principal producing countries in each of the five years 1934 to 1938 are given in the table hereunder. Particulars of the quantities and values of gold produced in all countries for the ten years 1929-38 will be found in *Production Bulletin* No. 33, Part II., issued by this Bureau.

GOLD PRODUCTION IN PRINCIPAL COUNTRIES.

Country.	1934.	1935.	1936.	1937.	1938.
	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
Union of South Africa	10,479,857	10,773,991	11,336,214	11,734,575	12,161,392
U.S.S.R. (Russia) ..	3,700,000	4,500,000	5,500,000	5,000,000	5,000,000
Canada ..	2,972,074	3,284,890	3,748,028	4,096,213	4,725,117
U.S.A. ..	2,742,161	3,163,166	3,759,645	4,117,078	4,245,368
Australia ..	887,490	914,736	1,178,581	1,381,135	1,592,034
Korea ..	420,000	540,000	650,000	850,000	1,050,000
Mexico ..	662,000	682,319	753,950	846,381	923,798
Philippine Islands ..	340,314	451,818	599,657	716,967	903,265
Rhodesia ..	693,265	727,928	801,513	808,447	815,191
Japan, including Formosa ..	531,371	674,030	820,666	832,000	852,000

The next table shows the average yearly production in order of importance of the yield in the principal gold-producing countries for the decennium 1929 to 1938 :—

GOLD : AVERAGE ANNUAL PRODUCTION IN PRINCIPAL COUNTRIES, 1929 TO 1938.

Country.	Quantity.	Country.	Quantity.
	Fine oz.		Fine oz.
Union of South Africa ..	11,106,473	Mexico	703,513
U.S.S.R. (Russia) ..	3,263,862	Rhodesia	672,934
Canada ..	3,154,429	Japan, including Formosa	582,299
U.S.A. ..	2,889,356	Korea	444,112
Australia ..	898,860	Philippine Islands ..	405,984

5. *Employment in Gold-mining.*—The number of persons engaged in gold-mining in each State at various intervals since 1901 is shown in the following table. The figures are inclusive of prospectors, etc., so far as they are ascertainable, and include those who may not have worked during the whole of the year.

GOLD-MINING : PERSONS EMPLOYED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Taa.	Nor. Terr.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
1901 ..	12,064	27,387	9,438	(a)1,000	19,771	1,112	(a) 200	70,972
1903 (b) ..	11,247	25,208	9,229	(a)1,000	20,716	973	(a) 200	68,573
1913 ..	3,570	11,931	3,123	800	13,445	481	175	33,525
1923 ..	1,141	2,982	603	32	5,555	119	30	10,462
1932 ..	8,154	6,089	3,893	142	7,983	250	89	26,660
1933 ..	6,913	6,126	4,161	231	9,900	229	95	27,655
1934 ..	7,080	6,943	3,867	804	12,523	275	115	31,607
1935 ..	6,652	6,960	3,931	243	14,708	216	403	33,113
1936 ..	5,204	6,959	3,983	283	15,696	230	372	32,727
1937 ..	3,885	6,180	3,436	192	16,174	179	388	30,434
1938 ..	3,764	6,315	3,378	158	15,374	141	267	29,397

(a) Estimated.

(b) Year of maximum production.

Owing to causes referred to earlier in this section, the number employed in gold-mining had dwindled to the comparatively small figure of 6,108 in 1929. Stimulated by the enhanced price of gold in recent years employment in the industry rose more than five-fold to 33,113 in 1935, but the numbers employed have declined since that year.

6. Tax on Gold.—The Commonwealth Government imposed a tax on gold delivered in Australia or in any territory under its jurisdiction to the Commonwealth Bank on and after the 15th September, 1939. The rate of tax was fixed at 50 per cent. of the price payable by the Bank in excess of £A9 per fine oz. Gold imported from places other than Australian Territories is not subject to the tax, nor is gold coin or wrought gold unless and until the Treasurer otherwise directs by notice in the *Commonwealth Gazette*.

A rebate of tax is allowed to bona fide prospectors in respect of the first 25 ounces delivered by them each year. In 1940 the Gold Mining Encouragement Act provided for the refund of the whole or part of the tax to producers, other than bona fide prospectors, working at a loss or at a profit not exceeding 30s. per fine oz. A sum of £150,000 was also appropriated for the purpose of making grants to the States to provide advances to companies needing capital to develop their properties.

It was anticipated that the tax on gold would yield about £1,400,000 per annum, while the assistance provided was estimated as follows:—

	£
Bona fide prospectors	90,000
Marginal producers and low-grade mines	100,000
Assistance to industry through the States	150,000

7. Bounty on Production.—A reference to the bounty provided by the Commonwealth on gold production in Australia will be found in Official Year Book No. 32. p. 579.

§ 3. Platinum and Platinoid Metals.

1. Platinum.—(i) *New South Wales.* The deposits at present worked in the State are situated in the Fifield division, near Parkes and in the Ballina division. The production in 1938 from these divisions amounted to 4 oz. and 3½ oz. respectively making a total of 7½ oz. valued at £52, as compared with 46 oz. valued at £455 in the preceding year. The total production recorded to the end of 1938 amounted to 20,193 oz., valued at £128,544.

(ii) *Victoria.* In Gippsland the metal has been found in association with copper and 127 oz. were produced in 1913, but there has been no production in recent years.

(iii) *Queensland.* Platinum, associated with osmiridium, has been found in the beach sands between Southport and Currumbin, in creeks on the Russell gold-field near Innisfail, and in alluvial deposits on the Gympie gold-field, but no production has been recorded.

2. Osmium, Iridium, etc.—(i) *New South Wales.* Small quantities of osmium, iridium and rhodium are found in various localities. Platinum, associated with iridium and osmium, has been found in the washings from the Aberfoil River, about 15 miles from Oban; on the beach sands of the northern coast; in the gem sands at Bingara, Mudgee, Bathurst and other places. In some cases, as for example in the beach sands of Ballina, the osmiridium and other platinoid metals amount to as much as 40 per cent. of the platinum, or about 28 per cent. of the whole metallic content.

(ii) *Victoria.* In Victoria, iridosmine has been found near Foster, and at Waratah Range, South Gippsland.

(iii) *Tasmania.* The yield of osmiridium was returned as 191 oz. in 1938 valued at £2,976 compared with the record production of 3,365 oz. in 1925 valued at £103,570. The decrease in later years was largely due to the decline in price from £31 in 1925 to £15 os. 4d. per oz. in 1938, but the depletion of the known alluvial deposits was also a factor.

§ 4. Silver, Lead and Zinc.*

1. **Occurrence in Each State.**—Particulars regarding the occurrence of silver and associated metals in each State were given in Official Year Books, Nos. 1 to 5.

2. **Production.**—(i) *General.* The values of the production of silver, silver-lead ore and lead from the various States during the five years ending 1938 are given hereunder :—

SILVER AND LEAD : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Australia.
	£	£	£	£	£	£	£	£
1934 ..	2,199,823	370	671,255	..	7,199	43,850	(a) 11	2,922,508
1935 ..	3,189,388	642	755,899	..	12,687	63,713	..	4,022,329
1936 ..	3,820,785	525	899,101	357	14,001	215,449	..	4,950,218
1937 ..	4,310,613	491	1,172,531	371	27,844	308,262	328	5,820,440
1938 ..	3,520,465	647	926,614	70	29,477	267,773	..	4,745,046

(a) Year ended 30th June.

(ii) *New South Wales.* The figures quoted above for New South Wales for the year 1938 include silver to the value of £7,357 and silver-lead ore and concentrates valued at £3,513,108. Since the Sulphide Corporation Ltd. ceased smelting operations in 1922 the silver (metal) is obtained chiefly in the refining of gold and copper ores, and there has been no production of lead (pig) in the State. It may be noted here that the bulk of the carbonate and siliceous ore from the Broken Hill field is sent for treatment to Port Pirie in South Australia, while the remainder of the ore is concentrated on the field and then dispatched to Port Pirie for refining. The output of silver-lead ores and concentrates for 1938 showed an increase in quantity over that of the previous year. Owing to the fall in the price of lead, however, the value of these ores and concentrates declined by almost £800,000.

It must be understood that the totals for New South Wales in the table above represent the net value of the product (excluding zinc) of the silver-lead mines of the State. In explanation of the values thus given, it may be noted that, as previously mentioned, the metallic contents of the larger portion of the output from the silver-lead mines in the State are extracted outside New South Wales, and the Mines Department considers, therefore, that the State should not take full credit for the finished product. The real importance of the State as a producer of silver, lead and zinc is thus to some extent overlooked. The next table, however, which indicates the quantities of metals extracted within Australia and the contents by assay of concentrates exported during selected years, will show the estimated total production and the value of the metal contents of all ore mined in New South Wales :—

SILVER AND LEAD : PRODUCTION IN NEW SOUTH WALES.

Year.	Metal Extracted within Australia.				Contents of Concentrates Exported.			
	Silver.	Lead.	Zinc.	Value.	Silver.	Lead.	Zinc.	Value.
	Fine oz.	Tons.	Tons.	£	Fine oz.	Tons.	Tons.	£
1903 ..	6,489,689	92,293	286	1,790,929	1,736,512	29,706	14,625	308,714
1913 ..	5,908,638	106,432	4,121	2,709,867	8,596,251	117,903	184,149	3,759,691
1923 ..	7,233,236	124,576	41,153	5,707,739	4,834,718	40,906	149,319	1,813,287
1933 ..	7,430,479	158,475	53,956	3,579,886	790,792	18,344	63,849	475,161
1935 ..	8,422,316	180,958	67,666	4,933,492	660,630	11,947	72,285	424,929
1936 ..	7,778,514	157,755	57,744	4,608,888	779,289	18,569	68,011	549,319
1937 ..	8,731,750	184,822	43,254	6,353,963	1,048,749	13,832	64,785	889,991
1938 ..	8,497,637	181,187	47,370	4,438,188	1,060,913	15,213	66,359	479,795

* Further details in regard to zinc are given in § 7 hereinafter.

The figures given above are quoted on the authority of the Mines Department of New South Wales. Accurate details in regard to gold, copper, antimony, cadmium and cobalt contained in the silver-lead ores are not available. Cadmium was first extracted in 1922 at Risdon, in Tasmania, and in 1938 the amount won from ores of New South Wales origin was given as 147.17 tons, valued at £60,770. As pointed out previously, credit for the value is not taken in the New South Wales returns, the value accruing to the State being taken as that of the declared value of the concentrates at the time of their dispatch.

(a) *Broken Hill.* Broken Hill, in New South Wales, is the chief centre of silver production in Australia. A description of the silver-bearing area in this district is given in earlier issues of the Official Year Book. (See No. 4, p. 506.)

Although the returns are not complete in all cases, the following table relating to the companies controlling the principal mines at Broken Hill will give some idea of the richness of the field :—

SILVER : BROKEN HILL RETURNS TO END OF 1938.

Mine.	Value of Output to end of 1938.	Dividends and Bonuses Paid to end of 1938.
	£	£
Broken Hill Proprietary Co. Ltd.	54,059,804	16,580,109
Broken Hill Proprietary Block 14 Co. Ltd.	4,750,508	670,160
British-Australian Broken Hill Co. Ltd.	5,858,998	821,280
Broken Hill Proprietary Block 10 Co. Ltd.	4,946,989	1,432,500
Sulphide Corporation Ltd. (Central and Junction Mines)	29,037,544	3,770,625
Broken Hill South Ltd.	28,224,159	7,535,000
North Broken Hill Ltd.	25,049,305	7,950,190
Broken Hill Junction Lead Mining Co.	1,185,058	87,500
Junction North Broken Hill Mine	3,511,940	171,431
The Zinc Corporation Ltd.	15,229,099	4,842,178
Barrier South Ltd.	151,517	50,000
Total	172,004,981	43,910,973

The returns relating to dividends and bonuses paid are exclusive of £1,744,000, representing the nominal value of shares in Block 14, British, and Block 10 companies, allotted to shareholders of Broken Hill Proprietary Company. If the output of the companies which were, prior to 1938, engaged in treating the tailings, etc., be taken into consideration, the totals for output and dividends shown in the table would be increased to about £179.3 millions and £47.0 millions respectively. The authorized capital of the various companies amounted to £18,918,000 in 1938, an increase of £7.5 million on that of 1936 due to the authorized capital of the Broken Hill Proprietary Co. being raised from £7.5 million to £15 million in 1937. In 1938 the dividends and bonuses paid amounted to £1,882,760 shared in by the Companies controlling the principal mines as follows :—Zinc Corporation, £431,142 ; North Broken Hill, £315,000 ; Broken Hill South, £400,000 ; Broken Hill Proprietary, £706,618, and Sulphide Corporation, £30,000. The dividend of the latter company is quoted in sterling.

(b) *Other Areas.* Silver is found in various other localities in New South Wales, but the production therefrom in 1938 was relatively unimportant. Development of the Captain's Flat silver-lead-zinc mine was continued during 1938 and, as expected, production commenced during 1939. This mine employs about 400 men. The rate of production is to be 500 tons per day, increasing to 1,000 tons per day as soon as additional equipment has been installed. In addition to the production of silver-lead-zinc ores, it is expected that 80,000 tons of iron pyrites will be railed to Port Kembla annually where the sulphur contents will be used for the large-scale manufacture of sulphuric acid and superphosphates.

(iii) *Victoria*. The silver produced in 1938 amounted to 5,898 oz., valued at £647, and was obtained in the refining of gold at the Melbourne Mint.

(iv) *Queensland*. The production of silver increased by 268,496 oz. to about 3.5 million oz., and lead increased by 2,722 tons to 41,196 tons, practically all of which was won from the mine and works at Mount Isa in the Cloncurry mineral field.

(v) *South Australia*. Silver ore has been discovered at Miltalie and Poonana, in the Franklin Harbour district, also at Mount Malvern and Olivaster, near Rapid Bay, and in the vicinity of Blinman and Farina, at Baratta, and elsewhere. There was no production between 1932 and 1935 but subsequently there has been a small output of silver. In 1938 production amounted to 503 oz. valued at £51. In addition 1 ton of lead was mined for a value of £20.

(vi) *Western Australia*. The quantity of silver obtained as a by-product and exported in 1938 was 271,346 oz., valued at £28,852.

(vii) *Tasmania*. The silver produced in 1938 amounted to 1,219,550 oz., valued at £104,671, and the lead to 10,652 tons, valued at £163,162. This represents a considerable increase on that of the previous year as regards quantities. The drop in the price of lead, however, was responsible for the lower value. About 1,153,000 oz. of the total silver output were contained in silver-lead, while 67,000 oz. were contained in the blister copper produced by the Mount Lyell Co.

(viii) *Northern Territory*. A rich deposit of silver-lead and copper ore was located in 1930 at the Jervis Range about 200 miles east of Alice Springs. Development is hindered, however, by transport difficulties and lack of permanent water. Rich sulphides have been found at Barrow Creek. Production during the past ten years has been very intermittent and not of great consequence in those years when any output was recorded.

3. **Production of Silver in Australia.**—The following table sets out as fully as possible the total production of silver in Australia. It is based on the data published by the Australian Mines and Metals Association and shows the quantities of refined silver recovered by smelters and mints and the estimated metallic contents of ores and concentrates exported:—

SILVER : PRODUCTION IN AUSTRALIA.

Particulars.	1914.	1924.	1934.	1937.	1938.
	Fine oz.	Fine oz.	Fine oz.	Fine oz.	Fine oz.
Metal recovered by—					
Smelters	4,020,904	7,529,845	8,583,133	9,279,983	9,102,178
Mints	226,019	101,368	91,416	230,526	254,961
Metallic contents in ores and concentrates exported ..	8,901,212	2,242,170	2,579,082	4,267,571	4,538,402
Total Production ..	13,148,135	9,873,383	11,253,631	13,778,080	13,895,541

Particulars for 1939 are not available for publication.

4. **World's Production.**—The world's production of silver during the last five years for which particulars are available is estimated to have been as follows:—

SILVER : WORLD'S PRODUCTION.

1934.	1935.	1936.	1937.	1938.
Fine oz.				
193,000	223,000	249,000	276,000	267,000

The world's production of silver in millions of fine oz. during the years 1918, 1928 and 1938 amounted respectively to 203, 258 and 267, of which Australia contributed 10.4 million, 9.6 million and 13.9 million fine ounces, or 5.1 per cent., 3.7 per cent. and 5.2 per cent. respectively. The production for Australia includes an estimate of the silver contents of the ores, bullion and concentrates exported.

Arranged in order of importance the estimated yields in 1938 from the principal silver-producing countries were as follows:—

SILVER PRODUCTION IN PRINCIPAL COUNTRIES, 1938.

Country.	Production.	Country.	Production.
	Fine oz. (‘000 omitted.)		Fine oz. (‘000 omitted.)
Mexico	81,017	Bolivia	6,366
United States of America	61,706	Burma	5,920
Canada	22,219	Honduras	3,346
Peru	20,424	Belgian Congo	3,120
Australia	13,806	Yugoslavia	2,450
Japan	10,000	Newfoundland	1,414
U.S.S.R. (Russia)	7,000	Chile	1,646
Germany	6,773	Union of South Africa	1,135

5. **Production of Lead in Australia.**—For reasons already mentioned, difficulties arise when an attempt is made to show the production of lead by States. This is due to the fact that production is largely recorded in terms other than metal. As the chief sources of production are confined to the States of New South Wales, Queensland, and Tasmania, the aggregation of their outputs can be accepted as being representative of the production for Australia. This is shown in the following table:—

LEAD : PRODUCTION IN AUSTRALIA.

Year.	New South Wales. (a)	Queensland. (a)	Tasmania.	Total.
	Tons.	Tons.	Tons.	Tons.
1934	175,783	42,462	1,507	219,752
1935	192,905	32,952	1,488	227,345
1936	176,324	35,762	7,563	219,649
1937	198,654	38,474	9,117	246,245
1938	196,400	41,196	10,652	248,248

(a) Estimated lead contents of silver-lead ores.

The following table, compiled from details supplied by the Australian Mines and Metals Association, adds confirmation to the total figures given in the previous table.

LEAD : PRODUCTION IN AUSTRALIA.

Particulars.	1935.	1936.	1937.	1938.
	Tons.	Tons.	Tons.	Tons.
Metal recovered in Australia	181,211	159,504	186,757	182,214
Metallic contents in ores and concentrates exported	48,000	52,534	53,279	57,376
Total Production	229,211	212,038	240,036	239,590

Particulars for 1939 are not available for publication.

6. **Lead : War-time Contract.**—On the outbreak of war in September, 1939, the British Ministry of Supply contracted with the Broken Hill Associated Smelters Pty. Ltd. for the purchase of Australia's surplus lead. The contract, which was made with the approval of the Commonwealth Government, is for a period of twelve months, the buyer having the option of renewal by giving three months notice. The quantity involved amounts to 13,330 tons per month up to a total of 160,000 tons for the year and the price is quoted at £Stg15 1s. 3d. per ton or £A18 16s. 7d. on a basis of f.o.b. Port Pirie.

7. **Prices of Silver, Lead and Zinc.**—In view of the close association in Australia, particularly in New South Wales, of ores containing these metals, the average prices of each metal during the last five years have been incorporated in the table hereunder :—

PRICES OF SILVER, LEAD AND SPELTER.

Metal.	1935.			1936.			1937.			1938.			1939.		
	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
Silver (Standard) per oz.	0	2	4.95	0	1	8.06	0	1	8.07	0	1	7.52	0	1	8.57
Lead .. per ton	14	5	7	17	13	4	23	4	3	15	5	4	15	13	10
Spelter per ton	14	3	6	15	0	9	22	5	9	13	19	10	14	13	6

A marked recovery in the prices of lead and spelter occurred on the London Metal Market between November, 1936, and March, 1937, when the price of lead rose from £22 to £33 per ton and that of spelter from £16 to more than £33 per ton. Prices receded after that month and by June, 1939, were quoted at £15 and £14 per ton respectively. Silver at the latter date was about 1s. 7½d. per oz.

At the outbreak of war in September, 1939, the prices of lead and zinc were fixed in London by the Ministry of Supply at £Stg16 12s. 6d. and £Stg15 respectively. On the 18th December, 1939, increases to £Stg25 and £Stg25 15s. respectively, were permitted. In Australia prices were fixed on 19th December, 1939, at £A20 17s. 8d. per ton for lead and £A20 2s. 6d. per ton for zinc, and increases to £A25 per ton for each metal were made in February, 1940. No further changes were recorded in either country up to May, 1940.

8. **Employment in Silver, Lead and Zinc Mining.**—The average number of persons employed in mining for these metals during each of the last five years is given below :—

SILVER, ETC., MINING : PERSONS EMPLOYED.

Year.	N.S.W. (a)	Q'land.	S. Aust.	W. Aust. (b)	Tasmania (a)	Nor. Terr.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1934 ..	3,237	523	..	4	192	1	3,957
1935 ..	3,536	544	..	..	162	..	4,242
1936 ..	4,163	601	3	32	271	..	5,070
1937 ..	5,225	578	2	29	369	..	6,203
1938 ..	5,612	530	..	4	421	3	6,570

(a) Silver, lead and zinc.

(b) Principally lead and silver-lead ore.

§ 5. Copper.

1. **Production.**—Copper is widely distributed throughout Australia, but the chief sources of production are now centred in Tasmania and Queensland. South Australia and New South Wales were once large producers of copper but the output has dwindled considerably during recent years. The quantity of copper raised in Australia is dependent largely upon prices, as prices improve so production expands and vice versa.

The values of the local production as reported and credited to the mineral industry for the years 1934 to 1938 are shown hereunder. Quantities for Australia as a whole as returned by the several State Mines Departments are appended on separate lines at the foot of the table :—

COPPER : PRODUCTION.

State.	1934.	1935.	1936.	1937.	1938.
	£	£	£	£	£
New South Wales	25,398	30,071	53,687	72,406	87,905
Queensland	95,993	101,489	161,688	308,968	203,967
South Australia	8,475	11,065	22,609	21,620	15,333
Western Australia .. ..	..	..	97	986	1,275
Tasmania	267,342	464,007	556,734	759,332	580,238
Northern Territory .. ..	..	..	(a) 1,972	55	4,362
Australia	397,118	606,632	796,787	1,163,367	893,080
Ingot, Matte, etc. .. tons	12,003	16,992	18,069	18,694	18,751
Ore and Concentrates .. tons	96	56	819	2,884	935

(a) Eighteen months ended 31st December, 1936.

2. Sources of Production.—(i) *New South Wales.* The production during 1938 amounted to 1,280 tons of electrolytic copper and 683 tons of concentrates, the latter being exported overseas. Practically all of the copper was obtained at Port Kembla from the treatment of copper matte forwarded by the Broken Hill Smelters and derived from Broken Hill silver-lead ores. The concentrates were obtained from the treatment of ore from the Cobar district. Other copper mines operated in the State during the year but the outputs were very small. Since 1919 the production in New South Wales has rarely exceeded 1,000 tons, whilst previously it had ranged from 2,500 tons in 1915 to 10,600 tons in 1911.

(ii) *Queensland.* The yield in this State amounted in 1938 to 4,459 tons valued at £203,967. Although an improvement on the yields of recent years the output for 1938 was very much less than that of 1920 when nearly 16,000 tons valued at £1,552,000 were raised. The falling-off was due primarily to the low prices realized for copper. The returns from the chief producing areas in 1938 were as follows: Cloncurry, 1,562 tons, £71,462; Herberton, 169 tons, £7,743; and Mount Morgan, 2,488 tons, £113,829.

(iii) *South Australia.* Deposits of copper are found over a large portion of South Australia and its total production easily exceeds that of any other State. Compared with the output of previous years the production of South Australia has dwindled during recent times to very small dimensions, and is now exceeded by that of Tasmania, Queensland and New South Wales. A short account of the discovery, etc., of some of the principal mining areas, such as Kapunda, Burra Burra, Wallaroo and Moonta, is given in earlier issues of the Official Year Book. The Moonta and Wallaroo copper field, which was opened in 1860, was worked continuously and up to the close of 1931, £20,500,000 of copper was produced. Between 1933 and 1938, the field was worked on a co-operative basis known as the Moonta Mining Scheme to which reference is made in previous issues of the Official Year Book. Owing to the exhaustion of the ore reserves the operations of the Scheme ceased in August, 1938. The production of copper in the State in 1938 amounted to 254 tons, valued at £15,323.

(iv) *Western Australia.* Twenty-nine tons of copper valued at £1,275 were exported from this State during 1938, compared with 35 tons valued at £986 exported in 1937.

(v) *Tasmania.* The quantity of copper produced in Tasmania during 1938 was 12,729 tons, valued at £580,238, the whole of the production being by the Mount Lyell Mining and Railway Co. Ltd. This Company treated 58,822 tons of ore and concentrates and produced 12,791 tons of blister copper, containing copper 12,700 tons, silver 67,176 oz., and gold 7,919 oz., the whole being valued at £A803,065.

(vi) *Northern Territory.* Copper has been found at various places, but the development of these deposits is hindered by low prices and the difficulties of transport. For the eighteen months ended December, 1936, 204 tons of ore were raised. This was the first production recorded since 1932-33. In 1937, 7 tons valued at £55 were also produced, whilst in 1938 the production amounted to 252 tons valued at £4,362.

3. **World's Production of Copper.**—The world's production of copper during the five years 1934-1938 was estimated as follows. The figures have been taken from the statistical summary prepared by the Imperial Institute.

COPPER : WORLD'S PRODUCTION.

1934.	1935.	1936.	1937.	1938.
Tons. 1,300,000	Tons. 1,470,000	Tons. 1,700,000	Tons. 2,300,000	Tons. 2,020,000

The yields from the principal copper-producing countries in 1938 were as follows :—

COPPER : PRODUCTION IN PRINCIPAL COUNTRIES, 1938.

Country.	Production.	Country.	Production.
	Tons.		Tons.
United States of America ..	498,003	Yugoslavia	48,700
Chile	345,821	Mexico	41,190
Canada	255,022	Peru	37,154
Rhodesia	250,882	Cyprus	34,000
Belgian Congo	121,985	Germany	30,000
U.S.S.R. (Russia)	100,000	Spain	30,000
Japan	80,000	Australia	19,446

During the year 1938 the share of the United States of America in the world's copper production amounted to nearly one-fourth, while the Australian proportion was less than 1 per cent. The total production of copper in 1938 was somewhat lower than that of the previous year despite the increase in armaments.

4. **War-time Contract.**—Soon after the outbreak of war in September, 1939, the British Ministry of Supply expressed its willingness to purchase, under contract, any surplus electrolytic copper up to a total quantity of 7,000 tons for the first year. Owing to the expansion of the armament industry in Australia, however, it is probable that no surplus will be available for export.

5. **Prices.**—The average prices of copper in London and New York during each of the last five years are given in the following table. The figures are given on the authority of *The Mineral Industry*.

COPPER PRICES : LONDON AND NEW YORK.

Year.	Average London Price per Ton Standard Copper.	Average New York Price in Cents per lb. Electrolytic Copper.
	£	Cents.
1934	30.28	8.43
1935	31.37	8.65
1936	38.44	9.47
1937	54.47	13.17
1938	40.71	10.00

Copper is subject to considerable variation in price. In December, 1916, the average London price of standard copper was £145.32 per ton, while in June, 1927, it was quoted at £54.03. In 1930, the average price was £54, and during each of the next five years just over £30 per ton. It rose to £60 in June, 1937, but declined thereafter to £35 in June, 1938, only to rise again to more than £42 in June, 1939.

At the outbreak of war in September, 1939, the price of copper in London was fixed at £Stg51 per ton. This was subsequently increased to £Stg62 per ton on 13th December, 1939. On the following day, the price in Australia was fixed at £A63 17s. 6d. per ton, and on 16th February, 1940, was further increased to £A76 per ton. This latter increase was made, partly, to stimulate production in Australia. Owing to the expansion of defence measures, local production was insufficient for local needs and, to avoid the necessity of imports, the price was raised to include a sum of £4 per ton which was to be devoted to exploration and new development by the major copper-mining companies. No further changes were recorded in either country up to May, 1940.

6. **Employment in Copper-mining.**—The number of persons employed in copper-mining during each of the last five years was as follows :—

COPPER-MINING : PERSONS EMPLOYED.

Year.	N.S.W.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Nor. Terr.	Australia. (a)
	No.	No.	No.	No.	No.	No.	No.
1934	4	151	45	..	905	..	1,105
1935	7	170	54	..	1,113	..	1,344
1936	9	196	54	..	914	4	1,177
1937	27	306	75	..	952	8	1,368
1938	13	213	67	4	1,015	5	1,317

(a) Revised.

In 1917 over 9,000 persons were engaged in copper-mining.

§ 6. Tin.

1. **Production.**—The values of the production of tin as reported to the Mines Departments in each of the States during the five years 1934 to 1938 are given in the next table. A separate line is appended showing the recorded tonnage for Australia during each of the specified years.

TIN : PRODUCTION.

State.	1934.	1935.	1936.	1937.	1938.
	£	£	£	£	£
New South Wales	328,130	287,890	268,454	336,628	286,768
Victoria	3,886	14,475	14,750	44,127	28,650
Queensland	179,404	187,234	157,889	202,614	141,547
Western Australia	6,765	8,829	6,882	12,421	7,421
Tasmania	219,246	258,919	206,656	260,673	244,037
Northern Territory	(a) 9,566	(a) 6,036	(b) 4,176	7,205	3,205
Total	746,997	763,383	658,807	863,668	711,628
Ingot, Matte etc. tons	3,169	3,395	3,187	3,377	3,446
Concentrates tons	154	207	225	366	286

(a) Year ended 30th June.

(b) Eighteen months ended December, 1936.

2. Sources of Production.—(i) *New South Wales.* The production in 1938 was stated at 1,162 tons of ingots valued at £282,024, and 28 tons of concentrates valued at £4,744 were exported overseas. A large proportion of the output in this State is obtained in normal years by dredging, principally in the New England district, the quantity of stream tin won in 1938 being 527 tons. The Tingha area was the principal contributor to the output in 1938, the yield from this district comprising 615 tons of concentrates. Amongst other areas, Emmaville produced 243 tons of concentrates and Ardlethan 205 tons of concentrates, while the lode mines at Torrington returned a yield of 25 tons of tin oxide.

(ii) *Victoria.* The production of tin in this State is obtained chiefly by dredging in the Beechworth district and by mining in the Toora district in Gippsland. The production in 1938 amounted to 169 tons of concentrates valued at £28,650 compared with 218 tons valued at £44,127 in 1937.

(iii) *Queensland.* The chief producing districts in Queensland during 1938 were Herberton, 601 tons, valued at £83,953; Cooktown, 71 tons, £10,898; Stanthorpe, 119 tons, £17,854; Chillagoe, 78 tons, £10,815 and Kangaroo Hills, 122 tons, £16,080. The total production, 1,005 tons, £141,547, was a decrease of 166 tons and £61,067 on that for 1937. These figures may be compared with those recorded in the early years of this century when the production ranged between 2,000 and 5,000 tons per annum.

(iv) *Western Australia.* The quantity of tin reported in this State in 1938 amounted to 68 tons, valued at £7,421, and was obtained in the Pilbara and Greenbushes fields.

(v) *Tasmania.* For 1938, the output amounted to 1,279 tons of tin, valued at £244,037, an increase of 189 tons in quantity but a decrease of £16,636 in value over the return for the previous year. The production of tin in this State has substantially increased since 1929 when the metal produced amounted to only 640 tons. The mines associated with the production of tin are well equipped and the prospects of greater activity in the future are very favourable.

(vi) *Northern Territory.* The production for the year ended December, 1938, amounted to 21 tons of concentrates valued at £3,205. This may be compared with 41 tons of concentrates valued at £7,205 produced during 1937.

3. World's Production.—The world's production of tin during each of the last five years was as follows:—

TIN : WORLD'S PRODUCTION.

1934.	1935.	1936.	1937.	1938.
Tons.	Tons.	Tons.	Tons.	Tons.
117,000	136,000	179,000	206,000	157,000

The world's production of tin increased to a record high level in 1937 but fell to 157,000 tons in 1938 a decline of 24 per cent. The chief producing countries of the world are:—Malaya, Netherlands East Indies, Bolivia and Thailand. These countries produced about three-quarters of the total production in 1938. The agreement controlling the production and export of tin has been extended to 1941. The parties to this agreement are those countries already mentioned together with Nigeria, Congo and Indo-China. Production in Australia is not affected.

The yields from the principal producing countries in 1938 were as follows :—

TIN : PRODUCTION IN PRINCIPAL COUNTRIES, 1938.

Country.			Production.	Country.			Production.
			Tons.				Tons.
Malaya			43,247	Burma.. .. .			4,412
Netherlands East Indies			27,299	Australia			3,732
Bolivia			25,484	Japan			2,300
Thailand			14,704	United Kingdom			1,999
China			11,600	Indo-China			1,599
Belgian Congo			9,025	Portugal			1,036
Nigeria			7,305	Argentina			(a)

(a) Not yet available.

Australia's share of the world's tin production, estimated at 157,000 tons in 1938, would appear to be a little more than 2 per cent.

4. Prices.—The average prices of the metal in the London market for the years 1934 to 1939 were as follows :—

TIN PRICES : LONDON.

Year.			Average Price Per Ton.	Year.			Average Price Per Ton.
			£ s. d.				£ s. d.
1934			230 7 5	1937			242 6 7
1935			225 14 5	1938			189 12 1
1936			204 12 8	1939			226 5 8

The average price of tin rose to £242 per ton in 1937 compared with £118 in 1931, the peak depression year. In 1938 the price receded to £189 per ton.

Subsequent to the outbreak of war in September, 1939, the price of tin in London was controlled and fixed at £Stg230 per ton. In December, 1939, the price was unpegged and it immediately rose to £Stg271. In Australia the domestic price was raised to £A306 per ton in February, 1940.

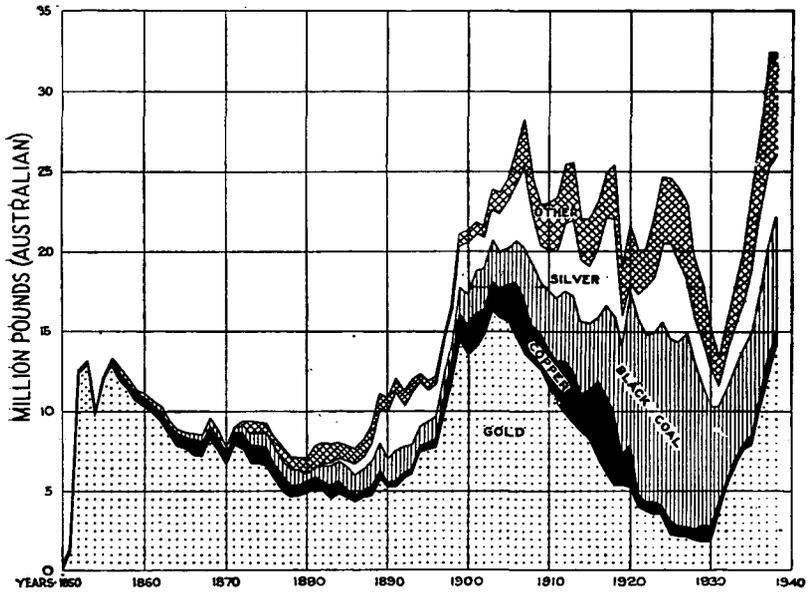
5. Employment in Tin-mining.—The number of persons employed in tin-mining during the last five years is shown below :—

TIN-MINING : PERSONS EMPLOYED.

Year.	N.S.W.	Victoria. (a)	Q'land.	W. Aust.	Tas.	Nor. Terr.	Australia.
	No.	No.	No.	No.	No.	No.	No.
1934	1,903	10	1,214	73	1,207	120	4,527
1935	1,807	5	1,122	58	1,415	30	4,437
1936	1,762	6	1,270	48	1,253	37	4,376
1937	1,781	8	1,389	60	1,330	27	4,595
1938	1,440	5	1,263	73	1,123	15	3,919

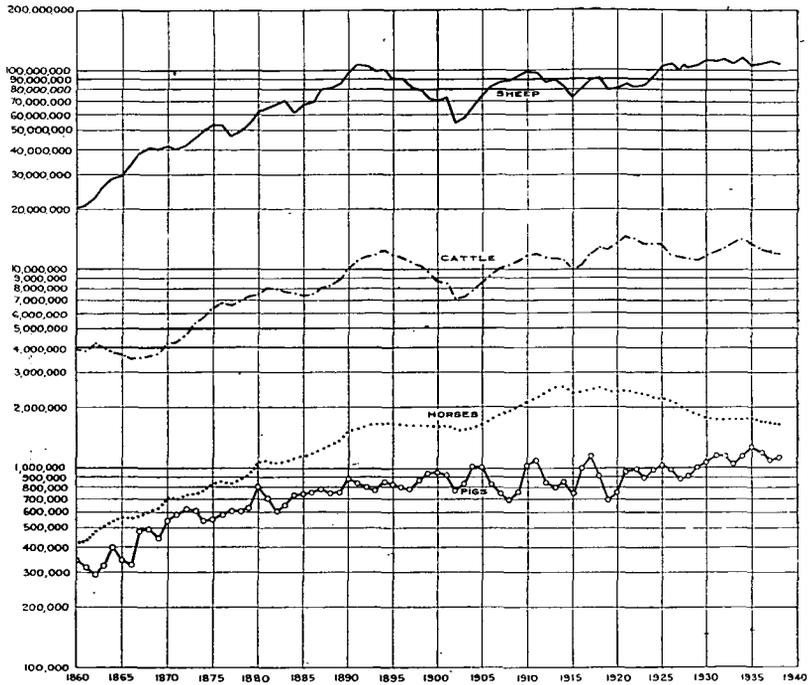
(a) The tin produced in Victoria was raised by a dredging company operating primarily for gold.

VALUE OF PRINCIPAL MINERALS PRODUCED—AUSTRALIA, 1850 TO 1938.



EXPLANATION.—The upper curve represents the total value of mineral production while the vertical distances between the curves represent the value of production of each mineral.

LIVE STOCK—AUSTRALIA, 1860 to 1938.



(See page 326.)

EXPLANATION.—This is a ratio graph, the vertical scale being logarithmic and the curves rise and fall according to the rate of increase or decrease. Actual numbers are indicated by the scale at the side of the graph.

§ 7. Zinc.

1. Production : States.—(i) *New South Wales.* (a) *Values Assigned.* The production of zinciferous concentrates is confined chiefly to the Broken Hill district of New South Wales, where zinblendes forms one of the chief constituents in the enormous deposits of sulphide ores. During the earlier years of mining activity on this field a considerable amount of zinc was left in tailings, but from 1909 onwards improved methods of treatment resulted in the profitable extraction of the zinc contents of the accumulations at the various mines.

As the metallic contents of the bulk of the concentrates, etc., produced in the Broken Hill district are extracted outside New South Wales, the mineral industry of that State is not credited by the Mines Department with the value of the finished product. During 1938 the zinc concentrates produced amounted to 265,296 tons, valued at £230,989. Portion of the zinc concentrates produced is treated at Risdon in Tasmania. The production from these concentrates in 1938 as recorded by the Electrolytic Zinc Company of Australia Ltd. at Risdon amounted to 47,370 tons of zinc, 147.17 tons of cadmium and 18.97 tons of cobalt oxide. This is referred to in the Tasmanian production below. The balance, which in 1938 amounted to 124,071 tons, valued at £240,677, was exported overseas.

The reopening of the mine at Captain's Flat by the Lake George Mines Ltd. was an important development in 1937. Production commenced in 1939. Approximately 400 men are employed at the mine.

(b) *Local and Foreign Extraction.* A statement of the quantity of zinc extracted in Australia and the estimated zinc contents of concentrates exported overseas during the five years 1934 to 1938 will be found in § 17 hereinafter.

(ii) *Queensland.* The production of zinc in the Cloncurry district of Queensland during 1938 was 23,735 tons, valued at £329,464, compared with 4,411 tons, valued at £68,863, obtained in 1935. The metal was produced by the Mount Isa Mines Ltd. and is exported overseas as concentrates.

(iii) *South Australia.* Zinc is known to exist in various localities in South Australia, but there has been no production during recent years.

(iv) *Tasmania.* The production of zinc from Tasmanian ores was suspended from 1931 to 1935. Developmental work on the Mount Read-Rosebery district was continued during that period and production commenced in 1936. In 1937—the first full year's operations since the inception of milling at Rosebery—23,481 tons, valued at £525,824, were obtained. In 1938, 25,366 tons of zinc, valued at £356,452, were obtained from Tasmanian ores, as well as 49 tons of cadmium, valued at £18,636, and 12 cwt. of cobalt oxide, valued at £243.

In addition to the above, the Electrolytic Zinc Company at Risdon operated on raw materials obtained from Broken Hill in New South Wales. Production from this source during 1938 amounted to 47,370 tons of slab zinc, valued at £915,617, 147.18 tons of cadmium, valued at £60,760, and 18.97 tons of sheet cobalt oxide, valued at £7,841.

2. Production : Australia.—The details furnished above do not adequately convey the potentialities of Australia as a producer of zinc. This is due to the omission of the metallic contents of ores and concentrates exported overseas, which, in recent years, have been in excess of the amount of metal actually recovered in Australia. In the following table the estimated metallic contents of these exports have been combined with the quantities of metal extracted in Australia to show the total production of zinc from ores mined in Australia. The figures do not include the contents of other zinc-bearing concentrates, e.g., lead concentrates, unless payment has been made for the zinc actually contained in them.

PRODUCTION OF ZINC : AUSTRALIA, 1938.

State of Extraction or Export.	Estimated Metallic Contents and Metal extracted from Ores and Concentrates the produce of—			
	New South Wales.	Queensland.	Tasmania.	Total.
	Tons.	Tons.	Tons.	Tons.
New South Wales	(a) 66,359	.. ..	.. ..	(a) 66,359
Queensland .. .. ..	.. ..	(b) 23,735	.. ..	(b) 23,735
Tasmania	47,370	.. ..	25,366	72,736
Total	113,729	23,735	25,366	162,830

(a) Metallic contents of 124,071 tons of concentrated exported overseas. (b) Metallic contents of 44,799 tons of zinc concentrates produced.

3. **World's Production.**—The world's production of zinc ore in terms of metal during the five years 1934–38 was as follows :—

ZINC : WORLD'S PRODUCTION.

1934.	1935.	1936.	1937.	1938.
Tons. 1,162,000	Tons. 1,540,000	Tons. 1,700,000	Tons. 1,860,000	Tons. 1,840,000

The yields from the principal producing countries in 1938 were as given hereunder, the figures referring to slab zinc produced in the various countries, irrespective of the source of the ore.

ZINC : PRODUCTION IN PRINCIPAL COUNTRIES, 1938.

Country.	Production.	Country.	Production.
	Tons.		Tons.
United States of America ..	398,500	United Kingdom	55,000
Belgium	207,000	Japan	50,000
Germany	191,300	Norway	45,000
Canada	153,500	Mexico	33,100
Poland	106,400	Italy	36,900
Australia	72,468	Netherlands	24,900
U.S.S.R. (Russia)	70,000	Rhodesia	10,200
France	60,000	Czechoslovakia	8,700

The production of Australia quoted above represents the actual quantity of metal extracted in Australia and omits, therefore, the zinc contents of ores and concentrates exported. If this quantity was included, the total production would amount to 162,562 tons, or about 9 per cent. of the world's output.

4. **War-time Contract.**—At the outbreak of war in September, 1939, the British Ministry of Supply contracted with the Electrolytic Zinc Company for the purchase of Australia's surplus zinc. The contract, which was made with the approval of the Commonwealth Government, is for a period of twelve months; the buyers have the option of renewal by giving three months' notice. The quantity involved amounts to 3,000 tons per month up to a total of 36,000 tons for the year and the price quoted being £Stg18 per ton, or £A22 10s. on a basis of f.o.b. Risdon.

5. **Prices and Employment**.—Information regarding prices of zinc and employment in zinc-mining will be found in § 4, pars. 7 and 8, respectively.

§ 8. Iron.

1. **General**.—Iron ore is widely distributed throughout Australia, but the extent of the deposits has never been determined. The only two known ore bodies of large extent, high grade and easy access are those situated at Yampi Sound, Western Australia, and at Iron Knob, South Australia. Estimates of the reserves at these centres place the quantities available at approximately 100 million tons and 150 million tons respectively. In a report submitted to the Government the Commonwealth Geologist stated that, bearing in mind the expansion of the iron industry in Australia, these reserves were sufficient for not more than two generations and that unless supplies were conserved, Australia would, by that time, become an importer of iron ore. As the result of this advice, the Commonwealth Government prohibited the export of iron ore from 1st July, 1938. A survey of the iron ore resources of Australia is now in progress.

2. **Production**.—(i) *New South Wales*. The production from ores mined in New South Wales amounted to 4,580 tons in 1935, valued at £18,320. This is the only occasion since 1929 that ore of New South Wales origin has been used in the production of pig-iron in that State. For many years the chief source of supply has been South Australia.

Small quantities of iron oxide produced in New South Wales are used by the various gasworks 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 1938 the iron oxide raised amounted to 108 tons, valued at £43. Ironstone flux amounting to 2,432 tons valued at £950 was raised in the Goulburn Division during 1933. This is the only production recorded since 1922.

(ii) *Queensland*.—Extensive deposits of iron ore are known to exist in Queensland. Their location and size, however, preclude their exploitation in comparison with the more favorable deposits of South Australia. In 1938, 5,326 tons of ore were obtained from Mount Lucy and used as a flux at the Chillagoe State Smelters.

(iii) *South Australia*. The production from the deposits worked by the Broken Hill Pty. Co. Ltd., at Iron Knob and at Middlebank reached its maximum in 1938, when 2,245,366 tons of ore valued at £2,582,171 was raised. This may be contrasted with an output of 289,000 tons obtained during the industrial depression of 1931. The marked recovery in the iron and steel industry of Australia and the prospects of further expansion indicate an output in the neighbourhood 3,000,000 tons of iron ore in 1940.

(iv) *Western Australia*. The development of the deposits at Yampi Sound was discontinued in 1938 as a result of the embargo on exports. Exploratory operations are to continue until the survey of the quantity and grade of ore is completed. The expenditure thus incurred is to be the responsibility of the Commonwealth Government.

(v) *Tasmania*. There was no production of ironstone in Tasmania during 1938. The production of iron pyrites which amounted to 50,277 tons, valued at £62,845 in 1938, is not included in the mineral returns, but is credited to the manufacturing industry, as it is a by-product from the flotation of copper ore at Mount Lyell. This product is exported to the mainland, where the sulphur contents have displaced imported sulphur in the manufacture of chemical fertilizers. The recovery has grown considerably since 1932, when the output amounted to 274 tons.

(vi) *Other States*. Reference to the iron ore deposits in the various States will be found in preceding issues of the Official Year Book (see No. 22, p. 779).

3. **Iron and Steel Bounties**.—During the year 1938–39 the bounties paid under the Iron and Steel Products Bounty Act on articles manufactured from locally produced materials were as follows: Wire-netting, £5,736; traction engines, £17,313. Corresponding amounts paid during 1939–40 were £4,534 and £12,452 respectively.

4. *World's Production of Iron and Steel.*—(i) *General.* The Australian production of iron and steel at present forms a very small proportion of the world's output. According to the *The Mineral Industry*, the production in the principal countries during the latest available three years was as follows :—

PIG-IRON AND STEEL : WORLD'S PRODUCTION.

Country.	Pig-iron.			Steel Ingots and Castings.		
	1936.	1937.	1938.	1936.	1937.	1938.
	Thousands of Tons.			Thousands of Tons.		
U.S.A.	31,029	37,127	19,161	48,478	51,792	28,739
Germany	15,303	15,957	18,226	19,158	19,816	22,875
U.S.S.R. (Russia) ..	14,400	14,520	14,479	16,300	17,824	17,802
Great Britain	7,686	8,497	6,763	11,698	12,963	10,394
France	6,237	7,917	5,956	6,562	7,761	6,080
Japan	2,869	3,561	3,040	5,368	6,423	5,930
Belgium	3,207	3,843	2,426	3,105	3,777	2,249
Luxemburg	1,987	2,513	1,527	1,981	2,510	1,413
Czechoslovakia ..	1,140	1,675	1,215	1,559	2,315	1,733
Italy	816	790	850	2,328	2,087	2,285
Poland	582	724	952	1,143	1,450	1,522
Canada	679	898	758	1,115	1,401	1,156
Sweden	585	646	647	1,022	1,104	964
India	1,541	1,453	1,628	880	971	950
Australia	(b) 662	905	1,059	(b) 716	1,146	1,206
Hungary	306	362	345	460	706	650
Austria	248	389	(a)	418	650	(a)
Union of South Africa	199	272	271	298	332	341
Total—All Countries	89,802	102,848	80,452	124,794	135,317	107,157

(a) Included with Germany.

(b) Incomplete.

The figures for the world's production of iron and steel reached an exceptionally low level in 1932, namely, pig-iron, 39,275,000 tons; steel, 50,029,000 tons. From that year onwards all steel-producing nations recorded continuous increases in production, but in 1938 a marked decline was recorded. The principal producers in Australia are the Broken Hill Pty. Co. Ltd. and the Australian Iron and Steel Ltd., the former situated at Newcastle and the latter at Port Kembla in New South Wales. Additional plant has been authorized at both of these works in order to meet the increasing demand for steel in Australia whilst an extension of the industry to South Australia is in hand. Work connected with the erection of a blast furnace at Whyalla is proceeding.

(ii) *Australia.* The production of steel and pig-iron in New South Wales, which is the only producing State, is shown during each of the last ten years.

PIG-IRON AND STEEL : AUSTRALIAN PRODUCTION.

Year ended 30th June—	Pig-iron.	Steel Ingots.	Steel Rails, Bars and Sections.	Year ended 30th June—	Pig-iron.	Steel Ingots.	Steel Rails, Bars and Sections.
	Tons.	Tons.	Tons.		Tons.	Tons.	Tons.
1930 ..	308,369	314,917	256,696	1935 ..	698,493	696,861	585,838
1931 ..	232,783	228,363	188,708	1936 ..	783,233	820,395	671,244
1932 ..	190,132	221,488	178,740	1937 ..	913,406	1,073,479	837,445
1933 ..	336,246	392,666	295,523	1938 ..	929,676	1,159,075	906,426
1934 ..	487,259	518,326	431,765	1939 ..	1,104,605	1,170,103	987,847

§ 9. Other Metallic Minerals.

1. **Wolfram and Scheelite.**—(i) *General.* Tungsten ores occur in several of the States, in the Northern Territory and on King Island in Bass Strait, the last-named being included with Tasmania. It is a minor metal of growing importance in both peace and war. On account of the low prices during recent years, mining activities were restricted and production intermittent. In 1937, however, prices soared to the record level of £16 6s. per cwt., compared with only £3 2s. 9d. per cwt. in 1932. As a result, production of wolfram and scheelite responded accordingly. Although prices receded slightly in 1938 production, both in quantity and value, increased considerably. The production during the past five years is shown in the following table :—

WOLFRAM AND SCHEELITE : PRODUCTION, AUSTRALIA.

Particulars.		1934.	1935.	1936.	1937.	1938.
WOLFRAM.						
New South Wales	cwt.	950	1,095	105	915	1,877
	£	6,506	5,694	560	13,051	25,740
Queensland ..	cwt.	740	480	404	1,963	3,015
	£	5,049	2,888	1,889	26,139	30,779
Tasmania ..	cwt.	3,884	4,640	4,143	5,820	5,982
	£	27,375	29,345	28,323	71,643	63,348
Northern Territory	cwt. (a)	800	(a) 1,846	(b) 3,155	5,831	8,694
	£ (a)	3,114	(a) 10,380	(b) 15,451	84,832	78,277
Total ..	cwt.	6,374	8,061	7,807	14,529	19,568
	£	42,044	48,307	46,223	195,665	198,144

SCHEELITE.

New South Wales	cwt.	130	50	245	202	184
	£	818	381	1,631	3,401	2,472
Queensland ..	cwt.	..	22	..	38	13
	£	..	120	..	533	93
Tasmania ..	cwt.	..	..	..	..	611
	£	..	..	..	..	6,193
Total ..	cwt.	130	72	245	240	808
	£	818	501	1,631	3,934	8,758

(a) Year ended June.

(b) Eighteen months ended December, 1936.

(ii) *War-time Contract.* Arrangements have been made for the sale of the Australian output of wolfram and scheelite to the Government of the United Kingdom. Subject to certain conditions, yet to be finalized, the production of tungsten will be sold at a price of £Stg.2 10s. per unit f.o.b.

2. **Cadmium.**—Cadmium is extracted as a by-product at Risdon in Tasmania from ores mined at Broken Hill in New South Wales, and on the west coast of Tasmania. The particulars given in the following table refer to the production of metal and do not include the cadmium contents of zinc ores or concentrates exported overseas.

3. **Cobalt.** The recovery of this metal as an oxide is obtained in the same way as cadmium. It is recovered from the treatment of silver, lead and zinc ores of Broken Hill and Tasmanian origin. The production together with that of cadmium is given in the following table.

PRODUCTION OF CADMIUM AND COBALT : AUSTRALIA.

Year.	Cadmium.				Cobalt.			
	Extracted in Tasmania from Ores mined in				Extracted in Tasmania from Ores mined in			
	New South Wales.	Tasmania.	Total.		New South Wales.	Tasmania.	Total.	
	Cwt.	Cwt.	Cwt.	£	Cwt.	Cwt.	Cwt.	£
1934	3,450	..	3,450	24,163	..	..	..	..
1935	4,372	..	4,372	46,980	..	..	..	..
1936	4,284	673	4,957	64,977	..	..	..	..
1937	3,245	900	4,145	77,203	..	..	..	..
1938	2,943	980	3,923	79,406	377	12	389	8,084

The figures given above do not include the metallic contents of cadmium and cobalt contained in the ores and concentrates exported overseas.

4. Other.—Detailed information in regard to occurrence and production of other metallic minerals in each of the States will be found in Official Year Book No. 22, pp. 780-3 and preceding issues.

§ 10. Coal.

1. Production in each State.—An account of the discovery of coal in each State will be found in preceding issues of the Official Year Book (see No. 3, pp. 515-6). The quantity and value of the production in each State and in Australia during the years specified are given in the table hereunder :—

COAL : PRODUCTION.

Year.	N.S.W.	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
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QUANTITY.

	Tons	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1913 ..	10,414,165	593,912	1,037,944	..	313,818	55,043	12,414,882
1921 ..	10,793,387	514,859	954,763	..	468,817	66,476	12,798,302
1931 ..	6,432,382	571,342	841,308	..	432,400	123,828	8,401,260
1935 ..	8,698,579	476,495	1,051,978	..	537,188	123,714	10,887,954
1936 ..	9,199,466	426,725	1,046,879	..	565,075	132,204	11,370,409
1937 ..	10,051,519	257,945	1,120,179	..	553,510	91,121	12,074,274
1938 ..	9,570,930	307,258	1,113,426	..	604,792	83,753	11,680,159

VALUE.(b)

	£	£	£	£	£	£	£
1913 ..	3,770,375	274,371	493,767	..	153,614	25,367	4,627,494
1921 ..	9,078,388	603,323	831,483	..	407,117	63,446	10,983,757
1931 ..	4,607,343	362,284	699,926	..	336,178	98,004	6,103,735
1935 ..	4,887,341	282,253	843,034	..	318,013	86,204	6,416,845
1936 ..	5,126,850	253,835	858,732	..	331,565	92,269	6,663,251
1937 ..	5,823,469	171,369	934,107	..	340,444	66,883	7,336,272
1938 ..	5,603,842	188,101	958,884	..	375,083	61,991	7,187,910

(a) Exclusive of brown coal, shown in next table.

(b) At the pit's mouth.

The figures for Victoria already quoted are exclusive of brown coal, the quantities and values of which were as follows :—

BROWN COAL : PRODUCTION IN VICTORIA.

Year.	Quantity	Value. (a)	Year.	Quantity.	Value. (a)
	Tons.	£		Tons.	£
1913	2,984	569	1935	2,221,515	317,444
1921	79,224	31,074	1936	3,044,897	323,914
1926	957,935	188,899	1937	3,393,919	325,950
1931	2,194,453	251,511	1938	3,675,450	351,721

(a) Cost of Production.

2. Distribution and Production of Coal in each State.—(i) *New South Wales*.—The coal deposits of New South Wales constitute the most important and extensively worked in Australia. The principal fields are known as the Northern, Southern and Western, and are situated at Newcastle, Bulli and Lithgow respectively.

The coal from the various districts differs considerably in quality—that from the Northern district being especially suitable for gas-making, household purposes and steam, while the product of the Southern and Western is essentially a steaming coal. At the present time the Greta coal seams in the Northern division are being worked extensively between West Maitland and Cessnock, and this stretch of country, covering a distance of 15 miles, is now the most important coal-mining district in Australasia.

The table hereunder gives the yields in each of the three districts during the five years 1934 to 1938 :—

COAL : PRODUCTION IN DISTRICTS OF NEW SOUTH WALES.

District.	1934.	1935.	1936.	1937.	1938.
	Tons.	Tons.	Tons.	Tons.	Tons.
Northern	5,227,647	5,679,802	6,197,554	6,674,362	6,294,213
Southern	1,344,669	1,558,282	1,626,143	1,880,440	1,831,408
Western	1,300,864	1,460,495	1,375,769	1,496,717	1,445,309
Total	7,873,180	8,698,579	9,199,466	10,051,519	9,570,930
Total Value (a) £ ..	4,541,923	4,887,341	5,126,850	5,823,469	5,603,842
Average value per ton (a) ..	11s. 6d.	11s. 3d.	11s. 2d.	11s. 7d.	11s. 8½d.

(a) At the pit's mouth.

For a number of years before the industrial depression the production of coal in New South Wales exceeded 10 million tons, reaching its maximum in 1924 when 11,618,000 tons were produced. The output fell to 6,400,000 tons in 1931, but it has steadily increased each year to 9,570,930 tons in 1938. Of the total quantity of coal won in New South Wales since the commencement of operations to the end of the year, 1938, namely, 423 million tons, about 287 million tons or 68 per cent. was obtained in the Northern District, 87,000,000 tons or 21 per cent. came from the Southern District, and 49 million tons or 11 per cent. was contributed by the mines in the Western District.

The quantity of coal cut by machinery in New South Wales amounted to 2,722,049 tons in 1938 or 28.4 per cent. of the total output for the State, compared with 23.4 per cent. so cut in 1928.

(ii) *Victoria.* (a) *Black Coal.* The deposits of black coal in Victoria occur in three main areas in the southern portion of the State, namely, the Wannon, the Otway and South Gippsland, which total approximately 3,500 square miles. The workable seams are restricted to the South Gippsland area, where the thickness ranges from 2 feet 3 inches to 6 feet. The total quantity of black coal mined in Victoria to the end of 1938 amounted to 17,952,000 tons valued at £13,819,507.

The output of black coal in Victoria during the last five years was as follows :—

BLACK COAL : PRODUCTION IN VICTORIA.

Year.	State Coal-mine.	Other Coal-mines.	Total Production.	Total Value. (a)	Average Value per ton. (a)	
					£	s. d.
	Tons.	Tons.	Tons.			
1934	268,861	88,097	356,958	215,413		12 1
1935	393,532	82,963	476,495	282,253		11 10
1936	355,605	71,120	426,725	253,835		11 11
1937	187,934	70,011	257,945	171,369		13 3
1938	253,065	54,193	307,258	188,101		12 3

(a) At the pit's mouth.

(b) *Brown Coal.*—(i) *General.* Victoria is richly endowed, both in quantity and quality, in its brown coal deposits. Some account of these deposits and of the operations of the State Electricity Commission in connexion therewith will be found in preceding Official Year Books (see No. 22, p. 785). The brown coal produced in Victoria in 1938 amounted to 3,675,450 tons, all but 1,000 tons being procured at the State open cut at Yallourn. During the year 1938-39, 3,643,490 tons of brown coal were produced by the State Electricity Commission, of which 2,096,169 tons went to the power station and 1,547,321 tons to the briquette factory.

(ii) *Production of Briquettes.* The briquetting plant started operations in November, 1924, and the output for fourteen months ending December, 1925, was 77,945 tons. In 1926 the output was 95,477 tons which had increased to 180,905 tons in 1930 and to 399,924 in 1938-39. Two and a half tons of brown coal are required to make one ton of briquettes.

(iii) *Queensland.* The distribution of production during the year 1938 was as follows :—

COAL : PRODUCTION IN QUEENSLAND, 1938.

District.			Production.	District.			Production.
			Tons.				Tons.
Ipswich .. ..	..	..	547,901	Clermont .. ..	..	..	88,407
Bowen .. ..	..	..	224,778	Chillagoe (Mount Mulligan)	..	..	19,192
Darling Downs .. ..	..	..	76,571	Mount Morgan .. ..	..	..	13,698
Maryborough .. ..	..	..	77,162	Other .. ..	..	..	1,543
Rockhampton .. ..	..	..	64,174				
				Total			1,113,426

The production in 1938 was somewhat lower than that of the previous year and was about 19 per cent. below the peak production of 1,369,000 tons in 1929. The distribution of the output in 1938 was as follows : Railway Department, 423,569 tons ; other industries within the State 620,960 tons : exported, 68,897 tons. There were 58 collieries operating in the Ipswich district, 7 in the Darling Downs, 6 in the Maryborough area, 4 in Clermont district, 5 in Rockhampton district, 1 in Chillagoe district, 1 at Mount Morgan, 1 at Mackay, and 2 in the Bowen district ; a total of 85 collieries for the State. State coal-mines are in operation at Collinsville in the Bowen field, at Styx in the Central area, and at Mount Mulligan.

(iv) *South Australia.* So far no coal has been worked in South Australia (see Official Year Book No. 22, p. 786).

(v) *Western Australia.* The production from the five collieries operating on the Collie field amounted in 1938 to 604,792 tons, an increase of 51,283 tons on the return for 1937. The value of the production increased by £34,639 to £375,083. The number of men employed was 765 and the output per man was 791 tons, which was 25 tons greater than in 1937. The total production of coal from the Collie coalfield to the end of 1938 amounted to 13,877,292 tons.

(vi) *Tasmania.* The production in 1938 amounted to 83,753 tons, being 7,368 tons less than the total for 1937. Industrial troubles, resulting in the cessation of operations for considerable periods, were responsible for this reduction in output. About 43,400 tons of the total output in 1938 were contributed by the Cornwall Coal Company and 13,600 tons by the Jubilee Company. The two mines combined raised 57,000 tons, or about 68 per cent. of the total output of the State. The Cornwall Coal Company absorbed the Mount Nicholas Colliery in 1937 and operations at the latter mine ceased.

(vii) *Australia's Coal Reserves.* The latest available estimate of the actual and probable coal reserves of Australia is shown in the Report of the Royal Commission on the Coal Industry 1929-1930, and is based upon that prepared by the Coal and Lignite Panel of the Power Survey Sectional Committee of the Standards Association of Australia. The following table shows the actual and probable coal reserves as determined by that Committee :—

ACTUAL AND PROBABLE COAL RESERVES OF AUSTRALIA.

(Millions of Tons.)

State.	Black Coal.	Sub-bituminous and Brown Coal.
New South Wales	13,929	..
Victoria	40	37,000
Queensland	2,238	67
South Australia .. .. .	..	57
Western Australia .. .. .	..	3,500
Tasmania	244	..
Total	16,451	40,624

3. *Production in Various Countries.*—The total known coal production of the world in 1938 amounted to about 1,420 million tons, towards which Australia contributed about 15.4 million tons, or 1 per cent. The following tables show the production of the chief British and foreign countries during each of the four years ended 1938 :—

COAL : PRODUCTION IN BRITISH EMPIRE.

Year.	Great Britain.	British India.	Canada.	Australia.	New Zealand.	Union of S. Africa.
BLACK COAL.						
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935 ..	222,249,000	23,017,000	9,193,000	10,888,000	825,000	13,360,000
1936 ..	228,448,000	22,611,000	10,146,000	11,370,000	859,000	14,607,000
1937 ..	240,409,000	25,036,000	10,840,000	12,074,000	970,000	15,246,000
1938 ..	227,015,000	28,343,000	9,623,000	11,680,000	978,000	16,027,000

BROWN COAL, LIGNITE.

1935 ..	..	..	3,186,000	2,222,000	1,290,000	..
1936 ..	..	..	3,452,000	3,045,000	1,231,000	..
1937 ..	..	..	3,299	3,394,000	1,308,000	..
1938 ..	..	..	3,098,000	3,675,000	1,244,000	..

COAL : PRODUCTION IN FOREIGN COUNTRIES.

Year.	Germany.	Austria.	Hungary.	Belgium.	France. (a)	Czecho- slovakia.	Yugoslavia.
BLACK COAL.							
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935 ..	149,744,000	246,500	810,000	26,087,000	46,363,000	10,791,000	394,000
1936 ..	155,783,000	240,500	814,000	27,427,000	44,512,000	12,040,000	434,000
1937 ..	181,599,000	226,600	903,000	29,213,000	43,618,000	16,513,000	432,000
1938 ..	183,238,000	222,000	(b)	29,106,000	45,763,000	13,300,000	(b)
Year.	Spain.	Poland.	Nether- lands.	U.S.S.R.	Japan.	China. (c)	U.S.A.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935 ..	6,905,000	28,091,945	11,690,000	93,736,000	34,354,000	12,000,000	379,046,000
1936 ..	(d)	29,278,000	12,600,000	106,677,000	37,466,000	12,000,000	440,774,000
1937 ..	(d)	35,646,000	14,095,000	120,643,000	(d)	(d)	444,096,000
1938 ..	(d)	37,502,000	13,275,000	130,300,000	(d)	(d)	348,865,000
BROWN COAL, LIGNITE.							
Year.	Germany.	Austria.	Hungary.	Belgium.	France.	Czecho- slovakia.	Yugoslavia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935 ..	145,028,000	2,924,000	6,612,000	..	885,000	14,977,000	3,971,000
1936 ..	158,848,000	2,851,000	6,993,000	..	905,000	15,697,000	3,971,000
1937 ..	182,106,000	3,191,000	7,928,000	..	1,000,000	17,613,000	4,523,000
1938 ..	191,399,000	3,477,000	9,212,000	..	1,040,000	12,900,000	5,651,000
Year.	Spain.	Poland.	Nether- lands.	U.S.S.R.	Japan.	China.	U.S.A.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1935 ..	299,000	18,000	85,000	13,602,000	(d)	..	(e)
1936 ..	(d)	13,000	87,000	17,333,000	(d)	..	(e)
1937 ..	(d)	19,000	141,000	(e)	(d)	..	(e)
1938 ..	(d)	9,000	168,000	(e)	(d)	..	(e)

(a) Exclusive of Saar District, which produced 11,130,000 tons in 1934, and 1,673,000 tons from 1st January to 17th February, 1935. From this date production has been included with that of Germany.
 (b) Included with brown coal. (c) Includes about 300,000 tons of lignite yearly. (d) Not available. (e) Included with black coal.

World production dropped from 1,510 million tons in 1937 to 1,420 million tons in 1938. The United States of America with a reduced output of nearly 100 million tons was chiefly responsible for the decline. The production of the British Empire amounted to 304 million tons in 1938, a decrease of 11 million tons or 3.5 per cent. on that of 1937. The production of foreign countries also decreased by 80 million tons to 1,120 million tons, or by 6.6 per cent. in the same period.

4. Exports.—(i) General. The quantity of coal of Australian production (exclusive of bunker coal) exported to other countries in 1938-39 was 382,085 tons, valued at £347,054. New South Wales exported 381,778 tons. Queensland 305 tons, and Victoria

2 tons. The quantities and values of the oversea exports of Australian coal for the years specified are shown in the appended table:—

COAL : OVERSEA EXPORTS, AUSTRALIA.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Tons.	£		Tons.	£
1913 ..	2,098,505	1,121,505	1935-36 ..	307,540	276,553
1921-22 ..	1,028,767	1,099,899	1936-37 ..	340,388	300,457
1931-32 ..	344,015	341,800	1937-38 ..	392,873	354,754
1934-35 ..	305,139	273,305	1938-39 ..	382,085	347,054

Australian coal taken for bunker purposes during the same years was as follows:—

COAL : BUNKER, AUSTRALIA.

Year.	Quantity.	Value.	Year.	Quantity.	Value.
	Tons.	£		Tons.	£
1913 ..	1,647,870	1,018,375	1935-36 ..	614,333	576,549
1921-22 ..	1,498,035	2,178,101	1936-37 ..	605,425	564,071
1931-32 ..	506,140	534,897	1937-38 ..	614,762	575,319
1934-35 ..	575,418	544,875	1938-39 ..	549,453	561,063

(ii) *New South Wales.* The total export of coal from New South Wales in 1938 amounted to 3,024,265 tons, valued at £2,622,292 of which 2,695,217 tons, valued at £2,348,181 were shipped from Newcastle. Interstate exports amounted to 2,113,393 tons, valued at £1,773,530 and were divided as follows:—Cargo, 1,763,628 tons, £1,505,388; bunker, 349,765 tons, £268,142. Oversea exports totalled 910,872 tons, valued at £848,762, representing 531,272 tons of bunker coal, valued at £506,641 and 379,600 tons of cargo coal, valued at £342,121.

The distribution of the total output from New South Wales collieries during the last five years was as follows, the quantities shown for exports including bunker coal.

COAL : DISTRIBUTION OF OUTPUT, NEW SOUTH WALES.

Year.	Exports to Australian Ports. (a)	Exports to Foreign Ports. (a)	Local Consumption.	Total.
	Tons.	Tons.	Tons.	Tons.
1934	1,882,873	807,154	5,183,153	7,873,180
1935	1,889,274	876,591	5,932,714	8,698,579
1936	2,166,241	911,176	6,122,049	9,199,466
1937	2,407,978	922,515	6,721,026	10,051,519
1938	2,113,393	910,872	6,546,665	9,570,930

(a) Including Bunker.

For the period of five years shown in the table above, 23 per cent. of the total output was exported to other States, 10 per cent. was sent overseas, and 67 per cent. was consumed locally. The quantity shown for local consumption in 1938 includes an amount of 48,711 tons of interstate bunker coal shipped from Sydney. It is understood that this amount is not included in the export returns.

The figures quoted in the table above are given on the authority of the New South Wales Mines Department.

5. *Consumption in Australia.*—From the information now available it is possible to show in greater detail, particulars of the production of coal and the manner of its disposal in Australia.

Under normal circumstances the production and consumption of coal move in the same direction, but in times of industrial trouble large consumers may be compelled to rely upon accumulated stocks, and, consequently annual figures may be thrown out

of alignment. For this reason the following table has been prepared on a quinquennial basis in order to smooth out any departures from the normal :—

COAL : PRODUCTION AND UTILIZATION IN AUSTRALIA.

Particulars.	Average for Five Years ending.			
	1933-34.		1938-39.	
BLACK COAL.				
Production of Saleable Coal (a)	Tons. 8,770,730		Tons. 11,168,996	
Imports	169,940		30,860	
Total Supplies	8,940,670		11,199,856	
Exported overseas	320,449	% 3.58	345,606	% 3.09
Exported as bunker, overseas	521,651	5.84	592,469	5.29
Total	842,100	9.42	938,075	8.38
Consumed as fuel in—				
Electric Light and Power Works	1,491,633	16.68	1,795,568	16.03
Factories (b)	1,434,635	16.05	2,067,462	18.46
Railway Locomotives (c)	2,161,552	24.18	2,327,791	20.78
Total	5,087,820	56.91	6,190,821	55.27
Consumed as raw material in—				
Gas Works	1,077,372	12.05	1,110,801	9.92
Coke Works	609,020	6.81	1,467,459	13.10
Total	1,686,392	18.86	2,578,260	23.02
Balance available for consumption including accumulation of stocks (d)	1,324,358	14.81	1,492,700	13.33
Grand Total	8,940,670	100.00	11,199,856	100.00
BROWN COAL.				
Production of Brown Coal	Tons. 2,294,321		Tons. 3,063,879	
Utilization—				
As fuel in Electric Light and Power Works	1,173,743	% 51.16	1,673,018	% 54.60
Used in Briquette Works (e)	1,120,578	48.84	1,390,861	45.40
Total	2,294,321	100.00	3,063,879	100.00

(a) Estimated. (b) Estimated where details were not available. Not including Brown coal, see Note (e). (c) Government Railways only. (d) Including bunker coal for Interstate and Intra-state Shipping. (e) A portion of the briquette output is consumed in factories.

The production of coal is ascertained only in calendar years and to relate it to the other factors in the table, it was necessary to have recourse to estimates which in all probability differ but slightly from the actual figures.

6. Prices.—(i) *New South Wales*. The price of New South Wales coal depends on the district from which it is obtained. Previously the northern district coal generally realized a somewhat higher rate than the southern or western product, but latterly the average price in the southern fields has been somewhat in excess of that prevailing in the northern area. The average price at the mine in each district and for the State as a whole during the last five years is given in the following table. The increase in 1937 was the first recorded since 1927.

COAL PRICES : NEW SOUTH WALES.

Year.	Northern District.	Southern District.	Western District.	Average for State.
	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.
1934	12 0	12 2	8 10	11 0.4
1935	11 9	11 10	8 8	11 2.8
1936	11 6	11 8	8 9	11 1.8
1937	11 11	12 7	9 0	11 7.1
1938	11 9	13 4	9 8	11 8.5

(ii) *Victoria*. In Victoria the average price of coal per ton at the pit's mouth in 1934 was 12s 1d.; in 1935, 11s. 10d.; in 1936, 11s. 11d.; in 1937, 13s. 3d. and in 1938, 12s. 3d. These averages are exclusive of brown coal, which in 1938 cost 1s. 11d. per ton to produce.

(iii) *Queensland*. Prices in the principal coal-producing districts during the last five years were:—

COAL PRICES : QUEENSLAND.

District.	Value at Pit's Mouth.				
	1934.	1935.	1936.	1937.	1938.
	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.	Per ton. s. d.
Ipswich	14 11	15 5	16 0	16 4	17 0
Darling Downs	18 4	18 3	18 10	19 3	19 11
Wide Bay and Maryborough	22 11	23 1	23 9	23 7	24 0
Rockhampton	16 7	16 7	17 4	17 4	17 0
Clermont	12 11	12 5	12 8	13 0	13 8
Bowen	13 6	13 10	14 0	14 2	14 10
Mount Mulligan (Chillagoe)	26 0	29 0	28 9	30 5	31 6
Average for State ..	15 11	16 0	16 5	16 8	17 2

(iv) *Western Australia*. The average prices of the Collie (Western Australia) coal during the last five years were: 1934, 11s. 2d.; 1935, 11s. 10d.; 1936, 11s. 9d.; 1937, 12s 4d.; and 1938, 12s. 5d.

(v) *Tasmania*. The average prices per ton of coal at the pit's mouth in Tasmania for the last five years were: 1934, 14s. 4d.; 1935, 13s. 11d.; 1936, 13s. 11d.; 1937, 14s. 8d.; and 1938, 14s. 10d. per ton.

7. Prices in the United Kingdom.—During the five years 1933 to 1937 the average selling prices of coal per ton at the pit's mouth in the United Kingdom were: 1933, 13s.; 1934, 12s. 11d.; 1935, 13s.; 1936, 14s. 0½d.; and 1937, 15s. 2½d.

8. **Employment in Coal-mines.**—The number of persons employed in coal-mines, both above and below ground, in each of the producing States is given in the following table for the years 1913, 1923, and for each of the years 1933 to 1938 :—

COAL-MINES : PERSONS EMPLOYED.

Year.	New South Wales.	Victoria.		Queensland.	Western Australia.	Tasmania.	Total.
		Black.	Brown.				
	No.	No.	No.	No.	No.	No.	No.
1913 ..	18,843	1,377	(a)	2,548	559	136	23,463
1923 ..	22,969	2,131	(a)	2,662	713	268	28,743
1933 ..	13,349	1,517	272	2,448	626	313	18,525
1934 ..	13,465	1,502	319	2,385	624	342	18,637
1935 ..	13,337	1,397	615	2,455	689	340	18,833
1936 ..	14,221	1,367	419	2,432	768	334	19,541
1937 ..	14,981	1,359	390	2,442	723	322	20,217
1938 ..	15,815	1,322	444	2,495	765	269	21,110

(a) Production prior to 1924 was of little importance.

The maximum number was employed in 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. Since 1934 there has been a gradual improvement, but the numbers employed in 1938 were only about two-thirds of the maximum figure already quoted. As the production in 1938 was not so far below the record output of 13.7 million tons in 1924, it would appear that the growth of mechanization in the industry has been a factor in raising production during recent years. In 1928, 23.4 per cent. of the total output of coal in New South Wales was cut by machinery, while in 1938 the percentage had increased to 28.4.

9. **Accidents in Coal-mining.**—(i) *Australia.* The following table gives the number of persons killed or injured, with the proportion per 1,000 employed, and in relation to the quantity of coal raised, this being a factor which must be reckoned with in any consideration of the degree of risk attending mining operations. Although no precise definition of an accident is available, any disablement from misadventure which rendered the injured unfit for work for fourteen or more days appears to have been uniformly adopted by the State Departments of Mines. A further table gives the rate of fatalities during the last five years.

COAL-MINING : EMPLOYMENT AND ACCIDENTS, 1938.

State.	Persons Employed in Coal-mining.	No. of Persons.		Proportion per 1,000 Employed.		Tons of Coal raised for each Person.	
		Killed.	Injured.	Killed.	Injured.	Killed.	Injured.
New South Wales ..	15,815	11	65	0.70	4.11	870,085	147,245
Victoria ..	1,766	2	5	1.13	2.83	1,991,354	796,542
Queensland ..	2,495	2	184	0.80	73.75	556,713	6,051
Western Australia ..	765	1	364	1.31	475.82	604,792	1,662
Tasmania ..	269	..	4	..	14.87	..	20,938
Total ..	21,110	16	622	0.76	29.46	730,010	18,778

The next table shows the average number of miners employed, number of fatalities, and rate per 1,000 during the quinquennium 1934-38 :—

COAL-MINING : FATALITIES, 1934 TO 1938.

State.	Average No. of Coal-miners Employed.	Average No. of Fatal Accidents.	Rate per 1,000 Employed.
New South Wales	14,366	15.20	1.04
Victoria	1,827	3.40	1.86
Queensland	2,442	3.00	1.23
Western Australia	714	0.20	0.28
Tasmania	324	0.20	0.62
Total	19,673	22.00	1.12

(ii) *Other Countries.* According to the report of the Chief Inspector of Mines, the average death rate per 1,000 miners from accidents in coal-mines in Great Britain during the quinquennium 1933-37 was 1.11, the rates varying between 1.35 in 1934 and 1.02 in 1936 while the rate for Australia for the same period was 1.14.

§ 11. Coke.

1. *General.* Notwithstanding the large deposits of excellent coal in Australia, the production of coke was limited to about 250,000 tons prior to the war of 1914-18. This was below local requirements and necessitated a fairly considerable import from abroad. During recent years, however, a high standard of excellence has been attained in the local product and imports have almost ceased, while Australian coke is being shipped to New Zealand and other islands in the Pacific. For the year 1938-39 the coke imported amounted to 9,719 tons, of which 6,695 tons were obtained from the United Kingdom and 2,030 tons from Germany, Western Australia being the chief importing State. The quantity exported was 30,091 tons, valued at £56,027, of which 25,894 tons, valued at £42,291, were sent to New Caledonia.

2. *New South Wales.* The table hereunder gives the production in New South Wales during the last five years as recorded by the Department of Mines :—

COKE : PRODUCTION IN NEW SOUTH WALES.

Items.	1934.	1935.	1936.	1937.	1938.
Quantity .. tons	688,621	857,875	893,201	939,944	1,135,446
Value, total .. £	636,346	802,887	800,632	909,822	1,100,266
Value, per ton	18s. 6d.	18s. 9d.	17s. 11d.	19s. 4d.	19s. 5d.

The figures quoted refer to the product of coke ovens, and are exclusive of coke produced in the ordinary way at gasworks. Prior to the industrial depression the maximum production of coke was 709,000 tons in 1927 : the output fell to 217,509 tons in 1931, but with the general recovery of trade, the figure rose to a new high level of 1,135,000 tons in 1938. During the latter year the number of coke ovens at work totalled 548, whilst the number of persons engaged in its manufacture was 647.

3. *Queensland.* A small quantity of coke is made in Queensland, the quantity returned in 1938 being 30,984 tons, of which 27,328 tons were produced at the Bowen State Coke Works. The greater proportion of the output of these works was consigned

to the Mount Isa Mines Ltd. and to the Chillagoe State Smelters. Hitherto the coke used at these ore-treatment works was imported from New South Wales, but now the local output is sufficient to meet the requirements of the State and leave a small surplus available for export. During 1938 2,329 tons of coke were exported from Bowen to Noumea. The following table shows the amount manufactured during the last five years:—

COKE : PRODUCTION IN QUEENSLAND.

Year.	1934.	1935.	1936.	1937.	1938.
Quantity .. tons	25,655	24,877	23,326	30,459	30,984

In order to avoid duplication with coal values, the returns for coke have not been included in the general tables of mineral production in the early part of this chapter.

§ 12. Shale-oil and Mineral Oil.

1. *Shale-oil.*—(i) *General.* Reference to the deposits of shale and the search for mineral oil in Australia will be found in Official Year Book No. 22, pp. 791-3.

(ii) *New South Wales.* Reference to the establishment of the shale-oil industry in Australia will be found in previous issues of the Official Year Book. In 1937 negotiations were completed between the Commonwealth and New South Wales Governments and the National Oil Proprietary Ltd., in which the latter company undertook to develop the shale-oil industry in the Newnes-Capertee district. The Commonwealth Government agreed to protect the industry by exempting from excise, up to 10 million gallons annually, the Company's output of petrol for a period of 25 years. The successful establishment of this project will probably lead to an expansion of the industry in Australia and should provide a valuable training ground for technicians. Production commenced in 1940.

(iii) *Tasmania.* About 38,000 gallons of crude oil were produced in 1934 from shale treated in Tasmania, while the total quantity of oil distilled from shale up to the end of 1934 was set down at 357,000 gallons. The plant owned by the Tasmanite Shale Oil Company has not operated since the end of January, 1935.

2. *Coal Oil.*—Attention has been directed to the production of oil from coal by a number of processes. A committee consisting of nominees of the Commonwealth and State Governments, excepting Western Australia, and of Imperial Chemical Industries Ltd., was appointed to advise on specific questions submitted to it. In a report submitted in June, 1937, it was stated that the stage had not been reached when Australia could establish plants for the production of oil from coal. The committee recommended, however, that close touch be kept with developments abroad. A report dated 25th July, 1939, on the production of oil from coal was submitted to the Minister by the Standing Committee on Liquid Fuels. The recommendations of this Committee followed the lines of those of its predecessors.

3. *Natural Oil.*—(i) *Australia.* Natural oil does exist in Australia. This has been proved in Queensland, Victoria and Western Australia. Conditions favourable to accumulation in commercial quantities have been shown to exist in Queensland, Western Australia and New South Wales. In the latter State, however, no strong positive evidence of its existence has been recorded. In Victoria, while oil has been proved to exist, the problem as to whether it can be produced on a commercial basis has still to be worked out.

Reference is made in § 16 hereinafter to the assistance afforded by the Commonwealth Government in the search for petroleum oil.

(ii) *Victoria.* The production of crude petroleum oil in the year 1938 amounted to 6,173 gallons, valued at £154. The total production to the end of that year amounted to 106,476 gallons, worth £2,602. In conjunction with the State Government, the Commonwealth Government is carrying out a scout drilling campaign in the Gippsland area of Victoria.

(iii) *Queensland.* Great hopes are still entertained in regard to the petroliferous area in Queensland. Gas and light to medium gravity oils have been found at Roma, and gas and oily wax at Longreach. Structural conditions favourable to accumulation on a commercial scale have been located at several places between Injune and Springsure. The search for oil was continued during 1939 by several companies in localities situated at Mount Bassett, near Roma, at Hutton Creek and at Arcadia. Test bores have been drilled to bed rock in all the localities mentioned, the deepest being that at Arcadia which exceeded 6,000 feet. Showings of petroliferous gas, amounting at Arcadia to 3,000,000 cubic feet a day, and of petroleum have been encountered in all these boreholes.

(iv) *South Australia.* Under prescribed conditions, the South Australian Government offers a bonus of £5,000 to the person or body corporate which first obtains from a local bore or well 100,000 gallons of crude petroleum containing not less than 90 per cent. of products obtainable by distillation.

(v) *Western Australia.* Only one company was active in Western Australia during 1939. The company, financially assisted by the Commonwealth and State Governments, commenced deep-drilling operations in the Kimberley district in 1939.

(vi) *General.* During 1939 efforts were made to secure greater uniformity in State legislation governing the search for oil. A draft Bill based on modern legislation in other countries was prepared by the Commonwealth and submitted to the State Governments. As a result amending legislation was passed in Victoria and Queensland, while certain amendments are proposed in Western Australia. There was immediate response to this in Queensland, where an agreement has been reached between the State Government and one of the major oil Companies, whereby the Company has undertaken to spend up to £400,000 in the search for oil in that State.

§ 13. Other Non-metallic Minerals.

A more or less detailed statement regarding the occurrence and production of other non-metallic minerals is given in preceding issues of the Official Year Book (see No. 22, pp. 793-6). The tables of quantities and values in § 1 of this Chapter will show the production of the principal items in this class for each State during the year 1938.

§ 14. Gems and Gemstones.

1. *Diamonds.*—It is difficult to secure accurate returns in connexion with the production of precious stones, but the yield of diamonds in 1938 in New South Wales was estimated at 300 carats, valued at £300. These were won by fossickers in the Inverell district. The total production to the end of 1938 is given at 205,543 carats, valued at £148,000.

2. *Sapphires.*—The production of sapphires in New South Wales during 1929 was returned as 65 ozs., valued at £450, obtained wholly at Sapphire in the Inverell division, but no output has been recorded since. Production during recent years has been restricted owing to the unfavourable market.

In Queensland, gems to the value of £2,166 were purchased on the Anakie sapphire fields in 1938. It is probable that many were sold privately or held for better prices. For these reasons the returns are considered to be very incomplete. There were about 120 miners operating on the fields during 1934 but their number decreased to 25 in 1938. Production has declined very considerably since 1920, when the yield was valued at £66,000.

3. *Precious Opals.*—The estimated value of the opal won in New South Wales during the year 1938 was £4,226, obtained chiefly on the Lightning Ridge field. White Cliffs and Grawin fields also contributed but their total output was less than £100. The figures quoted, however, do not represent the total output, as in many instances miners, buyers and collectors leave the fields before a record of their production or purchases can be secured. Some very fine stones are at times obtained, one weighing 5 ozs. and valued at £300 being found in 1911. Three finds of large stone were made in 1928, the gems weighing 790, 590 and 232 carats respectively, and showing

fine fire and lustre. Occasionally black opals of very fine quality are found, one specimen from the Wallangulla field, weighing $6\frac{1}{2}$ carats, being sold in 1910 for £102, while in the early part of 1920 a specimen realized £600. It is stated that this locality is the only place in the world where the "black" variety of the gem has been found. The total value of opal won in New South Wales since the year 1890 is estimated at £1,627,021, but, as pointed out above, the figures are to some extent understated.

Small quantities of precious opal are found in the Beechworth district in Victoria.

The opaliferous district in Queensland stretches over a considerable area of the western interior of the State, from Kynuna and Opalton as far down as Cunnamulla. The yield in 1938 was estimated at £80, and up to the end of that year at about £188,000. These figures are, however, merely approximations, as large quantities of opal, of which no record is obtained, are disposed of privately. Production during recent years has been limited by the paucity of demand. Only six men operated during 1938 and then only for a period of two months. The little quantity of stone obtained was unsold and the men have left the field. The greatest recorded output was for the year 1895 when the yield was valued at £32,750.

Owing to the poor market for gems, production from the Coober Pedy opal field, situated in the Stuart Range in South Australia, fell from £11,056 in 1929 to £1,517 in 1934. The demand improved in 1937 and the production rose to £11,887 but it declined in 1938 to £4,570. The field is extremely prolific, a large quantity of precious white opal having been raised therefrom, while only a small portion of the known opal-bearing area has been thoroughly tested. The greatest yield for the State in any one year was obtained in 1920 when the value of production was returned at £24,000.

4. **Other Gems.**—Various other gems and precious stones have from time to time been discovered in the different States, the list including agates, amethysts, beryls, chialstolite, emeralds, garnets, moonstones, olivines, rubies, topazes, tourmalines, turquoises and zircons. In Western Australia, 609 carats (rough) of emeralds, valued at £278, were produced during 1929 in the Cue district on the Murchison gold-field. The value of the 3,750 carats reported from the same area in 1930 was not ascertainable as there were no sales during the year. There has been no recorded production since 1930.

§ 15. Numbers 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 the season, the price of industrial metals, the state of the labour markets, and according to the permanence of new finds and the development of the established mines. During the year 1938, the number so employed was as follows:—

NUMBER OF PERSONS ENGAGED IN MINING, 1938.

State.	Number of Persons engaged in Mining for—						Total.
	Gold.	Silver, Lead and Zinc.	Copper.	Tin.	Coal.	Other.	
New South Wales ..	3,764	5,612	13	1,440	15,815	1,547	28,191
Victoria ..	6,315	..	..	5	1,766	107	8,193
Queensland ..	3,378	530	213	1,263	2,495	574	8,453
South Australia ..	158	..	67	..	..	607	832
Western Australia ..	15,374	4	4	73	765	207	16,427
Tasmania ..	141	421	1,015	1,123	269	305	3,274
Northern Territory ..	267	3	5	15	..	321	611
Australia ..	29,397	6,570	1,317	3,919	21,110	3,668	65,981

Included in the figures for "other" in South Australia were 253 engaged in mining iron ore, 63 gypsum miners, 143 salt gatherers, and 56 opal miners. The Tasmanian figures include 48 osmiridium miners, and those for the Northern Territory, 30 mica and 287 wolfram miners.

The following table shows the number of persons engaged in mining in each State at intervals since 1901 and the proportion so employed to the total population :—

NUMBER ENGAGED IN MINING PER 100,000 OF POPULATION.

State.	1901.		1911.		1921.	
	Miners employed.	No. per 100,000 of Population.	Miners employed.	No. per 100,000 of Population.	Miners employed.	No. per 100,000 of Population.
New South Wales	36,615	2,685	37,017	2,225	29,701	1,410
Victoria	28,670	2,381	15,986	1,210	5,211	339
Queensland	13,352	2,664	13,201	2,147	5,847	766
South Australia	7,007	1,931	6,000	1,457	2,020	406
Western Australia	20,895	11,087	16,596	5,787	7,084	2,122
Tasmania	6,923	4,017	5,247	2,760	3,170	1,486
Northern Territory .. ..	..	..	715	21,595	131	3,356
Australia	113,462	2,992	94,762	2,109	53,164	974

State.	1931.		1937.		1938.	
	Miners employed.	No. per 100,000 of Population.	Miners employed.	No. per 100,000 of Population.	Miners employed.	No. per 100,000 of Population.
New South Wales	30,682	1,200	27,318	1,014	28,191	1,036
Victoria	6,463	359	8,937	433	8,193	439
Queensland	6,753	730	8,924	902	8,453	845
South Australia	518	90	825	140	832	140
Western Australia	7,147	1,653	17,136	3,772	16,427	3,571
Tasmania	3,397	1,512	3,412	1,459	3,274	1,389
Northern Territory	145	2,918	557	10,294	611	10,609
Australia	55,105	844	66,209	969	65,981	957

The general falling-off since 1901 is largely due to the causes mentioned in each section hereinbefore. The proportion to population shows increases since 1931 in all States excepting New South Wales and Tasmania and is attributable mainly to the larger numbers engaged in the search for gold. Since that year the increase in the number so employed was approximately 6,000 persons. The number engaged in mining for tin increased by 1,700, while increases of 3,000 were also recorded in the mining for silver, lead and zinc.

2. **Wages Paid in Mining.**—Information regarding rates of wages paid in the mining industry, which in earlier issues of the Official Year Book was given in this chapter, is now contained in the *Labour Report* issued by this Bureau.

3. **Accidents in Mining, 1938.**—The following table gives particulars of the number of men killed or injured in mining accidents during the year 1938:—

MINING ACCIDENTS, 1938.

Mining for—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	Australia.
KILLED								
Coal ..	11	2	2	..	1	..	..	16
Copper ..	..	..	3	..	..	1	..	4
Gold ..	6	7	4	..	23	..	..	40
Silver, lead and zinc ..	7	..	4	..	..	..	..	11
Tin ..	..	..	..	..	..	1	..	1
Other minerals	1	..	..	..	4	..	..	5
Total ..	25	9	13	..	28	2	..	77
INJURED.								
Coal ..	65	5	184	..	364	4	..	622
Copper ..	1	..	47	1	..	64	..	113
Gold ..	17	11	71	3	1,007	..	2	1,111
Silver, lead and zinc ..	229	..	21	..	..	19	..	269
Tin ..	1	..	..	..	..	11	..	12
Other minerals	..	..	..	29	..	..	1	30
Total ..	313	16	323	33	1,371	98	3	2,157

§ 16. Government Aid to Mining.

1. **Commonwealth.**—(i) *General.* Assistance to mining has been given by the Commonwealth under the provisions of the Precious Metals Prospecting Act 1926, the Gold Bounty Act of 1930, the Petroleum Oil Search Acts 1936, which superseded the Petroleum Prospecting Acts of 1926, 1927 and 1928, the Loan Appropriation (Unemployment Relief) Act 1934 and the Northern Australia Survey Act 1934.

Expenditure under these various Acts has been reviewed in previous issues of the Official Year Book. With the exception of the Northern Australia Survey Act and the Petroleum Oil Search Acts further expenditure under these Acts is not contemplated.

(ii) *Survey of North Australia.* In 1934 the Northern Australia Survey Act was passed. Under this Act the Governments of the Commonwealth and the States of Queensland and Western Australia agreed to co-operate in the conduct of an aerial, geological and geophysical survey of certain areas in Australia north of the 22nd parallel of south latitude. This survey was conducted during the three years ended 1937, and has now been extended to the end of 1940. The total cost of the survey will involve an expenditure of £250,000, of which the Commonwealth Government will contribute £140,000, Queensland £67,500 and Western Australia £42,500. The latest report was in respect of the period ending 30th June, 1939. About 60 reports on individual areas have been issued as appendices and a further 60 are in course of preparation.

(iii) *Search for Oil.* The Commonwealth Government has encouraged the search for oil in Australia, Papua and New Guinea and considerable sums have been spent during the past ten years in geological surveys and in drilling operations. Details of efforts made during that period are shown in previous issues of the Official Year Book.

In 1936 the Petroleum Oil Search Acts were passed which replaced all previous enactments. Under these Acts a sum of £250,000 was appropriated to assist in the search for oil in Australia and the Territories of Papua and New Guinea. Considerable preliminary geological surveys have already been conducted and test drilling has been and still is being done at approved sites in Australia. So far no commercial production has been obtained. In Papua preparations are being made to drill a deep test in 1940.

The moneys made available under the Acts mentioned may be applied—

- (1) to the payment of advances to persons and companies engaged in drilling operations or in the conduct of geological surveys in connexion with the search for petroleum ; and
- (2) for the purchase of drilling plants.

Under the provisions of the Acts four modern rotary-drilling plants have been purchased. These are made available on hire to companies engaged in the search. Since their purchase the four plants have been in use in Queensland, Victoria, New South Wales, Western Australia and Papua.

(iv) *Mineragraphic and Ore-dressing Investigations.* In addition to the assistance mentioned above the Commonwealth Government made a grant of £25,000 in 1934 to the Council for Scientific and Industrial Research to stimulate gold production by conducting mineragraphic and ore-dressing investigations as required by the industry. This amount was expended during the succeeding five years in conducting these investigations, which were carried out conjointly with appropriate State institutions, the three laboratory centres being the School of Mines, Kalgoolie, the School of Mines and Industries, Adelaide, and the University of Melbourne.

The success of the scheme induced a further grant of £22,000. After providing £2,000 for the year 1940-41, the balance is to be expended at the rate of £4,000 during each of the succeeding five years. The scheme is administered by a Mining Advisory Committee.

(v) *Standing Committee on Liquid Fuels.* The Commonwealth Government has appointed a Standing Committee on Liquid Fuels to co-ordinate knowledge concerning the production of liquid fuels and the use of substitutes therefor, and to furnish information which will enable Australia to obtain greater independence in regard to fuel supplies. This Committee undertakes the investigation of such matters as the production of oil from coal, benzol, power alcohol, shale oil, the use of producer and compressed gas in road vehicles, and tar as a substitute for fuel oil. Six reports have been issued by this Committee to date.

2. *New South Wales.*—The chief aid given by the Government of New South Wales has been in the assistance to prospectors, but there were no appropriations from the Prospecting Vote for the four years ended 1938-39; all claims are met from State Unemployment Relief Funds and the Commonwealth Grant. Aid is granted on a footage basis to sink, drive, etc., on approved sites to which a valid mining title is held. Grants approved during 1938 amounted to £16,859 but the actual expenditure in respect of work completed amounted to £12,694. Loans are also made to assist in the erection of crushing batteries or reduction plants on which interest at the rate of 4 per cent. is charged. During the year loans totalling £10,087 were approved. A reward amounting to £250 was paid in 1937 in connexion with the discovery of a new gold deposit near Weethalle, but all offers of rewards have now been withdrawn.

3. **Victoria.**—During the year 1938 expenditure in connexion with mining amounted to £28,298. Of this amount £5,100 consisted of advances to prospectors and £9,808 was advanced to companies on a £ for £ basis under conditions of Commonwealth Grant for assistance to metalliferous mining. The balance of £13,390 was provided for operation of State batteries, boring operations, geological surveys, etc.

4. **Queensland.**—State assistance to the mining industry in 1938–39 amounted to £28,710, of which £25,844 was advanced to prospectors, the balance consisting of grants under the Mining Machinery Advances Act £1,439, and £1,427 for the provision of transport facilities, etc., to mineral fields. In addition to the amounts above, a sum of £10,000 was spent in connexion with the aerial survey of North Australia.

Mining operations conducted by the State include three coal-mines situated at Bowen, Styx and at Mount Mulligan, three batteries at Kidston, Charters Towers and Bamford, an assay office at Cloncurry, smelting works at Chillagoe, coke works at Bowen, and the State treatment works at Irvinebank. The battery at Charters Towers continues to be leased privately.

5. **South Australia.**—Aid is given to the mining industry under the terms of the Mining Acts of 1930 and 1931. Up to the end of 1938 the total amount of subsidy paid was £70,915, of which £16,807 has been repaid, and £4,700 written off, leaving a debit of £49,408. Portion of this amount is represented by machinery that has fallen into the hands of the Government. Repayments must be provided from profits, but in only two instances have the profits enabled a full return to be made. The State maintains batteries and cyanide works at Mount Torrens, Peterborough, Mongolata, Tarcoola and Glenloth, and assays for public purposes are made at the School of Mines. Advances to prospectors in 1938 amounted to £4,006.

6. **Western Australia.**—Under the Mining Development Act of 1902 assistance was granted in 1938 in accordance with the subjoined statement:—Aid to prospectors, £15,282; subsidies on stone crushed for the public, £1,140; advances in aid of mining work and equipment of mines with machinery, £5,210. Other assistance granted from the vote on various matters during the year amounted to £283. The total amount involved was £21,915.

In 1938 there were 24 State batteries in operation of which three were leased. The amount expended thereon up to the end of 1938 was £91,981 from revenue, £390,108 from loan fund and £42,408 from other sources, giving a total of £524,497. The working expenditure up to the end of 1938 exceeded the revenue by £81,415. The total value of gold and tin produced to the end of 1938 at the State plants was £10,183,770. Free assays and determinations of mineral values for prospectors are made at the Kalgoorlie School of Mines and at the Government laboratory at Perth.

7. **Tasmania.**—Aid to Mining in 1938 amounted to £2,942, of which £490 was expended as sustenance, £203 for prospecting, £1,937 as assistance to companies and individuals, £270 on construction of roads and tracks, and £42 for assistance to batteries.

Tributers' assays are made at a nominal charge, and all tribute surveys are carried out free of charge by the Assay and Survey Office at Zeehan.

8. **Northern Territory.**—During the year 1937–38 the assistance granted to prospectors amounted to £451. In addition a sum of £16,861 was also granted to assist mining companies and mine owners.

The Government maintains batteries at Maranboy, Pine Creek and Tennant Creek. Government Assayers situated at Darwin and Alice Springs make free assays for prospectors, and arrange for the sampling, storage and sale of ores.

§ 17. Metallic Contents of Ores, etc., Produced and Exported.

1. Local Production.—According to returns compiled from various sources by the Australian Mines and Metals Association, the quantities of the principal metals (exclusive of gold) extracted in Australia during the five years 1934 to 1938 were as follows. Particulars for 1939 are not available for publication.

REFINED METALS PRODUCED IN AUSTRALIA.

Metal.		1934.	1935.	1936.	1937.	1938.
Silver	oz.	8,674,549	8,983,950	8,498,674	9,510,509	9,357,139
Lead, pig	tons	160,201	181,211	159,504	186,757	182,214
Zinc	"	54,629	67,666	70,509	69,750	69,820
Copper	"	7,970	11,768	13,313	17,400	17,098
Tin	"	2,330	2,837	2,717	2,907	3,229

The local production of pig-iron during the quinquennium 1923–27 ranged between 330,000 tons in 1923 and 517,000 tons in 1927. Complete information for the later years is not available from the returns published by the Association, but according to the metal extraction returns published in the *Statistical Register of New South Wales*, the production of pig-iron in that State amounted in 1933–34 to 487,259 tons, in 1934–35 to 698,493 tons, in 1935–36 to 783,233 tons, in 1936–37 to 913,406 tons, in 1937–38 to 929,676 tons and in 1938–39 to 1,104,605 tons. As pointed out previously, the iron ore used is now obtained from South Australia.

2. Metallic Contents of Ores, Concentrates, etc., Exported.—The estimated metallic contents of ores, concentrates, etc., exported during the five years 1934 to 1938 as supplied by the Australian Mines and Metals Association, are given in the following table:—

METALLIC CONTENTS OF ORES, CONCENTRATES, ETC., EXPORTED.

Metal.	Contained in—	1934.	1935.	1936.	1937.	1938.
Silver	oz. { Lead-Silver-Gold Bullion Lead Concentrates and Ores Zinc Concentrates and Ores Copper and Gold Ores ..	1,819,546	2,506,015	2,810,828	3,505,293	3,400,581
		612,014	275,134	444,052	557,438	831,809
		147,522	217,266	222,536	204,840	306,012
	
	Total	2,579,082	2,998,435	3,477,416	4,267,571	4,538,402
Lead	tons { Lead-Silver-Gold Bullion Lead Concentrates and Ores Zinc Concentrates and Ores	35,804	36,723	33,450	41,773	40,369
		21,075	9,619	17,497	10,086	15,049
		803	1,658	1,587	1,420	1,958
Total	57,682	48,000	52,534	53,279	57,376	
Zinc	tons { Lead Concentrates and Ores Zinc Concentrates and Ores	..	..	..	..	..
		26,963	54,693	75,391	76,990	93,561
Total	26,963	54,693	75,391	76,990	93,561	
Copper	tons Ores, Matte, etc. ..	1,122	1,361	2,770	2,389	3,228
Tin	tons Concentrates and Ores ..	198	289	246	192	202

§ 18. Oversea Exports of Ores, Metals, etc.

The following table shows the quantities and values of the principal overseas exports of ores, concentrates and metals, the produce of Australia, together with the countries to which the respective products were forwarded, for the year 1938-39:—

OVERSEA EXPORTS OF AUSTRALIAN ORES, METALS, ETC., 1938-39.

Article.	Total Exports.	Exports to—						
		U.K.	U.S.A.	Belgium.	Germany.	Japan.	N.Z.	Other Countries.
QUANTITY.								
Ores—	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Copper	376	376	..	..	..	..	..	..
Silver and Silver-lead	8,447	..	3,287	5,139	..	..	..	..
Iron	2,643,260	..	1,146,600	..	..	1,496,660	..	21
Wolfram	18,371	3,350	404	1,351	7,160	..	..	6,106
Tin	174	174	..	..	..	..	..	..
Zinc	46,121	46,121	..	..	..	..	..	..
Other	43,317	14,488	20,700	459	3,076	108	1,565	2,921
Concentrates—								
Silver and Silver-lead	688,968	..	194,550	494,418	..	..	..	..
Zinc	4,898,291	4,073,931	..	650,089	62,049	40,499	..	(a) 71,723
Copper	267,380	..	263,882	628	2,870	..	..	..
Tin	9,464	9,464	..	..	..	..	..	..
Lead Slime Residue	31,744	11,859	17,889	1,569	..	..	..	427
Gold Ore, Quartz and Concentrates	10,359	13	8,256	1,683	..	..	407	..
Other	20,838	213	1,500	19,125	..	..	..	..
Cadmium—Blocks, Ingots, etc.	3,036	2,240	..	..	..	14	22	760
Copper—								
Matte	21,231	24	..	21,207	..	..	..	..
Ingot	324	4	..	..	..	..	320	..
Tin—Ingot	29,431	14,860	6,600	1,400	..	..	4,402	2,169
Lead—								
Pig	4,089,895	4,010,625	..	..	..	6,985	43,698	28,587
Matte .. .. .	..	..	..	..	..	..	..	..
Zinc—Bars, Blocks, etc.	892,192	283,055	..	4,800	..	230,281	3,427	(b) 370,629
Platinum, Osmium, etc.	(c) 225	169	..	..	..	56	..	..
Gold—								
Bar, Dust, etc.	1,639,430	212,409	1,426,180	..	..	..	..	(d) 841
Silver—								
Bar, Ingot, etc.	9,332,624	198,059	33,054	..	74,205	..	3,940	9,023,366
VALUE.								
Ores—	£	£	£	£	£	£	£	£
Copper	1,092	1,092	..	..	..	..	..	..
Silver and Silver-lead	5,517	..	2,628	2,869	..	..	..	20
Iron	83,300	..	31,823	..	..	51,477	..	..
Wolfram	177,361	35,665	5,178	13,217	68,253	..	..	55,048
Tin	1,167	1,167	..	..	..	..	..	..
Zinc	19,509	19,509	..	..	..	..	..	..
Other	90,297	23,144	24,850	7,469	27,982	1,028	1,204	4,620
Concentrates—								
Silver and Silver-lead	484,395	..	149,229	335,166	..	..	..	..
Zinc	804,264	662,205	..	111,238	7,398	14,895	..	(a) 8,528
Copper	406,446	..	401,148	1,483	3,815	..	..	..
Tin	80,139	80,139	..	..	..	..	..	..
Lead Slime Residue	27,937	5,619	21,988	190	..	..	..	140
Gold Ore, Quartz and Concentrates	17,799	7,208	8,712	1,757	..	..	122	..
Other	24,241	316	675	23,250	..	..	..	..
Cadmium—Blocks, Ingots, etc.	56,543	41,356	..	..	..	314	314	14,559
Copper—								
Matte	14,741	56	..	14,685	..	..	..	..
Ingot	915	10	..	..	..	..	905	..
Tin—Ingot	370,137	184,142	83,070	18,240	..	..	50,307	28 378
Lead—								
Pig	4,266,566	4,188,961	..	..	..	7,050	43,423	27,132
Matte .. .. .	..	..	..	..	..	..	..	..
Zinc—Bars, Blocks, etc.	887,421	281,454	..	4,716	..	228,995	3,811	(b) 368,445
Platinum, Osmium, etc.	4,768	3,726	..	..	..	1,042	..	..
Gold—								
Bar, Dust, etc.	14,848,705	1,887,423	12,953,955	..	..	..	..	(d) 7,327
Silver—								
Bar, Ingot, etc.	958,053	21,705	3,402	..	7,745	..	459	(e) 924,742
Total	23,631,313	7,444,807	13,686,658	534,280	115,193	304,801	106,545	1,438,039

(a) Czechoslovakia, 40,000 cwt., £4,602; Netherlands, 31,723 cwt., £3,926. (b) India, 357,599 cwt., £355,479. (c) Mainly osmium exported from Tasmania. (d) France. (e) Ceylon, 8,801,107 fine oz., £901,209; India, 222,259 fine oz., £23,533.

CHAPTER XIII.

PASTORAL PRODUCTION.

§ 1. Initiation and Growth of Pastoral Industry.

1. **Early Statistics.**—The live stock which Captain Phillip brought with him when establishing the first settlement in January, 1788, is stated to have comprised seven horses, six cattle, twenty-nine sheep, twelve pigs and a few goats. Later in the same year, in a letter from Captain Phillip to Lord Sydney, then Secretary of State for the Colonies, an enclosure sets forth the numbers of each kind of live stock in the colony on 1st May, 1788. These details together with those of later enumerations are shown in the following table:—

LIVE STOCK : AUSTRALIA.

Date.	Horses.	Cattle.	Sheep.	Pigs.	Goats.
1st May, 1788	7	7	29	74	19
10th November, 1791	4	18	57	37	(a)
1st July, 1794	(b) 20	40	576	(a)	522
15th June, 1795	(c) 49	176	832	(a)	985
1st September, 1796	57	227	1,531	1,869	1,427
15th August, 1800	203	1,044	6,124	4,026	2,182

(a) Not stated.

(b) Not including three asses.

(c) Not including seven asses.

The return for the year 1788 includes, in addition to poultry, five rabbits.

2. **Subsequent Statistics.**—The statistical returns of live stock in Australia subsequent to the year 1800 referred mainly to those in possession of the Government, omitting those owned by individuals. Doubtless the growth of population, the expansion of the area settled and the increase of private ownership made it difficult in those early times to secure accurate returns. The figures continued to be somewhat defective up to 1860, but from that year onwards fairly complete information is available for most of the States. At the present time, statistics of live stock are collected annually in all the States principally through the agency of the police, but in the years 1885 to 1888 inclusive, and 1893 to 1895 inclusive, these particulars were not collected in South Australia, and similar gaps occur in the Victorian records for the periods 1895 to 1899 inclusive and 1901 to 1903. In order to obtain totals for Australia for these years the missing numbers have been supplied by interpolation. The results so obtained probably differ but slightly from the actual numbers for the respective years.

3. **Increase in Live Stock.**—Particulars concerning the numbers of each of the principal kinds of live stock in Australia at decennial intervals from 1860 to 1930, and from 1931 onwards in single years are given in the following table, and are shown continuously on the graph on page 300.

During the seventy-eight years covered by the table the live stock of Australia increased considerably, horses, 303 per cent.; cattle, 225 per cent.; sheep, 452 per cent.; and pigs, 229 per cent. The average annual increases which these aggregates represent are as follows:—Horses, 1.80 per cent.; cattle, 1.52 per cent.; sheep, 2.21 per cent.; and pigs, 1.46 per cent.

LIVE STOCK : AUSTRALIA.

31st December.				Horses.	Cattle.	Sheep.	Pigs.
1860	..	..	..	431,525	3,957,915	20,135,286	351,096
1870	..	..	..	716,772	4,276,326	41,593,612	543,388
1880	..	..	..	1,068,774	7,527,142	62,184,252	815,776
1890	..	..	..	1,521,598	10,299,816	97,881,221	891,138
1900	..	..	..	1,609,654	8,640,225	70,602,995	950,349
1910	..	..	..	2,165,866	11,744,714	98,066,046	1,025,850
1920	..	..	..	2,415,510	13,499,737	1,795,727	764,406
1930	..	..	..	1,792,734	11,720,916	110,568,279	1,071,679
1931	..	..	..	1,775,550	12,260,955	110,618,893	1,167,845
1932	..	..	..	1,765,437	12,783,137	112,926,931	1,162,407
1933	..	..	..	1,763,225	13,512,486	109,921,053	1,046,867
1934	..	..	..	1,767,758	14,048,671	113,048,037	1,158,274
1935	..	..	..	1,764,430	13,911,659	108,875,801	1,293,964
1936	..	..	..	1,762,750	13,491,072	110,242,704	1,202,752
1937	..	..	..	1,746,513	13,078,356	113,372,518	1,100,082
1938	..	..	..	1,741,056	12,861,781	111,057,832	1,155,591

4. **Fluctuations.**—The increases referred to, however, have not been continuous, marked fluctuations having 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 were in evidence in 1868, 1877, 1883-4, 1892, 1893, 1895, 1901-2, 1912, 1914, 1918, 1919, 1922-23, 1925-26 and 1927-28.

The years in which the numbers of live stock attained their maxima are as follows:—Horses, 1918, 2,527,149; cattle, 1921, 14,441,309; sheep, 1937, 113,372,518; and pigs, 1935, 1,293,964.

5. **Live Stock in Relation to Population.**—The number of each kind of live stock per head of the population of Australia has varied during the past seventy-eight years in the manner shown in the succeeding table:—

LIVE STOCK PER HEAD OF POPULATION : AUSTRALIA.

Year.	Horses.	Cattle.	Sheep.	Pigs.	Year.	Horses.	Cattle.	Sheep.	Pigs.		
1860	..	0.38	3.45	17.58	0.31	1930	..	0.28	1.81	17.07	0.17
1870	..	0.43	2.60	25.24	0.33	1933	..	0.26	2.03	16.52	0.16
1880	..	0.48	3.37	27.87	0.37	1934	..	0.27	2.11	16.97	0.17
1890	..	0.48	3.17	31.06	0.28	1935	..	0.26	2.06	16.13	0.19
1900	..	0.43	2.29	18.75	0.25	1936	..	0.26	1.98	16.20	0.18
1910	..	0.49	2.65	22.16	0.23	1937	..	0.26	1.91	16.59	0.16
1920	..	0.44	2.49	15.11	0.14	1938	..	0.25	1.87	16.11	0.16

6. Live Stock in Relation to Area.—The numbers of live stock per square mile in the several States and Territories of Australia are given in the following table :—

LIVE STOCK PER SQUARE MILE, 1938.

State or Territory.	Horses.	Cattle.	Sheep.	Figs.
New South Wales	1.77	9.09	157.96	1.22
Victoria	3.91	19.31	193.52	2.87
Queensland	0.66	9.09	34.54	0.49
South Australia	0.52	0.84	26.14	0.18
Western Australia	0.15	0.78	9.40	0.01
Tasmania	1.16	10.01	100.16	1.73
Northern Territory	0.06	1.72	0.06	0.00
Australian Capital Territory	1.27	7.51	261.21	0.61
Australia	0.59	4.32	37.33	0.37

7. Minor Classes of Live Stock.—Excluding Victoria, where the details are not available, the numbers of minor classes of live stock returned for 1938 were as follows :— Goats, 84,391; camels, 2,745; and mules and donkeys, 8,620. Of these, goats were most numerous in Queensland, and camels, mules and donkeys in Western Australia. In the raising of goats, some attention has been devoted to the angora goat and its product (mohair), and 6,375 angora goats are included in the total of 84,391 goats shown above. Of these, 1,831 were in New South Wales, 1,000 in Queensland, 2,931 in South Australia, and 613 in Tasmania.

8. Net Exports of Principal Pastoral Products.—The quantities by which the exports of the principal pastoral products of Australia exceeded the imports for the years 1934-35 to 1938-39 were as follows :—

NET EXPORTS OF PASTORAL PRODUCTS : AUSTRALIA.

Product.	Unit of Quantity.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
QUANTITIES.						
Animals (living)—						
Cattle	No.	63	76	— 665	184	405
Horses	"	4,123	3,783	4,674	3,549	2,294
Sheep	"	58,182	64,340	49,806	67,808	66,739
Bones	cwt.	10,207	17,188	16,603	17,895	21,407
Glue-pieces and Sinews	"	1,251	379	(a)	— 1,945	— 11,145
Glycerine	lb.	— 9,282	— 1,193,982	— 1,163,777	— 1,023,406	78,727
Hair	"	— 559,673	— 962,875	— 1,152,954	— 1,820,795	— 1,003,366
Hoofs	cwt.	(a)	(a)	(a)	(a)	(a)
Horns	"	(a)	(a)	(a)	(a)	(a)
Meats—						
Frozen Beef (b)	lb.	212,099,109	196,818,221	233,851,658	293,802,831	271,948,548
" Mutton and Lamb	"	196,102,828	178,005,079	208,457,576	201,800,129	186,487,551
" Rabbits and Hares	Pair	(a)	(a)	(a)	(a)	(a)
" Other	lb.	15,012,149	15,098,299	18,498,278	20,737,142	19,585,368
Potted, and Extract of	"	(a)	(a)	(a)	(a)	(a)
Preserved in Tins, etc.	lb.	5,941,584	6,418,202	9,197,093	12,230,650	14,778,896
Other (excluding Bacon and Ham)	"	408,396	561,341	637,509	398,085	308,148
Sausage Casings	cwt.	14,543	8,938	12,502	11,973	8,673
Skins—						
Hides	No.	(a)	(a)	(a)	(a)	(a)
Sheep	"	(a)	(a)	(a)	(a)	(a)
Rabbit and Hare	cwt.	84,744	91,443	66,446	43,946	37,544
Other (including Undressed Furs)	"	(a)	(a)	(a)	(a)	(a)
Tallow	cwt.	822,751	445,358	624,521	524,170	560,241
Wool—						
Greasy	lb.	782,278,901	742,738,515	755,610,976	708,509,619	779,781,662
Scoured	"	66,408,783	68,053,803	66,594,446		
Tops	"	3,104,232	3,144,411	3,746,779		
Nolls	"	1,303,616	1,647,629	1,219,681		
Waste	"	1,067,598	880,045	621,324	61,314,071	70,299,505

NOTE.—The minus sign (—) signifies net imports. (a) Quantity not available. (b) Including chilled beef.

The values of the net exports for the same five years are furnished in the next table, and amount to no less a total than £312,847,661 for the period, or an average of £62,569,532 per annum, of which wool represents 77.19 per cent. Meat, skins and tallow rank next in order of importance.

NET EXPORTS OF PASTORAL PRODUCTS: AUSTRALIA.

Product.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
VALUES. (a)					
	£	£	£	£	£
Animals (living)—					
Cattle	-26,491	-39,244	-24,921	-11,131	142
Horses	-15,631	3,473	-9,385	-16,276	-11,258
Sheep	30,118	36,062	16,605	47,458	39,405
Bones	7,406	9,911	9,804	10,919	10,741
Glue-plates and Sinews	2,908	4,812	317	-1,618	-7,706
Glycerine	4,962	-34,937	-38,748	-41,326	4,004
Hair	-81,902	-115,077	-120,245	-177,266	-103,353
Hoofs	6,092	5,935	(b)	8,560	8,027
Horns	18,083	16,721	19,762	21,811	18,615
Meats—					
Frozen Beef (c)	2,559,605	2,481,803	3,035,943	4,367,049	4,323,235
" Mutton and Lamb	4,475,665	4,465,691	5,233,626	5,339,832	4,807,418
" Rabbits and Hares	443,484	243,623	(c)	172,225	232,034
" Other	266,167	286,415	385,061	406,748	417,670
Potted, and Extract of	-29,507	-32,925	-38,916	-25,391	-32,580
Preserved in Tins, etc.	152,880	191,316	295,172	390,535	492,709
Other (excluding Bacon and Ham)	7,649	9,885	10,407	7,459	6,336
Sausage Casings	106,210	9,206	60,582	125,366	185,649
Skins—					
Hides	147,782	450,577	976,227	929,687	775,398
Sheep	1,753,908	2,808,267	3,785,748	3,435,269	2,336,718
Rabbit and Hare	867,068	1,732,715	1,623,046	1,033,519	393,641
Other (including Undressed Furs)	-32,942	-110,180	165,625	-238,123	-287,277
Tallow	922,505	653,353	812,828	611,844	480,459
Wool—					
Greasy	34,095,191	45,806,287	54,921,808	40,531,631	36,617,167
Scoured	4,598,459	5,548,336	6,659,952		
Tops	331,833	404,644	532,121		
Noils	75,950	123,481	112,969		
Waste	39,935	48,848	32,780		
				5,731,196	5,277,027
Total Values	50,727,387	65,017,998	78,458,168	62,659,977	55,984,131

(a) Australian currency values.

(b) Not recorded separately.

(c) Including chilled beef..

NOTE.—The minus sign (—) signifies net imports.

9. Value of Pastoral Production.—Particulars of the gross, local and net values of pastoral production for each State are shown in the following table for the year 1938-39 together with the totals for the preceding four years. Fuller details of the source of the information and an explanation of the terms used in this compilation will be found in Chapter XXVIII. "Miscellaneous". It should be noted, however, that 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, 1938-39.

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.	
	£	£	£	£	£	£
New South Wales ..	28,078,000	3,184,000	24,894,000	964,000	317,000	23,613,000
Victoria ..	17,936,267	1,599,441	16,336,826	425,000	755,550	15,156,276
Queensland ..	17,417,000	1,682,000	15,735,000	608,000	246,000	14,881,000
South Aust. ..	6,163,342	712,656	5,450,686	198,216	197,686	5,054,784
Western Aust.	4,662,929	538,288	4,124,641	194,933	263,247	3,666,461
Tasmania ..	1,681,490	135,150	1,546,340	39,560	57,190	1,449,590
Total 1938-39	75,939,028	7,851,535	68,087,493	2,429,709	1,836,673	63,821,111
1937-38	90,524,251	8,323,090	82,201,161	2,512,610	1,521,809	78,166,742
1936-37	95,429,294	7,952,997	87,476,297	1,737,541	1,317,480	84,421,276
1935-36	83,224,102	7,506,983	75,717,119	1,505,633	983,754	73,227,732
1934-35	64,647,128	6,986,693	57,660,435	1,314,516	587,420	55,758,499

(a) No deduction has been made for depreciation and maintenance.

Although depreciation has not been deducted in arriving at the net value of production this item was compiled in each State for 1938-39 and amounted in the aggregate to £445,806.

10. Consumption of Meats.—Particulars of the per capita consumption of meat in Australia are shown in the following table, together with details for certain other countries. The figures have in each case been obtained from official sources, but it is not known whether they have been compiled on the same basis.

The average consumption in Australia is slightly lower than that of New Zealand, but it is greatly in excess of that of Canada, Great Britain and the United States of America. Compared with Australia the consumption of beef, mutton and lamb in these countries is relatively small, but pork consumption is greatly in excess of the average recorded for both Australia and New Zealand.

The world's supply of beef, mutton and lamb is obtained chiefly from countries situated in the Southern Hemisphere of which Argentine Republic, Australia, New Zealand and Uruguay are the main contributors. Argentine Republic furnishes the largest export of beef and New Zealand that of mutton and lamb, while Australia occupies second place in both commodities. Supplies of pork and pork products are largely drawn from countries in the Northern Hemisphere. It is to be expected, therefore, that the per capita consumption of beef, mutton and lamb will be greatest in the southern producing countries, and pig meat in the northern.

ESTIMATED PER CAPITA CONSUMPTION OF MEAT: AUSTRALIA AND OTHER COUNTRIES.

Description.	Australia, 1938-39.	New Zealand.	Great Britain, 1937.	Canada, 1938.	United States of America, 1937.
	lb.	lb.	lb.	lb.	lb.
Beef and Veal ..	139.95	140-175*	69.00	61.53	62.7
Mutton and Lamb ..	76.11	77	30.00	6.09	6.6
Pork and Bacon and Ham ..	18.03	19	42.00	56.88	55.1
Total All Meats ..	234.09	266*	141.00	124.50	124.4

* Veal not included.

§ 2. Horses.

1. **Suitability of Australia for Horse-breeding.**—From the earliest times the suitability of the climate and pastures of Australia for the production of serviceable breeds of horses has been fully recognized. By the importation of high-class sires, and the careful selection of breeding mares, these natural advantages have been utilized to the fullest extent in breeding all classes of horses. As a consequence of this combination of advantages, the Australian horse, whether of the heavy draught, medium weight, or light saddle and carriage variety, compares more than favourably with the product of other lands. The Australian horse is highly regarded by the military authorities in India and considerable numbers are purchased each year for remount purposes. Owing to the mechanization of the Army the demand is not so great as in former years.

2. **Distribution throughout Australia.**—The States of New South Wales, Queensland and Victoria together depasture more than 76 per cent. of the total number of horses in Australia. In the following table figures are given for each State and Territory during each of the last five years :—

HORSES : NUMBER.

31st Dec.	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T. (a)	Total.
1934	534,853	357,877	447,804	198,765	161,636	30,662	35,094	1,067	1,767,758
1935	542,862	356,106	441,075	197,368	160,181	30,626	35,152	1,060	1,764,430
1936	545,829	357,158	440,568	200,870	155,177	30,971	31,056	1,121	1,762,750
1937	528,625	359,106	445,916	197,334	151,067	31,578	31,662	1,225	1,746,513
1938	548,355	343,828	444,521	195,834	143,674	30,458	33,191	1,195	1,741,056

(a) 31st March year following.

The number of horses attained its maximum in Australia during 1918, when a total of 2,527,149 was recorded; in the same year the United States of America made its highest recording, and Canada reported likewise in 1921. The number in Australia has declined considerably since 1918 as the result of the development in motor transportation and the increasing use of petrol-driven cultivating and other machinery on farms.

During the past five years, however, the rate of decline has slackened considerably, probably on account of the halt in the use of power-driven machinery on farms owing to depressed prices. The introduction of rationing of motor spirit as a war-time measure should tend to make the horse more popular in the rural industries.

The number of horses in Australia from 1860 onwards may be ascertained from the graph on page 300.

3. **Proportions in the Several States and Territories.**—The percentages of the numbers of horses in the several States and Territories on the total for Australia for the year 1938 were :—New South Wales, 31.49; Victoria, 19.75; Queensland, 25.53; South Australia, 11.25; Western Australia, 8.25; Tasmania, 1.75; Northern Territory, 1.91; and Australian Capital Territory, 0.07 per cent.

The percentages in the various States have remained practically constant during the last quinquennium.

4. *Relation to Population.*—In proportion to population, horses are much more numerous in the Northern Territory than in any other of the principal divisions of Australia. Queensland is next in order, while the Australian Capital Territory has the smallest number of horses per head. The number per head of population has declined in all the statistical divisions since 1927. For the year 1938 the relative numbers were.—New South Wales, 0.20; Victoria, 0.18; Queensland, 0.44; South Australia, 0.33; Western Australia, 0.31; Tasmania, 0.13; Northern Territory, 5.32; Australian Capital Territory, 0.11; and Australia, 0.25.

5. *Comparison with other Countries.*—The numbers of horses in the leading horse-breeding countries of the world are as follows:—

HORSES : NUMBERS IN PRINCIPAL COUNTRIES.

Country.	Year.	Number of Horses (,000 omitted).	Country.	Year.	Number of Horses (,000 omitted).
U.S.S.R. (Russia) ..	1938	17,500	Turkey	1938	651
U.S.A.	1938	10,800	Uruguay	1930	623
Argentine Republic	1937	8,527	Sweden	1938	617
Brazil	1935	6,052	Cuba	1934	569
China	1935	4,080	Spain	1933	568
Poland	1938	3,886	Denmark	1938	565
Germany	1938	3,443	Lithuania	1938	558
Canada	1938	2,821	Bulgaria	1934	532
France	1938	2,692	Chile	1936	528
India (British and Native)	1936	2,380	Eire	1938	442
Rumania	1937	2,167	Peru	1932	432
Mexico	1932	1,888	Haiti	1935	400
Manchuria	1936	1,840	Latvia	1938	400
Australia	1938	1,741	Bolivia	1932	390
Japan	1936	1,432	Thailand	1938	386
Yugoslavia	1938	1,265	Finland	1937	380
United Kingdom ..	1938	1,100	Greece	1937	372
Colombia	1934	972	Netherlands ..	1938	312
Hungary	1938	814	New Zealand ..	1938	278
Italy	1938	791	Belgium	1938	265
Union of South Africa	1937	778	Austria	1938	246
Czechoslovakia ..	1936	704	Estonia	1938	219
Dutch East Indies	1937	671	French Morocco	1938	192
			Paraguay	1935	186

6. *Oversea Trade in Horses.*—(i) *Exports.* Australia's export trade in horses is now far below that of earlier years. During the period 1901-5 the average number exported was over 18,000, whereas during the last five years the figure was 4,005. The total number of horses exported during the latter period amounted to 20,026, valued at £696,061, equal to an annual average of 4,005 for £139,212. The average export price was £34 15s. 2d. The horses exported to India, where they are largely used for army remounts, numbered 3,145 or 79 per cent. of the average exports for the quinquennium.

(ii) *Imports.* The number of horses imported into Australia is comparatively small, consisting mainly of valuable stud animals from the United Kingdom and racehorses from New Zealand. The average value per head of the horses imported during the last

five years was £371. The average number imported per annum was, however, only 320, and the average annual value, £148,840. The following table gives the imports, exports and net exports of horses during each of the years from 1934-35 to 1938-39:—

HORSES : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value. (a)	No.	Value. (a)	No.	Value. (a)
		£		£		£
1934-35 ..	388	150,703	4,511	135,072	4,123	-15,631
1935-36 ..	352	132,645	4,135	136,118	3,783	3,473
1936-37 ..	352	180,686	5,026	171,301	4,674	-9,385
1937-38 ..	273	154,912	3,822	138,636	3,549	-16,276
1938-39 ..	238	125,192	2,532	113,934	2,294	-11,258

(a) Australian currency values.

NOTE.—The minus sign (—) signifies net imports.

§ 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 Victoria, New South Wales and Southern Queensland in particular, the portion of Australia in the temperate zone being the best adapted to this industry. On the other hand, beef-producing cattle are mainly raised in the tropical districts, i.e., in the northern parts of Queensland, in the Northern Territory, and in 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 occupied 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 12,311,617 head were depastured. From 1895 onwards, however, the effects of droughts and the ravages of tick fever reduced the number to 7,062,742 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 until the maximum number of 14,441,300 cattle was attained in 1921. After that year the numbers dropped continuously to 1929, largely owing to the decline in the overseas demand for frozen beef. They recovered with the expansion of dairying during the depression years, but are again declining, the loss during the last four years amounting to more than 1,000,000 head.

The numbers of cattle, beef and dairy, in the several States and Territories during each of the last five years are as follows.—

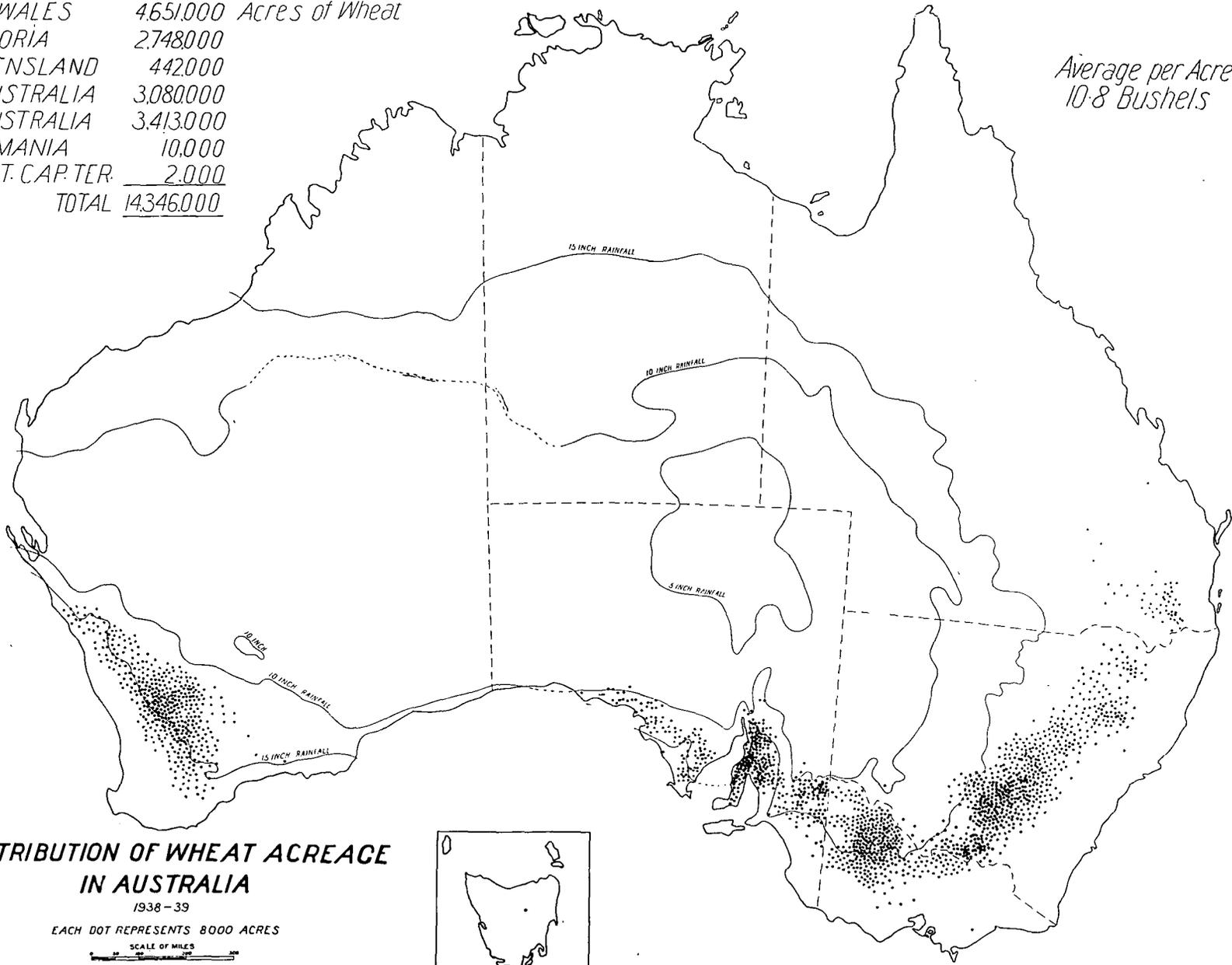
CATTLE : NUMBER.

31st Dec.	N.S.W. (a)	Vic. (a)	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aus. Cap. Terr. (a)	Total.
1934	3,482,831	2,085,080	6,052,641	346,479	911,940	261,588	899,679	8,433	14,048,671
1935	3,388,538	2,091,246	6,033,004	335,354	882,761	270,035	900,535	10,186	13,911,659
1936	3,288,169	2,004,959	5,950,572	328,013	792,508	261,597	855,398	9,856	13,491,072
1937	3,019,581	1,880,429	5,959,165	324,163	740,241	254,812	891,640	8,325	13,078,356
1938	2,811,884	1,697,295	6,097,089	318,897	767,680	262,407	899,472	7,057	12,861,781

(a) 31st March, year following.

N. S. WALES	4651000	Acres of Wheat
VICTORIA	2748000	
QUEENSLAND	442000	
S. AUSTRALIA	3080000	
W. AUSTRALIA	3413000	
TASMANIA	10000	
AUST. CAP. TER.	2000	
TOTAL	<u>14346000</u>	

*Average per Acre
10.8 Bushels*

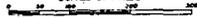


**DISTRIBUTION OF WHEAT ACREAGE
IN AUSTRALIA**

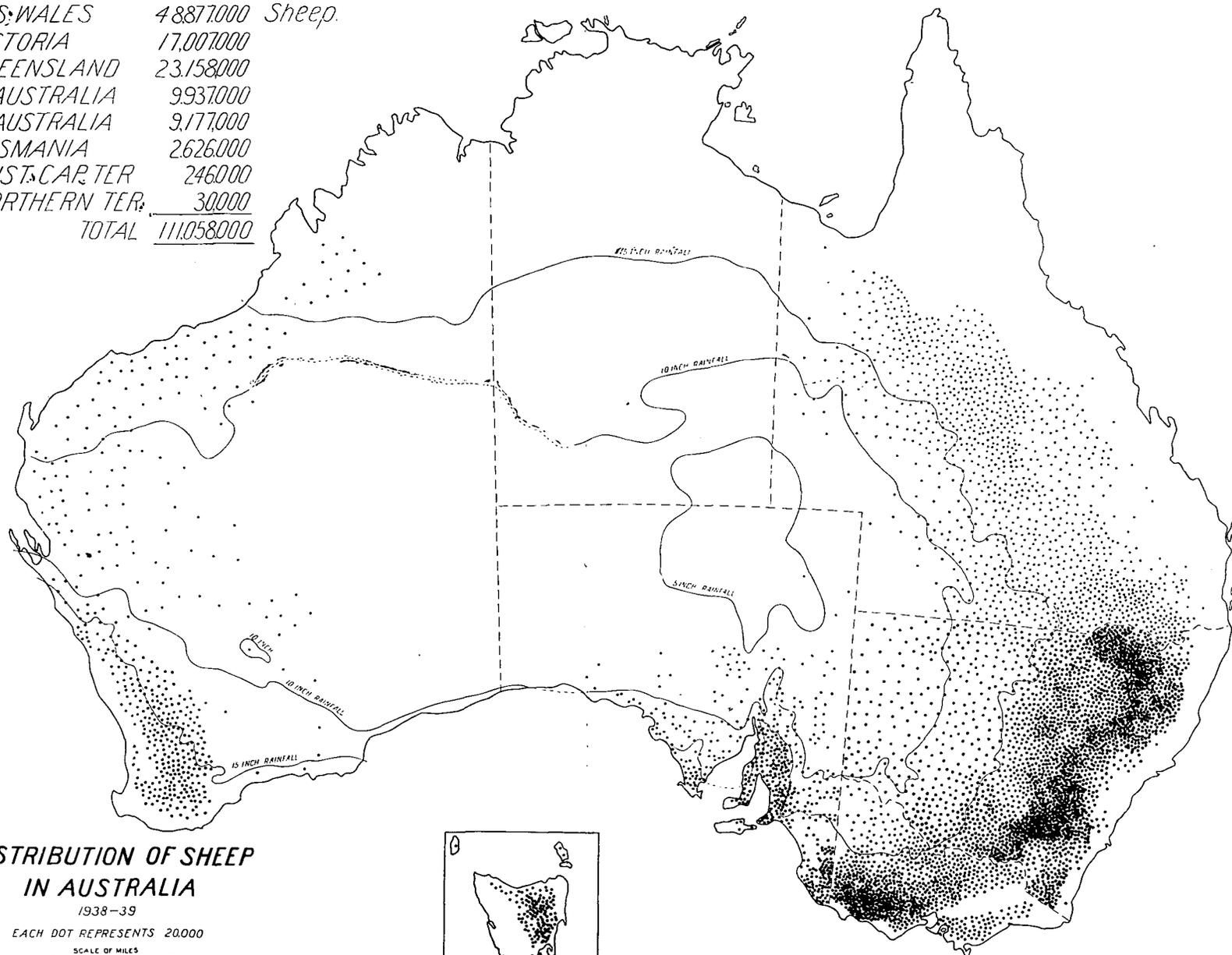
1938 - 39

EACH DOT REPRESENTS 8000 ACRES

SCALE OF MILES



N.S. WALES	4,887,000	Sheep.
VICTORIA	17,007,000	
QUEENSLAND	23,158,000	
S. AUSTRALIA	9,937,000	
W. AUSTRALIA	9,177,000	
TASMANIA	2,626,000	
AUST. CAPITAL	246,000	
NORTHERN TERR.	30,000	
TOTAL	111,058,000	

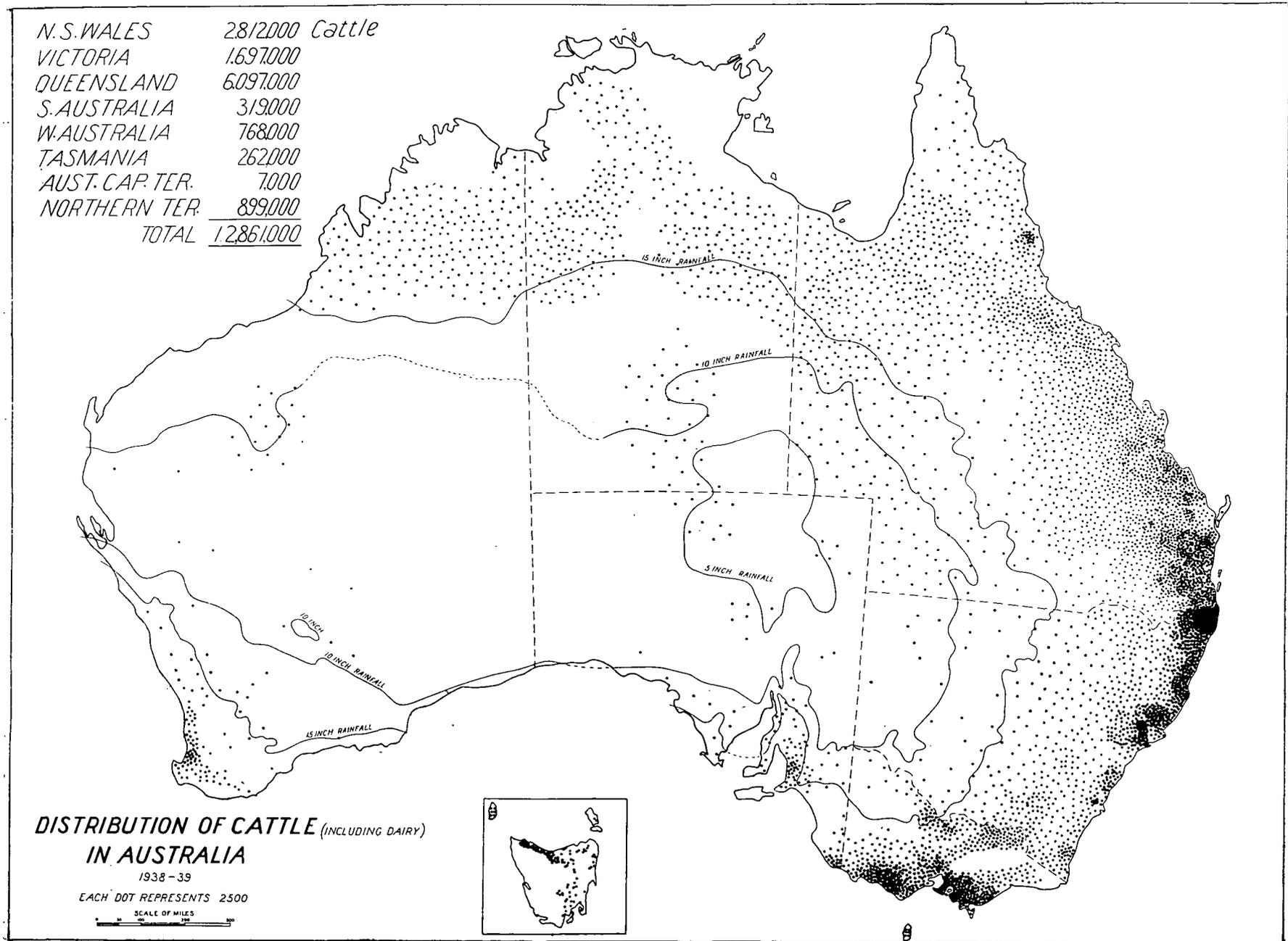


**DISTRIBUTION OF SHEEP
IN AUSTRALIA**

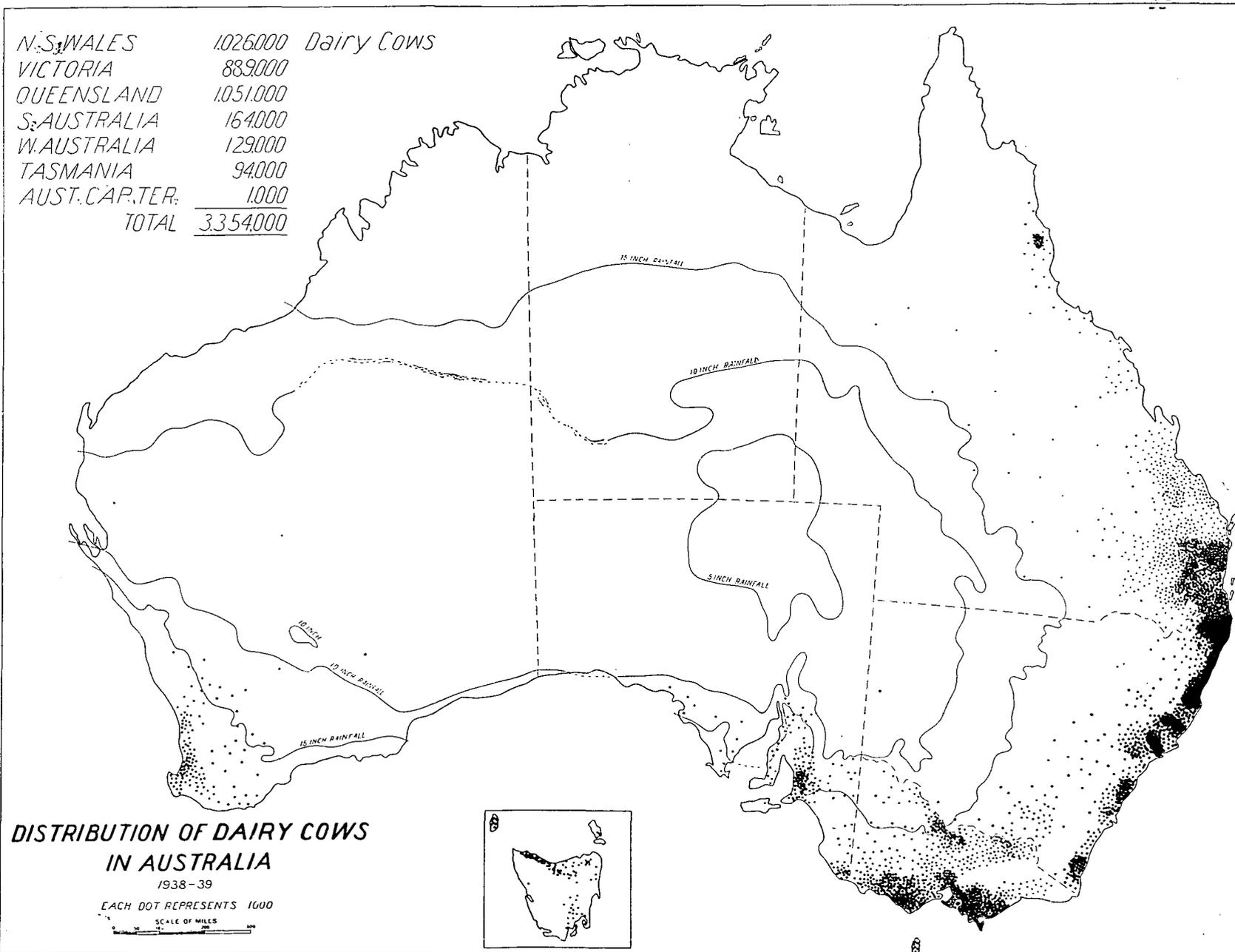
1938-39

EACH DOT REPRESENTS 20,000

SCALE OF MILES



N.S.WALES	1,026,000	Dairy Cows
VICTORIA	889,000	
QUEENSLAND	1,051,000	
S. AUSTRALIA	164,000	
W. AUSTRALIA	129,000	
TASMANIA	94,000	
AUST. CAP. TER.	1,000	
TOTAL	<u>3,354,000</u>	



Although the proportion is not as high as it has been in the past, Queensland was carrying 47.40 per cent. of the cattle in Australia in 1938. The percentage in each of the other States and Territories during 1938 was :—New South Wales, 21.87; Victoria, 13.20; Queensland, 47.40; South Australia, 2.48; Western Australia, 5.97; Tasmania, 2.04; Northern Territory, 6.99; Australian Capital Territory, 0.05.

A graph showing the distribution of cattle in Australia during 1938-39 appears on page 335.

3. 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 at the latest available date :—

CATTLE : NUMBERS IN VARIOUS COUNTRIES.

Country.	Year.	Number of Cattle (,000 omitted).	Country.	Year.	Number of Cattle (,000 omitted).
India (British and Native) ..	1936	119,437	Czechoslovakia ..	1937	4,938
U.S.A. ..	1938	66,821	Cuba ..	1935	4,651
U.S.S.R. (Russia) ..	1938	63,200	New Zealand ..	1938	4,506
Brazil ..	1935	40,514	Dutch East Indies	1937	4,414
Argentine Republic	1937	33,101	Yugoslavia ..	1938	4,268
China ..	1935	22,647	Rumania ..	1937	4,184
Germany ..	1938	19,911	French Equatorial and West Africa	1937	4,073
France ..	1938	15,622	Eire ..	1938	4,056
Australia ..	1938	12,862	Spain ..	1933	3,570
Union of South Africa	1937	11,395	Denmark ..	1938	3,238
Poland ..	1938	10,554	Paraguay ..	1935	3,052
Mexico ..	1930	10,083	Sweden ..	1938	3,036
United Kingdom ..	1938	8,903	Nigeria ..	1937	2,985
Colombia ..	1935	8,337	Rhodesia ..	1937	2,936
Uruguay ..	1937	8,297	Netherlands ..	1938	2,764
Canada ..	1938	8,091	Venezuela ..	1929	2,750
Italy ..	1938	7,667	Sudan (Anglo- Egyptian) ..	1938	2,700
Turkey ..	1938	5,896	Austria ..	1936	2,596
Thailand ..	1938	5,712	Uganda ..	1938	2,582
Kenya ..	1932	5,214	Chile ..	1937	2,460
Tanganyika Territory	1937	5,035	Bolivia ..	1931	2,064
Madagascar ..	1937	4,947			

4. Imports and Exports of Cattle.—The products of the cattle-raising industry figure largely in the export trade of Australia, although the export of live cattle has never been large. The number of cattle imported is also small, consisting, as in the case of horses, mainly of valuable animals for stud purposes. Details are as follows :—

CATTLE : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value. (a)	No.	Value. (a)	No.	Value. (a)
		£		£		£
1934-35 ..	161	30,382	224	3,891	63	— 26,491
1935-36 ..	164	33,527	240	3,283	76	— 30,244
1936-37 ..	946	32,276	281	7,355	— 665	— 24,921
1937-38 ..	164	16,913	348	5,782	184	— 11,131
1938-39 ..	42	7,530	447	9,573	405	2,043

(a) Australian currency values.

NOTE.—The minus sign (—) signifies net imports.

The average value of the cattle imported during the last five years was £81 13s. 4d. per head, while the average value of the cattle exported during the same period was £19 8s. 1d. As previously stated, the imported cattle were required principally for stud purposes.

5. **Cattle Slaughtered.**—The number of cattle slaughtered during each of the years 1934 to 1938 is given hereunder :—

CATTLE (INCLUDING CALVES) SLAUGHTERED.

Year.	N.S.W. (a)	Victoria (a)	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N. Terr.	A.C.T. (a)	Total.
1934	974,749	593,248	851,393	140,170	110,124	37,581	4,358	1,791	2,713,414
1935	1,100,472	774,395	866,410	153,686	120,123	39,588	1,531	1,620	3,057,825
1936	1,186,476	904,889	1,040,980	166,468	124,214	46,718	4,814	2,339	3,476,898
1937	1,223,320	971,338	1,266,412	167,451	145,375	48,451	2,456	2,693	3,827,496
1938	1,136,024	811,703	1,284,465	160,044	126,580	50,397	9,105	2,609	3,580,927

(a) For year ended 30th June of year following.

6. **Production and Consumption of Beef.**—The production of beef in Australia during the year 1938-39 was estimated at 1,252,631,000 lb. The requirements of the local market absorbed 969,495,000 lb. or approximately 77 per cent., leaving a balance of 283,136,000 lb. or 23 per cent., which was exported as frozen, chilled or canned beef. (See also § 1 par. 10.)

7. **Exports of Frozen Beef.**—The export of frozen meat from Australia dates from about 1881, and since that year the trade has grown considerably, the quantities and values exported during the past five years being as follows :—1934-35, 212,099,109 lb., £2,559,605; 1935-36, 196,823,248 lb., £2,481,896; 1936-37, 233,854,189 lb., £3,036,239; 1937-38, 293,803,532 lb., £4,367,064; and 1938-39, 271,963,829 lb., £4,323,680. Since 1932-33 chilled beef to the extent mentioned hereunder has been included in the foregoing. (See Table in § 1 par. 8.) The largest purchaser of Australian beef is the United Kingdom, which during the year 1938-39 took £3,901,691 worth, or about 90.2 per cent., of the total shipments. Other countries importing Australian beef were in order of importance Egypt, Malaya (British), Malta, Philippine Islands and Hong Kong; these countries, together with the United Kingdom, accounted for 98.62 per cent. of the total value of export.

In view of the preference for chilled beef overseas the Australian beef industry was at a serious disadvantage until investigations proved that beef could be successfully transported from Australia to United Kingdom in a chilled condition. Trial shipments of 254,000 lb. in 1932-33 and 1,515,000 lb. in 1933-34 were made, and the exports in subsequent years increased as follows :—1934-35, 21,570,928 lb., £322,239; 1935-36, 23,193,737 lb., £348,047; 1936-37, 41,869,695 lb., £608,175; 1937-38, 58,690,559 lb., £972,341; and 1938-39, 58,963,009 lb., £988,148.

8. **War-time Contract.**—The Government of the United Kingdom has contracted to purchase Australian beef. Fuller particulars will be found in Chapter XXVIII. "Miscellaneous".

9. **Agreements Regarding Meat at the Ottawa Conference.**—A stimulus to the Australian meat industry was provided by the agreement at the Imperial Economic Conference at Ottawa in August, 1932, under the terms of which the Government of the United Kingdom undertook to regulate importations of foreign meat from 1st January, 1932.

This matter is more specifically referred to in Chapter XXIV. "Trade".

10. Imports of Chilled and Frozen Beef into the United Kingdom.—The following statement shows the quantities and values of chilled and frozen beef imported into the United Kingdom during each of the five years 1934 to 1938 :—

IMPORTS OF CHILLED AND FROZEN BEEF IN QUARTERS AND SIDES INTO THE UNITED KINGDOM.

Country of Origin.	1934.	1935.	1936.	1937.	1938.
CHILLED—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Brazil	509,103	508,512	508,653	496,818	517,374
Uruguay	560,997	561,560	545,283	583,689	558,708
Argentine Republic	6,942,113	6,937,141	7,108,768	6,993,075	6,888,542
Other Foreign Countries .. .. .	..	..	..	..	..
British Countries	238,445	478,336	616,981	896,117	998,877
Total Chilled	8,250,658	8,485,549	8,779,685	8,969,699	8,963,501
CHILLED—VALUE.					
	£	£	£	£	£
Brazil	798,693	793,741	809,936	909,703	981,920
Uruguay	937,456	907,452	839,141	1,046,813	1,046,882
Argentine Republic	11,695,034	11,529,888	12,001,446	13,449,779	13,788,986
Other Foreign Countries .. .. .	..	..	..	..	..
British Countries	380,422	728,673	900,359	1,651,332	1,858,564
Total Chilled	13,811,605	13,959,754	14,550,882	17,057,627	17,676,352
FROZEN—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Brazil	5,473	11,245	3,421	7,900	3,879
Uruguay	40,950	41,971	36,090	53,974	72,147
Argentine Republic	97,234	93,933	113,479	111,798	158,522
Other Foreign Countries .. .. .	..	..	..	1	..
Australia	1,322,855	1,104,511	1,055,162	1,325,749	1,186,955
New Zealand	697,146	464,758	277,904	246,999	207,486
Other British Countries	4,866	4,509	4,248	12,413	1,454
Total Frozen	2,168,524	1,720,927	1,490,304	1,758,834	1,639,443
Grand Total (Chilled and Frozen)	10,419,182	10,206,476	10,269,989	10,728,533	10,593,944
FROZEN—VALUE.					
	£	£	£	£	£
Brazil	7,635	17,417	5,230	12,199	6,768
Uruguay	63,800	78,018	62,610	94,434	134,471
Argentine Republic	153,758	159,524	172,338	199,506	290,141
Other Foreign Countries .. .. .	..	..	..	2	..
Australia	1,660,554	1,481,103	1,316,743	1,969,902	1,885,549
New Zealand	824,611	606,849	344,012	363,996	313,359
Other British Countries	5,578	6,134	5,143	18,792	2,054
Total Frozen	2,715,936	2,349,045	1,906,076	2,658,831	2,632,342
Grand Total (Chilled and Frozen)	16,527,541	16,308,799	16,456,958	19,716,458	20,308,694

§ 4. Sheep.

1. **Initiation of the Pastoral Industry.**—Fortunately for Australia, the suitability of its climate and general conditions for the production of a high class of wool were, at an early date in the history of its settlement, surmised and tested by Captain Macarthur, one of the pioneer sheep-breeders of New South Wales. To the energy of this enterprising pastoralist is due in large measure the rapid and extremely satisfactory development of Australia as a producer of fine wool, and, 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 pastoral industry in Australia must certainly be his.

2. **Distribution throughout Australia.**—With the exception of a short period in the early sixties, when the flocks of Victoria outnumbered those of the mother State, New South Wales has occupied the premier position in sheep-raising, and practically one-half of the sheep of Australia are in this State.

A graph showing the distribution of sheep in Australia during 1938-39 appears on p. 334. A similar graph showing the distribution of sheep during 1924-25 was published in Official Year Book No. 22, p. 659.

Fluctuations in the number of sheep recorded for each year in Australia from 1860 onwards may be seen from the graph on page 300. Five marked periods of decline depleted the numbers at successive intervals, but these losses were made up rapidly. In every year since 1925 the sheep flocks have exceeded 100 millions, reaching 113,372,518 in 1937, the greatest number ever recorded in Australia. At no previous period have such large numbers been depastured continuously, and the development has taken place notwithstanding an average annual slaughter of approximately nineteen million sheep and lambs for the mutton and lamb trade. The forecast for 1939 indicates a record number of over 116 million.

The numbers of sheep in the several States and Territories for each year from 1934 to 1938, together with an estimate of the numbers at the 31st December, 1939, are shown in the table hereunder:—

SHEEP : NUMBER.

31st Dec.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	N.T.	A.C.T. (a)	Total.
1934	53,327,000	16,783,631	21,574,182	7,884,919	11,197,156	2,038,450	23,356	219,343	113,048,037
1935	51,936,000	17,457,291	18,060,093	7,945,745	11,082,972	2,139,900	25,483	228,317	108,875,801
1936	53,166,010	17,663,103	20,011,749	7,905,112	9,007,535	2,233,655	11,162	244,378	110,242,704
1937	51,563,181	18,863,497	22,497,970	8,904,402	8,732,076	2,520,950	26,856	263,616	113,372,518
1938	48,876,663	17,007,352	23,158,569	9,936,586	9,177,531	2,625,690	29,901	245,340	111,057,832
1939 <i>b</i>	52,500,000	18,252,000	23,500,000	9,941,000	9,574,000	2,500,000	25,000	250,000	116,542,000

(a) 31st March year following.

(b) Estimated.

3. **Proportion in the Several States and Territories.**—Apart from the effect of drought the relative numbers of sheep depastured in the different States remain fairly constant. The flocks of Western Australia which were depleted in 1936 by drought declined further in 1937, but the total for Australia increased by 3 million owing to gains in the other States.

The percentage distribution in 1938 was:—New South Wales, 44.01; Victoria, 15.31; Queensland, 20.85; South Australia, 8.95; Western Australia, 8.26; Tasmania, 2.37; Northern Territory, 0.03; Australian Capital Territory, 0.22 per cent.

4. **Comparison with other Countries.**—As regards the size of its flocks and the quantity and quality of wool produced, Australia has long occupied a leading position amongst the sheep-raising countries of the world. The following figures taken mainly from the *Year Book of the International Institute of Agriculture* represent the latest returns available in regard to the number of sheep in the principal wool-producing countries. The leading position is held by Australia, with 111 million, followed by the U.S.S.R. (Russia) with 85 million, the United States of America with 54 million, the

Argentine Republic with 44 million and India (British and Native), 42 million. On account of drought the number of sheep in the Union of South Africa dropped from 46 million in 1933 to 36 million in 1935, but the number had increased to 41 million in 1938. In the Argentine Republic sheep flocks also declined from 44.4 million in 1930 to 38 million in 1935, but the number recorded in 1937 was 44 million. During the years 1925 to 1929 the sheep flocks of the U.S.S.R. exceeded those of Australia. The maximum number recorded was 130 million in 1928, but after that year a remarkable decline took place and the number depastured in 1934 was only 46,848,000. It was proposed under the second Five Year Plan to increase the number to 85 million by 1937, but this number was only approximately reached by 1938. Russian sheep are mainly coarse-woolled, and the wool is of inferior quality, but the Soviet Government is making efforts to improve it. In a classification of the wool production in 1934, 10 per cent. was classed as fine wool, 16 per cent. as semi-fine quality, and 74 per cent. as coarse wool. In 1938 the production of fine wool had increased to 14 per cent. and semi-fine to 39 per cent., while the proportion of coarse wool had declined to 47 per cent. Production of wool in the U.S.S.R. amounted to about 303 million lb. during 1938, representing an average weight of fleece shorn of more than 3 lb.

SHEEP : NUMBERS IN VARIOUS COUNTRIES.

Country.	Year.	No. of Sheep (,000 omitted).	Country.	Year.	No. of Sheep (,000 omitted).
Australia	1938	111,058	Italy	1938	9,467
U.S.S.R. (Russia) ..	1938	84,500	Bulgaria	1934	8,840
U.S.A.	1938	53,762	Greece	1937	8,451
Argentine Republic	1937	43,740	Algeria	1937	5,965
India (British and Native)	1936	42,060	Chile	1936	5,749
Union of South Africa	1938	41,150	Germany	1938	5,677
New Zealand	1938	32,379	Iraq	1938	5,514
United Kingdom ..	1938	26,775	Bolivia	1931	5,232
China	1935	20,957	Mexico	1930	3,674
Spain	1933	19,093	Canada	1938	3,415
Uruguay	1932	17,931	Poland	1938	3,411
Turkey	1937	16,449	Tunis	1937	3,383
Iran	1936	13,615	Portugal	1934	3,274
Brazil	1935	12,645	Kenya	1930	3,243
Rumania	1937	12,372	Eire	1938	3,197
Peru	1929	11,209	Somaliland ..	1938	3,000
French Equatorial and West Africa	1937	11,014	Sudan (Anglo-Egyptian) ..	1938	2,500
French Morocco ..	1938	10,162	Syria and Lebanon	1938	2,129
Yugoslavia	1938	10,137	Manchuria	1937	1,966
France	1938	9,872	Nigeria	1938	1,796
			Tanganyika Territory	1937	1,646

5. 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. During the last five years the principal consignments of ordinary sheep have been made to Malaya (British) from Western Australia. On the 27th November, 1929, the export of stud sheep was prohibited, except with the approval of the Minister for Trade and Customs. Stud sheep, however, are being exported in increasing numbers to New Zealand, South Africa and Japan, the total shipments in 1938-39 amounting to 12,235 sheep valued at £45,744. The ordinary flock sheep exported from Australia

are, for the most part, consigned to Malaya and the Pacific Islands. The following table shows the imports and exports of stud and flock sheep for the years 1934-35 to 1938-39 :—

SHEEP : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	No.	Value. (a)	No.	Value. (a)	No.	Value. (a)
		£		£		£
1934-35 ..	1,377	15,233	59,559	45,351	58,182	30,118
1935-36 ..	2,167	18,917	66,507	54,979	64,340	36,062
1936-37 ..	5,903	46,371	55,799	62,976	49,896	16,605
1937-38 ..	4,241	41,712	72,049	89,170	67,808	47,458
1938-39 ..	5,288	44,961	72,027	84,366	66,739	39,405

(a) Australian currency values.

6. Sheep Slaughtered.—The numbers of sheep slaughtered in the several States during each of the years from 1934 to 1938 were as follows :—

SHEEP (INCLUDING LAMBS) SLAUGHTERED.

Year.	N.S.W. (a)	Victoria. (a)	Q'land.	S. Aust.	W. Aust.	Tas. (a)	N.T.	A.C.T. (a)	Total.
1934..	6,829,477	7,646,070	1,275,936	1,591,054	1,079,516	349,044	..	22,207	18,793,304
1935..	6,054,749	7,691,488	972,458	1,642,550	1,166,663	351,684	..	21,948	17,895,540
1936..	6,428,027	7,914,433	1,024,519	1,697,498	1,106,107	341,586	..	24,230	18,536,400
1937..	6,875,496	8,128,544	1,129,729	1,588,507	1,227,843	372,547	..	23,375	19,339,041
1938..	6,322,338	7,727,774	1,120,783	2,007,312	1,318,249	376,583	250	26,222	18,899,511

(a) Year ended 30th June, year following.

7. Production and Consumption of Mutton and Lamb.—The production of mutton and lamb during the year 1938-39 amounted to 717,454,000 lb., of which 527,241,000 lb. or 73 per cent. was consumed locally, leaving a balance of 190,213,000 lb. or 27 per cent. for exportation. (See also § 1 par. 10.)

8. Exports of Frozen Mutton and Lamb.—The export trade in mutton and lamb preserved by cold process expanded rapidly to 1913 when 205 million lb. were dispatched. Progress was interrupted during the War of 1914-19, and probably owing to high wool prices the exports of mutton and lamb for a number of years after that war were considerably less than earlier shipments. Exports commenced to rise again in 1929-30, and from that year onwards they have continued to expand almost uninterruptedly. Formerly the shipments consisted largely of frozen mutton, but in 1923-24 lamb supplanted mutton, and the exports of lamb have been almost solely responsible for the increased shipments of mutton and lamb during the past ten years.

The quantity and value of the shipments of mutton and lamb during each of the last five years were as follows :—Lamb, 1934-35, 135,879,651 lb., £3,515,230; 1935-36, 151,377,838 lb., £4,020,163; 1936-37, 162,885,887 lb., £4,466,801; 1937-38, 159,556,221 lb., £4,645,624; 1938-39, 158,332,714 lb., £4,393,773. Mutton, 1934-35, 60,314,351 lb., £960,479; 1935-36, 26,629,544 lb., £445,589; 1936-37, 45,572,359 lb., £766,851; 1937-38, 42,246,245 lb., £694,357; 1938-39, 28,155,757 lb., £413,693.

As with beef, the principal customer in this trade is the United Kingdom, which absorbed 97 per cent. of the total quantity exported from Australia during the year 1938-39.

9. War-time Contract.—The Government of the United Kingdom has contracted to purchase Australian mutton and lamb. Fuller particulars will be found in Chapter XXVIII. "Miscellaneous".

10. Resolutions at Ottawa Conference.—Reference has already been made to the agreement reached at the Imperial Economic Conference at Ottawa regarding the regulation of imports of meat into the United Kingdom. (See § 3 par 9.)

11. Imports of Frozen Mutton and Lamb into the United Kingdom.—The quantities and values of frozen mutton and lamb imported into the United Kingdom from various countries for the five years ended 1938 are given in the following table:—

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM.

Country of Origin.	1934.	1935.	1936.	1937.	1938.
MUTTON—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Chile	82,258	89,326	95,759	94,201	96,594
Uruguay	13,690	6,232	8,240	16,553	23,713
Argentine Republic	137,748	150,423	121,908	110,907	98,884
Other Foreign Countries	2,895	2,870	2,063	4,871	1,424
Total, Foreign	236,591	248,851	227,970	226,532	220,615
Australia	461,259	424,050	227,097	405,929	367,044
New Zealand	898,965	1,041,563	888,864	862,182	1,014,652
Other British Countries .. .. .	..	..	350	4,582	2,605
Total, British	1,360,224	1,465,613	1,116,311	1,272,693	1,384,301
Grand Total	1,596,815	1,714,464	1,344,281	1,499,225	1,604,916
MUTTON—VALUE.					
	£	£	£	£	£
Chile	163,574	129,856	177,128	163,122	166,009
Uruguay	23,260	10,635	13,945	28,128	43,859
Argentine Republic	261,398	223,070	219,406	202,384	192,254
Other Foreign Countries	4,744	3,984	3,204	8,762	2,500
Total, Foreign	452,976	367,545	413,683	402,396	404,622
Australia	845,228	693,878	421,720	727,408	622,648
New Zealand	1,716,799	1,754,720	1,616,742	1,638,107	1,779,019
Other British Countries .. .. .	..	..	613	8,482	4,194
Total, British	2,562,027	2,448,598	2,039,075	2,373,997	2,405,861
Grand Total	3,015,003	2,816,143	2,452,758	2,776,393	2,810,483

IMPORTS OF FROZEN MUTTON AND LAMB INTO THE UNITED KINGDOM—
continued.

Country of Origin.	1934.	1935.	1936.	1937.	1938.
LAMB—QUANTITY.					
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
Chile	124,067	118,554	111,209	115,682	99,199
Uruguay	124,702	130,176	118,055	148,876	147,637
Argentine Republic .. .	783,868	754,827	777,996	778,943	794,712
Other Foreign Countries .. .	27,641	28,561	37,230	38,006	42,947
Total, Foreign .. .	1,060,278	1,032,118	1,044,490	1,081,507	1,084,495
Australia	1,165,848	1,360,158	1,268,909	1,476,615	1,531,232
New Zealand	2,655,611	2,591,399	2,641,494	2,740,202	2,660,882
Other British Countries .. .	242	18	558	4,174	7,312
Total, British .. .	3,821,701	3,951,575	3,910,961	4,220,991	4,199,426
Grand Total .. .	4,881,979	4,983,693	4,955,451	5,302,498	5,283,921

LAMB—VALUE.					
	£	£	£	£	£
Chile	365,115	271,858	316,386	312,972	287,386
Uruguay	311,953	327,257	316,870	419,469	411,710
Argentine Republic .. .	2,051,554	1,898,688	2,091,387	2,179,470	2,250,955
Other Foreign Countries .. .	67,008	77,642	101,194	108,090	113,239
Total, Foreign .. .	2,795,630	2,575,445	2,825,837	3,020,001	3,063,290
Australia	3,320,964	3,934,693	3,698,058	4,349,418	4,571,384
New Zealand	8,414,183	8,063,996	8,264,409	8,753,793	8,743,507
Other British Countries .. .	674	51	1,529	11,704	17,831
Total, British .. .	11,735,821	11,998,740	11,963,996	13,114,915	13,332,722
Grand Total .. .	14,531,451	14,574,185	14,789,833	16,134,916	16,396,012

§ 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 one-quarter of the world's supply. Moreover, half of the world's production of fine quality merino wool is produced in Australia. The bulk of the production is exported, but with the greater activity of Australian woollen mills the quantity used locally is increasing; the amount so used represented 7 per cent. of the total production in 1938-39.

The important position held by Australia among the principal sheep and wool producing countries of the world is more clearly shown in the following table :—

SHEEP AND WOOL : PRINCIPAL PRODUCING COUNTRIES.

Country.	Year.	No. of Sheep (in millions).	Wool Production (in millions of lb., greasy).
Australia	1938-39	111.1	984
United States of America	1938-39	53.7	458
Argentine Republic	1937-38	43.7	389
New Zealand	1938-39	32.4	329
U.S.S.R. (Russia)	1938-39	84.5	303
Union of South Africa	1938-39	41.2	264

2. **Greasy and Scoured Wool.**—Whether the weight of the wool clip should be stated as “in the grease” or as “scoured or washed” is a matter which seriously affects comparisons between the clips of different seasons and of different countries. The quantity of grease and other extraneous matter in a fleece differs, not only between countries, but between districts in the same country. It fluctuates with the vagaries of the season, while it varies also with the breed and the condition of the sheep. There is, moreover, no clearly defined standard in regard to the cleanliness of wool described as scoured or washed. Consequently, any comparisons of the weight of the Australian clip for different years or seasons whether on a greasy or a scoured basis cannot be regarded as exactly similar. After extensive inquiry this Bureau estimates the average clean weight at 46.15 per cent. of the greasy weight; or, in other words, 1 lb. of clean wool is equivalent to 2¼ lb. of greasy.

The quantity of scoured or washed Australian wool exported during the last five years was approximately 15 per cent. of the total wool exports regarded as “greasy”.

3. **Production.**—(i) *Quantity.* The bulk of the Australian wool production is shorn from live sheep. Approximately 6 per cent. is obtained by fellmongering and about 5 per cent. is on skins exported. Statistics of wool production are compiled from data received from growers, fellmongers, etc. The following table gives the production for each of the last five seasons, but the figures shown for 1939-40 are preliminary only, and are subject to revision. Particulars of the gross value of wool produced in Australia are also shown; these values are based upon the average price of greasy wool realized at auction in the principal markets of the Commonwealth. The production in 1939-40 has been valued at 13.4375d. per lb., the average price agreed upon under the Imperial Purchase Scheme referred to later :—

WOOL : TOTAL PRODUCTION.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.(a)
	lb.	lb.	lb.	lb.	lb.
New South Wales (b)	474,359,226	505,375,065	496,824,150	439,949,939	534,000,000
Victoria	163,397,896	163,048,510	178,890,131	165,829,182	187,000,000
Queensland	142,793,328	153,766,368	174,751,280	179,458,589	190,000,000
South Australia	81,709,440	76,604,296	86,606,388	102,888,121	102,000,000
Western Australia	92,458,673	69,935,210	70,684,855	78,802,143	78,000,000
Tasmania	16,300,000	14,067,000	15,598,500	17,519,000	18,000,000
Northern Territory (c)	35,000	35,000	35,000	35,000	35,000
Total—Quantity	971,053,563	982,831,449	1,023,390,304	983,581,974	1,109,035,000
Value ..	£ 55,186,000	£ 63,585,782	£ 54,131,618	£ 41,405,483	£ 62,100,000^o

(a) Preliminary; subject to revision. (b) Including Australian Capital Territory. (c) Approximate.

(ii) *Estimate for 1940-41.* No official information is yet available for the season ending June, 1941. In many parts the wool is not yet shorn. It is expected, however, that the production for that year will approximate 3,500,000 bales. Should this estimate be realized the total production of wool in Australia for 1940-41 would approximate 1,050,000,000 lb.

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. *World's Wool Production.*—The following table gives details of the world's wool production and shows the importance of Australia as a wool-producing country. Of a total production of 3,990 million lb. in 1938-39, Australia produced 984 million lb., or 24.7 per cent. It is also interesting to note that the share of the British Empire in world production during the same year was estimated at 1,849 million lb., or 46.3 per cent.

WOOL : WORLD'S PRODUCTION.

(In millions of lb., "greasy" basis.)

Countries.	Average Five Years 1909-13.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Australia	741.4	1,015.4	971.1	982.8	1,023.4	983.6
U.S.A.	314.1	451.0	452.7	448.6	454.6	457.7
Argentine Republic ..	358.7	370.0	359.0	379.0	380.0	394.0
New Zealand	198.5	265.0	304.0	303.5	297.0	329.0
U.S.S.R. (Russia) ..	380.0	128.0	158.4	202.1	259.0	303.0
Union of South Africa	165.9	219.0	250.0	277.0	246.0	264.0
Uruguay	157.0	112.0	110.0	114.0	110.0	114.0
China (a)	100.0	110.0	110.0	110.0	110.0	110.0
United Kingdom ..	134.0	115.0	109.0	108.0	107.0	110.0
India (a)	100.0	100.0	100.0	100.0	100.0	100.0
Turkey	118.0	35.4	41.1	48.9	64.5	69.0
Spain	72.0	73.0	66.0	66.0	60.0	60.0
France	80.7	52.8	52.7	53.9	55.1	54.4
Rumania	13.2	43.0	42.9	42.9	45.0	48.5
Morocco (French) ..	14.9	35.6	40.8	40.7	47.8	44.7
Germany	52.0	32.2	36.3	40.1	43.3	44.5
Brazil	35.0	36.4	37.5	37.5	43.2	(a)43.0
Iran	12.1	40.0	37.5	37.5	35.3	40.0
Yugoslavia	25.4	31.0	32.2	33.6	31.5	35.5
Chile	17.4	37.0	35.2	35.7	36.0	33.0
Italy	55.0	36.0	30.0	30.0	30.0	33.0
Bulgaria	23.7	21.3	21.1	20.4	20.7	21.2
Canada	11.2	19.5	19.4	18.9	19.0	18.8
Eire .. ..	..	17.0	16.5	17.6	16.4	17.9
Algeria	35.2	15.2	16.1	17.6	17.2	16.4
Basutoland .. ..	..	5.1	7.3	6.0	4.7	6.9
Falkland Islands ..	..	4.0	4.2	4.0	4.6	3.6
Other Countries ..	71.2	201.4	214.0	222.3	215.9	234.8
Total	3,286.6	3,621.3	3,675.0	3,798.6	3,877.2	3,990.5

(a) Estimated.

6. **War-time Contract.**—After the outbreak of war in September, 1939, negotiations were concluded between the Governments of the Commonwealth and of the United Kingdom whereby the latter contracted to purchase the entire wool clip of Australia for the duration of the war and one full clip thereafter. The price per lb. at store in Australia was fixed at 10½d. sterling, or 13.4375d. in Australian currency, and provision was made for an equal division between the two Governments of any profits derived from the sale of the wool for use outside the United Kingdom. In addition, an amount not exceeding ¾d. sterling will be paid by the United Kingdom Government to cover costs from the store to shipboard. The agreement provides that sufficient quantities of wool shall be retained in Australia for domestic use. The administration of the scheme in Australia is controlled by the Central Wool Committee, assisted by a Committee in each State. These Committees consist of representatives of growers, brokers, buyers and manufacturers.

Further particulars of this contract will be found in Chapter XXVIII. "Miscellaneous".

A similar agreement was negotiated in August, 1940, between the Governments of the United Kingdom and the Union of South Africa.

7. **Appraisals, 1939-40 Season.**—More than 1,066.2 million lb. of greasy and 45.8 million lb. of scoured wool were appraised during that portion of the 1939-40 season in which the Central Wool Committee operated. The appraised values were £55,880,000 for greasy and £3,962,000 for scoured, or a total of £59,842,000 which includes wool appraised at £2,421,000 which will not participate in any subsequent distribution of profits. The average appraised price per lb. in the grease was 12.4028d. This was 1.0347d. below the agreement price of 13.4375d. The amount to be distributed on account of this 8.3426 per cent. shortage is £4,790,000.

8. **Consumption of Locally Processed Wool.**—It is impossible to obtain particulars of the total consumption of wool in Australia, as considerable quantities of manufactured woollen goods are imported. It is possible, however, to secure with reasonable accuracy the quantities of wool used in Australian factories and mills to produce woollen cloth and other woollen goods, such as blankets, rugs and knitted-wear. Some difficulties arise in the aggregation of returns from individual mills concerned with only one process in manufacture and whose output constitutes the raw material of other mills, but it is believed that the risk of duplication has now been reduced to a minimum. Reference is made to the woollen mills established in Australia in Chapter XVIII. "Manufacturing Industry".

In the following table particulars are given of the quantity of wool processed in Australian factories during each of the past ten years.

For reasons mentioned in § 5 par. 2 above, the factor used for converting wool in terms of scoured, tops, yarn, etc., to a greasy basis must be regarded as approximate.

CONSUMPTION OF LOCALLY PROCESSED WOOL IN AUSTRALIA.

(In terms of greasy.)

Year.		Quantity.	Year.		Quantity.
		lb.			lb.
1929-30	.. ..	49,606,200	1934-35	.. ..	55,753,478
1930-31	.. ..	35,200,996	1935-36	.. ..	70,205,840
1931-32	.. ..	50,159,704	1936-37	.. ..	71,579,920
1932-33	.. ..	65,343,392	1937-38	.. ..	68,377,043
1933-34	.. ..	60,881,494	1938-39	.. ..	68,444,311

9. Exports of Wool.—(i) *Greasy—Quantities.* Of the total weight of greasy wool shipped overseas during the last five years 38 per cent. was sent to the United Kingdom, the same proportion as that dispatched during the years 1909 to 1913. The other leading consignees since 1934–35 were Japan 17 per cent.; Belgium 14 per cent.; France 13 per cent.; and Germany 5 per cent. The balance of 13 per cent. was distributed among all other countries. The following table shows the quantities of “greasy” wool exported, and the principal countries of recorded destination:—

EXPORTS OF WOOL IN THE GREASE : AUSTRALIA.

Country to which Exported.	Average Five Years 1909–13.	1934–35.	1935–36.	1936–37.	1937–38.	1938–39.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	212,004,088	292,725,835	244,568,575	277,210,184	294,411,888	333,263,937
Other British Countries ..	(a)	1,252,059	2,477,886	2,396,943	1,931,028	2,861,227
Belgium ..	55,143,706	124,169,015	102,501,997	120,959,897	87,862,566	104,147,161
France ..	149,835,946	75,760,166	64,692,287	76,063,696	123,835,665	162,034,076
Germany ..	106,344,696	27,220,923	27,116,447	41,451,486	53,956,616	35,027,760
Italy ..	4,381,197	17,694,730	4,502,392	35,775,546	29,577,669	21,186,800
Japan ..	7,262,683	196,125,519	234,518,700	84,058,539	69,162,890	72,659,411
Netherlands ..	(a)	16,450,416	15,296,631	8,798,135	7,084,535	15,701,733
Poland ..	(a)	12,058,269	12,679,782	12,296,714	17,988,525	6,954,917
United States of America ..	15,486,447	5,448,868	24,810,766	72,758,475	4,193,370	21,484,584
Other Foreign Countries ..	6,382,577	16,878,821	18,722,139	27,404,760	31,821,901	20,406,016
Total ..	556,841,340	785,784,621	751,887,602	759,174,375	721,826,953	795,727,712

(a) Included with Other Foreign Countries.

(ii) *Scoured and Washed including Tops, Noils and Waste—Quantities.* The exports of “scoured and washed” wool including tops, noils and waste during the period shown were as follows:—

EXPORTS OF WOOL—SCOURED AND WASHED, INCLUDING TOPS, NOILS AND WASTE : AUSTRALIA.

Country to which Exported.	Average Five Years 1909–13.	1934–35.	1935–36.	1936–37.	1937–38.	1938–39.
	lb.	lb.	lb.	lb.	lb.	lb.
United Kingdom ..	32,032,577	36,713,150	33,670,787	34,770,657	30,951,063	36,591,488
Canada ..	(a)	3,270,402	4,226,701	5,227,856	4,686,416	4,470,367
Other British Countries ..	(a)	862,051	1,000,077	1,363,204	1,650,938	1,156,535
Belgium ..	7,538,058	10,733,900	10,826,486	8,701,786	5,113,651	5,802,183
France ..	16,068,910	9,843,830	10,835,868	7,668,430	8,238,396	9,900,450
Germany ..	12,310,967	2,879,686	3,927,532	3,561,744	2,772,248	1,935,088
Italy ..	265,442	1,073,491	213,531	593,359	310,170	67,051
Japan ..	1,888,161	1,027,420	1,814,949	474,775	695,954	1,618,827
Poland ..	(b)	1,187,583	2,003,013	812,765	555,721	497,285
Other Foreign Countries ..	252,995	4,392,352	5,378,311	9,134,695	6,687,941	3,845,890
Total ..	70,347,110	71,983,865	73,897,255	72,309,271	61,664,498	70,945,164

(a) Included with Other Foreign Countries.

(iii) *Total Value of Exports.* The value of wool exported from Australia during the five years ending 1938–39 averaged 39 per cent. of the value of the exports of merchandise of local origin, but during 1938–39 the proportion was only 36 per cent. The

value during the periods under review together with the principal countries to which wool was exported is shown in the next table :—

VALUE OF WOOL EXPORTS : AUSTRALIA.

Country to which Exported.	Average Five Years 1909-13.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£	£
United Kingdom ..	10,608,967	16,007,777	18,379,416	23,025,184	20,247,877	18,513,175
Other British Countries ..	(a)	409,286	657,572	948,495	834,619	675,143
Belgium ..	2,546,915	5,433,157	6,184,099	8,195,565	4,782,798	4,720,537
France ..	6,494,832	3,558,066	4,413,359	5,441,316	7,111,406	7,566,458
Germany ..	5,131,282	1,511,094	2,052,436	3,578,244	3,877,114	1,094,320
Italy ..	202,434	807,775	273,549	2,594,586	1,846,631	1,175,304
Japan ..	516,528	8,680,119	14,594,465	7,513,956	4,042,266	3,804,120
Netherlands ..	(a)	825,971	1,058,533	707,361	466,198	826,198
Poland ..	(a)	617,064	968,108	918,665	1,056,739	403,446
United States of America ..	795,328	352,466	2,102,066	7,039,771	391,356	1,346,187
Other Foreign Countries ..	296,356	1,063,165	1,661,958	2,541,424	2,326,557	1,712,208
Total ..	26,592,642	39,265,940	52,345,561	62,504,567	46,983,561	42,737,096

(a) Included with Other Foreign Countries.

10. Exports and Local Sales of Wool.—Approximately 90 per cent. of Australian wool is normally disposed of locally. Buyers from the United Kingdom, France, Belgium, Germany and other European countries, and from America, Japan, China and India attend the sales conducted in Sydney, Albury, Melbourne, Geelong, Ballarat, Brisbane, Adelaide, Perth, Hobart and Launceston. Particulars regarding exports and local sales, as well as quantities and proportions of the various descriptions of wool marketed in each State, will be found in the *Production Bulletin* issued by this Bureau.

11. Value.—Wool is the chief factor in the pastoral wealth of Australia, and the nation's prosperity is largely dependent upon the satisfactory sale of the clip. During the ten years ended 1938-39, the price of greasy wool sold in the selling centres of Australia averaged 11½d. per lb. This figure may be compared with an average of 18d. per lb. during the nine post-war years ended 1928-29, and 9d. per lb. for the seven pre-war years ended 1913-14. The heavy decline in the price of wool which commenced in 1929-30 continued during the succeeding three years. In 1933-34, prices rose in a remarkable manner, averaging 15.84d. per lb., compared with 8.72d. per lb. for the previous year, an increase of 81.6 per cent. A decline in 1934-35 was succeeded by a period of rising prices in the two years following, but in 1937-38 and in 1938-39 prices again receded.

The effect of fluctuating wool values upon the national income is reflected in the following figures. Based on the average auction room price of greasy wool the output for the season 1938-39 was valued at £42,042,734 compared with £54,132,000 in 1937-38. These values may be compared with £81,430,000 in 1924-25 when the record price was realized and £34,804,000 in the depression year 1930-31. On the average of the five seasons 1934-35 to 1938-39 the annual clip was valued at £51,181,000.

The estimated value of the clip for 1939-40 is £62,000,000, but this figure is subject to revision.

The following table gives the average auction room price in Australia of greasy wool as compiled by the National Council of Wool-selling Brokers. This price represents the average price realized for all greasy wool of whatever type or quality marketed during the years indicated.

WOOL : AVERAGE MARKET PRICE PER LB.

Description.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	d.	d.	d.	d.	d.	d.	d.
Greasy (a) ..	15.84	9.75	14.01	16.48	12.51	10.39	(b)13.43

(a) National Council of Wool-selling Brokers.

(b) The equivalent of the contract price of 10½d. sterling.

Measured in terms of Australian, sterling and gold currencies the approximate values of greasy wool per lb. since 1930-31 were as follows :—

GREASY WOOL : AVERAGE VALUES PER LB.

Year.	Australian Currency.	Sterling.	Gold Prices.
	d.	d.	d.
1930-31	8.36	6.96	6.96
1931-32	8.46	6.69	5.10
1932-33	8.72	6.98	4.84
1933-34	15.84	12.65	8.19
1934-35	9.75	7.78	4.68
1935-36	14.01	11.19	6.79
1936-37	16.48	13.16	8.03
1937-38	12.51	9.99	6.15
1938-39	10.39	8.30	4.84
1939-40	13.43	10.75	5.37

The average values shown in sterling and gold currencies have been calculated by converting the average prices shown in Australian currency on the basis of the average rate of exchange between the months of September and June in each year. Though not exact these results will suffice for general purposes.

12. United Kingdom Importation of Wool.—The appended statement of the quantities and values of wool imported into the United Kingdom during the year 1938 from the principal wool-producing countries shows the important position which Australia occupies in the supply of wool to the Mother Country :—

WOOL (a) : IMPORTS INTO UNITED KINGDOM, 1938.

Country of Origin.	Quantity.		Value.	Country of Origin.	Quantity.		Value.	
	lb.	£			lb.	£		
Australia ..	365,518,900	18,703,343	Other British Possessions	4,149,300	142,470	Peru ..	488,100	25,202
New Zealand ..	197,995,400	9,206,519		Belgium ..	3,431,900		245,735	
Union of South Africa ..	106,956,000	4,217,125	Falkland Islands	1,426,400	54,255	Germany ..	410,900	20,142
Argentine Republic ..	79,303,600	2,946,286	U.S.A. ..	1,530,500	74,305	Other Countries	3,206,000	134,236
India ..	46,108,400	1,736,827						
France ..	25,210,800	1,466,604						
Uruguay ..	22,072,200	1,027,644						
Chile ..	15,240,700	685,336						
Eire ..	8,276,300	310,129	Total ..	881,325,400	40,996,158			

(a) Greasy and Scoured.

Of the importations of wool into the United Kingdom, Australian wool represented 41 per cent. of quantity and 46 per cent. of value, and New Zealand 22 per cent. of quantity and 22 per cent. of value. Altogether, 674,619,600 lb., valued at £32,269,457, were received from British Possessions, these figures being equivalent to 77 per cent. of the total weight and 79 per cent. of the total value of all wool imported.

13. **Principal Importing Countries and Sources of Supply.**—The following table furnishes, in respect of the principal importing Countries, details of their production and imports of wool for the year 1938, together with the chief sources of supply. The quantities imported refer to the actual weight of wool without distinguishing between greasy and scoured. They are also exclusive of any wool imported on skins.

WOOL: PRINCIPAL IMPORTING COUNTRIES AND SOURCES OF SUPPLY, 1938.
(In millions of lb.)

Importing Country.	Production(a) of Importing Country.	Quantity Imported from—					Total Imports.
		Australia.	Union of South Africa.	Argentine Republic.	New Zealand.	Other Countries.	
United Kingdom ..	110.0	365	107	79	198	132	881
Belgium ..	0.7	106	19	20	7	65	217
Czechoslovakia ..	2.0	18	4	6	..	1	29
France ..	54.4	168	52	62	22	86	390
Germany ..	44.5	49	90	56	14	97	306
Italy ..	33.0	19	22	12	..	23	76
Japan ..	..	87	5	6	11	8	117
Poland ..	12.9	14	2	14	4	..	34
U.S.A. ..	457.7	7	1	47	4	44	103
Total ..	..	833	302	302	260	456	2,153

(a) As in the grease.

In connexion with the total imports shown in the table, it should be noted that a considerable transit trade exists between continental countries. It must not be assumed, therefore, that the whole of the imports recorded by these countries are retained for their own consumption. The countries chiefly concerned with this transit trade are United Kingdom, Belgium, and France. The quantities re-exported during 1938 were:—United Kingdom, 269 million lb., or 30 per cent., of the total imports; Belgium, 76 million lb., or 35 per cent.; and France, 49 million lb., or 13 per cent.

14. **Inquiry into Wool Industry.**—A Committee was appointed by the Commonwealth Government on the 15th August, 1932, to inquire into and report on the condition of the Australian Wool Industry. The report of the Committee was presented on the 24th November, 1932. The inquiry covered costs of production, prices, etc., and recommendations were made for the rehabilitation of the industry. For fuller details see Official Year Book No. 29, p. 644.

§ 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 the five years 1934–35 to 1938–39 amounted to £27,296,551, or an average of £5,459,310 per annum.

2. **Sheepskins with Wool.**—The exports of sheepskins with wool aggregating £13,897,617 during the five years constitute the largest item in the values referred to in the preceding paragraph. During the year 1938–39 France was the largest purchaser, taking 74 per cent. of the total consignments, while the United Kingdom ranked next with 15 per cent., followed by Germany, with 7 per cent. The exports of sheepskins with wool during each of the years from 1934–35 to 1938–39 were as follows:—

EXPORTS OF SHEEPSKINS WITH WOOL: AUSTRALIA.

Particulars.	1934–35.	1935–36.	1936–37.	1937–38.	1938–39.
Number ..	10,765,364	11,811,480	12,130,265	12,713,364	12,625,200
Value £	1,772,595	2,805,083	3,636,659	3,381,480	2,301,800

3. **Sheepskins without Wool.**—Sheepskins without wool are exported chiefly to the United States of America. During 1938-39 this country accounted for 40 per cent. of the total shipments while 24 per cent. were exported to France and 16 per cent. to the United Kingdom. Quantities and values for the last five years are given in the table hereunder :—

EXPORTS OF SHEEPSKINS WITHOUT WOOL : AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number	247,050	255,636	1,543,713	916,157	1,075,895
Value £	11,768	19,370	169,250	79,461	68,152

4. **Hides.**—(i) *Exports.* The export trade in cattle hides, which fell away during the depression years, has again become important. The consignments in 1938-39 were distributed as follows :—United Kingdom, £410,100; Japan, £143,882; Germany, £76,502; Finland, £44,722; United States of America, £40,151; Denmark, £33,452; Other Countries, £147,943.

The exports during the last five years are given in the table below :—

EXPORTS OF CATTLE HIDES : AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number	690,578	807,604	1,034,937	1,063,806	1,186,543
Value £	417,071	613,717	940,024	1,092,048	896,752

Calfskins exported during the years 1934-35 to 1938-39 numbered 3,608,366 valued at £827,702 and were shipped mainly to the United States of America, the value of the skins taken by that country averaging 65 per cent. of the total exports during the year 1938-39. The annual export of horse hides is very small, and for the past five years averaged only 8,967 hides valued at £5,269.

(ii) *Imports.* The imports of cattle hides and calfskins are fairly large, the average annual value during the last five years amounting to £306,157. New Zealand is the chief source of supply, and small quantities are obtained also from the Pacific Islands, France and Italy. The quantities and values of cattle hides, including calfskins, imported into Australia during the years 1934-35 to 1938-39 were as follows :—

IMPORTS OF CATTLE HIDES : AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Quantity cwt.	90,703	64,902	47,705	69,955	80,641
Value (a) £	336,872	301,217	248,848	363,573	280,273

(a) Australian currency values.

The number of horse hides imported into Australia is small. The value of imports during 1938-39 amounted to £654 in Australian currency.

5. **Other Skins.**—The exports of skins other than those mentioned in the preceding paragraphs were valued as follows :—

EXPORTS OF OTHER SKINS : AUSTRALIA.

Description.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Rabbit and Hare	876,221	1,744,834	1,649,412	1,052,709	429,140
Opossum ..	134,044	18,938	375,152	78,961	16,040
Kangaroo ..	159,571	229,469	125,033	182,490	169,078
Fox ..	50,232	61,943	80,390	68,684	27,767
Wallaby ..	12,051	12,803	25,789	27,635	9,640
Other ..	4,583	5,966	15,458	31,559	25,912
Total ..	1,236,702	2,073,953	2,271,234	1,442,038	677,577

These skins were shipped principally to the United States of America and the United Kingdom, the values taken by each during 1938-39 being as follows :—

OTHER SKINS : EXPORTS TO UNITED STATES AND UNITED KINGDOM, 1938-39.

Description.	United Kingdom.	United States of America.
	£	£
Rabbit and Hare	15,539	392,435
Opossum	11,386	4,654
Kangaroo	67	169,011
Fox	14,850	11,108
Wallaby	2,662	6,922
Other	2,278	9,576
Total	46,782	593,706

CHAPTER XIV. AGRICULTURAL PRODUCTION.

NOTE.—Except where otherwise stated, the "agricultural" years hereafter mentioned are taken as ending on 30th June.

§ 1. Introductory.

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. 67o.)

§ 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.

At a muster taken in 1808 the following was the return of crops:—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.

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. The largest increase took place in Victoria, which returned an area of 299,000 acres. For the same year South Australia had 264,000 acres in cultivation, Tasmania 229,000 acres, and New South Wales, 223,000 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 and during each of the last five seasons:—

AREA OF CROPS.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	N.T.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1860-1	246,143	387,283	3,353	359,284	24,705	152,860	..	..	1,173,628
1870-1	385,151	692,840	52,210	801,571	54,527	157,410	..	..	2,143,709
1880-1	606,277	1,548,309	113,978	2,087,237	63,902	119,788	..	..	4,560,991
1890-1	852,704	2,031,955	224,993	2,093,515	69,678	157,376	..	..	5,430,221
1900-1	2,446,767	3,114,132	457,397	2,369,680	201,338	224,352	..	..	8,813,666
1910-11	3,386,017	3,952,070	667,113	2,746,334	855,024	286,920	360	..	11,893,838
1920-21	4,465,143	4,489,143	779,497	3,231,083	1,804,987	297,383	296	1,966	15,069,858
1930-31	6,811,247	6,715,660	1,144,216	5,426,075	4,792,017	267,632	1,550	5,419	25,163,816
1934-35	5,687,988	4,677,683	1,296,619	4,629,303	3,838,618	292,000	1,132	5,456	20,428,799
1935-36	5,735,681	4,438,761	1,334,690	4,463,163	3,754,158	242,189	1,070	4,330	19,974,042
1936-37	5,957,520	4,497,312	1,506,423	4,577,707	3,884,349	263,251	1,305	4,728	20,602,595
1937-38	6,470,160	4,662,354	1,618,738	4,736,428	4,201,548	255,260	1,612	5,631	21,951,731
1938-39	7,049,357	5,019,299	1,734,789	4,724,090	4,719,254	243,048	1,116	6,827	23,497,780

The progress of agriculture was practically uninterrupted from 1860 to 1915-16, when, as the result of a special effort to raise wheat during the War of 1914-19, 18,528,234 acres were cultivated in Australia. Four years later the area of crops was down to 13,296,407 acres owing to the accumulation of wheat stocks consequent

upon the difficulty of securing freight space during the war years. After the termination of hostilities the area again began to expand and rose steadily to a new maximum of 25,163,816 acres in 1930-31. Thereafter the slump in wheat prices seriously depressed the agricultural industry and the area of crops receded to less than 20 million acres in 1935-36. Since that year, the area increased by 3½ million acres. Wheat is the most extensively grown crop in Australia and material changes in the total area of crops are largely a reflection of variations in the acreage sown to this cereal.

3. **Artificially-sown Grasses.**—In all the States there are considerable areas of artificially-sown grasses mainly sown on uncultivated land after burning off the scrub, and not included in "area of crops." These areas are, however, liable to revert to their natural state, and the information respecting them is too uncertain for formal record.

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 Minister for Commerce, the Commonwealth Minister in charge of Development and the State Ministers of Agriculture, with power to co-opt the services of other Commonwealth and State Ministers as required. The principle functions of the Council are (i) the promotion of the welfare and development of agricultural industries generally; (ii) the improvement of the quality of agricultural products and the maintenance of high grade standards; (iii) to ensure, as far as possible, balance between production and available markets; and (iv) organized marketing, etc.

In addition a permanent technical committee known as the Standing Committee on Agriculture was formed to act in an advisory capacity to the Council and to undertake the following duties:—(i) to secure co-operation and co-ordination in agricultural research throughout Australia; (ii) to advise the Commonwealth and State Governments, either directly or through the Council, on matters pertaining to the initiation and development of research on agricultural problems; and (iii) to secure co-operation between the Commonwealth and States and between the States themselves, with respect to quarantine measures relating to pests and diseases of plants and animals, and to advise the Commonwealth and State Governments with respect thereto. The personnel of this Committee consists of the permanent heads of the State Departments of Agriculture, members of the Executive Committee of the Council for Scientific and Industrial Research, and the Secretary of the Department of Commerce.

§ 3. Distribution, Production and Value of Crops.

1. **Distribution of Crops.**—The following table gives the areas in the several States of each of the principal crops for the season 1938-39:—

AREA OF PRINCIPAL CROPS, 1938-39.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat ..	4,650,872	2,748,362	442,017	3,080,401	3,412,818	9,849	..	2,061	14,346,380
Oats ..	399,449	657,999	8,650	266,842	426,110	24,831	..	324	1,784,205
Maize ..	122,201	18,485	183,415	..	37	..	..	..	324,146
Barley—									
Malting ..	6,961	150,984	10,304	417,276	56,651	8,042	..	..	650,218
Other ..	7,233	24,907	3,685	39,763	18,277	652	..	2	94,519
Beans and Peas ..	66	5,669	546	16,570	4,185	16,095	20	..	43,151
Eye ..	10,403	1,109	65	3,273	657	228	..	52	17,787
Other Cereals ..	23,533	..	..	219	218	210	..	..	24,180
Hay ..	1,068,925	1,104,558	65,732	519,309	408,276	79,959	..	3,501	3,250,260
Green Forage ..	573,569	108,796	448,643	275,988	352,442	28,681	..	681	1,788,800
Grass and other ..									
Seeds ..	(a)	7,534	11,660	2,342	(a)	2,692	..	..	24,228
Orchards and other Fruit-gardens ..	85,398	71,300	32,641	28,943	22,029	31,580	50	97	272,238

(a) Not available.

3. Area of Principal Crops in Australia.—The area of the principal crops during each of the last five seasons, together with the average for the decennial period 1919-28 is shown hereunder :—

AREA OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Average, 1919-28.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	1,000 acres.	1,000 acres.	1,000 acres.	1,000 acres.	1,000 acres.	1,000 acres.
Barley (a)	248	395	486	394	525	650
Maize	315	295	298	318	320	324
Oats	974	1,562	1,564	1,525	1,408	1,784
Rice	1.6	22	22	23	24	24
Wheat	9,750	12,544	11,957	12,317	13,735	14,346
Green Forage	859	1,234	1,423	1,625	1,640	1,789
Hay	2,998	3,178	3,007	3,101	2,982	3,250
Beans and Peas	46	51	52	48	41	43
Onions	7	7	7	8	8	7
Potatoes (b)	136	131	125	130	114	98
Sugar-beet	1.7	3	3	3	4	4
Vineyards	99	117	119	123	125	127
Hops	1.6	1	1	1	1	1
Sugar-cane	229	322	335	359	358	357
Cotton	31	78	55	62	53	66
Tobacco	2	8	11	12	11	8
Market Gardens (c)	44	53	55	62	66	66
Orchards	275	278	271	278	277	272
All Other Crops	104	150	183	214	260	282
Total	16,122	20,429	19,974	20,603	21,952	23,498

(a) Malting only. (b) Not including Sweet Potatoes. (c) Including Pumpkins and Melons.

4. Total and Average Production of Principal Crops in Australia.—The following table shows the production of the principal crops for the five years ended 1938-39 and for the decennium 1919-1928 :—

TOTAL AND AVERAGE PRODUCTION OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Unit of Quantity.	Average, 1919-28.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
		Barley (a)	1,000 bus.	4,541	6,991	8,413	6,383	10,802	9,704
Maize	" "	8,251	8,101	7,468	7,246	6,817	7,057
Oats	" "	14,221	16,006	18,721	16,662	17,165	15,555
Rice	" "	117	1,888	2,164	2,277	2,269	2,775
Wheat	" "	118,905	133,393	144,218	151,390	187,256	155,369
Hay	" tons	3,606	3,811	3,498	3,448	3,424	3,321
Beans and Peas	" bus.	714	721	616	778	625	495
Onions	" tons	38	42	35	53	56	18
Potatoes (b)	" "	358	286	323	461	345	274
Sugar (Beet)	" "	2.0	5.0	5.1	4.2	5.6	13
Grapes	" "	211	361	364	409	505	402
Wine	" gals.	12,028	16,265	17,728	20,168	20,430	14,958
Raisins and Currants	" cwt.	623	1,335	1,281	1,460	1,960	1,500
Hops	" lb.	2,276	2,065	2,403	2,376	2,277	2,402
Sugar (Cane)	" tons	332	641	647	783	810	
Cotton, Unginned	" lb.	6,907	26,924	20,785	19,199	11,793	13,688
Tobacco	" "	1,925	3,113	5,557	5,198	5,980	4,149
Pumpkins and Melons	" tons	48	54	62	66	82	81

(a) Malting only. (b) Not including Sweet Potatoes.

5. Average Yield per Acre of Principal Crops in Australia.—Details of the average yield per acre for Australia of the principal crops are shown hereunder for the periods indicated:—

AVERAGE YIELD PER ACRE OF PRINCIPAL CROPS : AUSTRALIA.

Crop.	Unit of Quantity.	Average, 1919-28.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Barley (a)	Bushel	18.30	17.69	17.31	16.20	20.56	14.92
Maize .. .. .	..	26.16	27.46	25.09	22.81	21.29	21.77
Oats .. .. .	..	14.60	10.83	11.97	10.93	12.19	8.72
Rice .. .. .	..	74.49	88.84	99.64	97.36	95.59	117.92
Wheat .. .. .	..	12.20	10.63	12.06	12.29	13.63	10.83
Hay	Ton	1.20	1.20	1.16	1.11	1.15	1.02
Beans and Peas	Bushel	15.62	14.02	11.95	16.16	15.27	11.47
Onions	Ton	5.09	5.97	4.95	6.81	6.67	2.74
Potatoes (b)	..	2.63	2.19	2.59	3.55	3.02	2.80
Sugar (Beet)	..	1.21	1.63	1.62	1.20	1.39	3.15
Grapes (c)	..	2.80	3.30	3.29	3.62	4.40	4.02
Wine (c)	Gallon	..	342	364	411	412	300
Raisins and Currants (c)	Cwt.	..	24.52	23.43	26.20	32.60	25.20
Hops (c)	lb.	1,511	2,173	2,388	2,243	2,193	2,225
Sugar (Cane) (c)	Ton	2.20	2.83	2.71	3.06	3.17	3.14
Cotton, Unginned (c)	lb.	395	620	378	309	224	205
Tobacco .. .. .	..	866	392	527	449	563	518
Pumpkins and Melons	Ton	3.33	2.91	3.02	2.34	2.57	2.65

(a) Malting only.

(b) Not including Sweet Potatoes.

(c) Per acre of productive crops.

6. Gross Value of Agricultural Production in Australia.—The following table shows the gross value of recorded agricultural production at the principal markets in each State for the years 1933-34 to 1938-39:—

GROSS VALUE OF AGRICULTURAL PRODUCTION : AUSTRALIA.

Crops.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£1,000	£1,000	£1,000	£1,000	£1,000.	£1,000.
Barley (a)	884	984	1,036	1,326	2,231	1,417
Maize	1,277	1,298	1,619	1,785	1,761	1,503
Oats	1,853	1,940	2,136	2,282	2,537	2,085
Rice	392	383	409	458	459	540
Wheat	27,897	24,738	29,768	40,471	37,000	21,989
Green Forage	2,540	2,435	2,703	2,784	3,043	2,999
Hay	10,265	10,587	10,061	12,104	13,629	12,704
Beans and Peas	234	194	163	258	222	253
Onions	230	311	297	250	255	306
Potatoes (b)	1,905	2,491	2,561	2,165	2,442	3,649
Sugar-beet	91	76	77	65	97	27
Grapes	3,674	3,562	3,754	4,233	4,865	3,924
Hops	142	151	172	171	190	183
Sugar-cane	7,601	7,310	7,493	8,742	9,065	9,178
Tobacco	340	257	484	437	513	360
Cotton, Unginned	283	397	376	330	205	230
Market Gardens (c)	2,029	2,136	2,240	2,330	2,395	2,473
Orchards	7,082	7,343	7,702	8,508	9,204	9,695
Other Crops	2,013	1,994	2,335	2,704	3,116	3,336
Total, Gross Value	70,732	68,587	75,388	91,403	93,229	76,851

(a) Malting only.

(b) Not including Sweet Potatoes.

(c) Including Pumpkins and Melons.

7. Value of Production—Gross and Net.—Uniform methods for arriving at the gross and net values of production in the various States were finally determined at a Conference of Statisticians held in March, 1935. The returns for the year 1933-34 and subsequent years have been valued on the new basis, and a revaluation was made for all years back to 1928-29. 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 XXVIII. "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 machinery; consequently the figure stated is inflated to this extent.

GROSS, FARM AND NET VALUES OF AGRICULTURAL PRODUCTION: AUSTRALIA, 1934-35 TO 1938-39.

(As Estimated by State Statisticians in Accordance with Conference Resolutions.)

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)	Depreciation. (estimated)
				Seed used, and Fodder for Farm Stock.	Value of other Materials used in process of production.		
	£	£	£	£	£	£	£
New South Wales ..	23,665,000	5,206,000	18,459,000	4,217,000	2,438,000	11,804,000	1,105,000
Victoria ..	14,378,841	2,350,670	12,028,171	4,919,144	1,489,262	5,619,765	875,000
Queensland ..	15,564,000	1,406,000	14,158,000	1,237,000	1,306,000	11,615,000	824,000
South Australia ..	10,003,798	1,511,553	8,492,245	1,645,117	1,357,900	5,489,228	609,233
Western Australia ..	8,538,688	1,992,929	6,545,759	992,830	1,487,313	4,065,616	503,013
Tasmania ..	4,580,061	827,880	3,752,181	511,480	155,730	3,084,971	78,960
Total—							
1938-39 ..	76,730,388	13,295,032	63,435,356	13,522,571	8,234,205	41,678,580	3,995,206
1937-38 ..	93,122,757	14,199,609	78,923,148	15,171,122	4,911,468	58,840,558	3,583,000
1936-37 ..	91,296,975	12,271,859	79,025,116	11,652,661	4,258,970	63,113,485	3,546,290
1935-36 ..	75,102,654	11,565,632	63,537,022	10,769,940	4,328,089	48,438,993	3,514,894
1934-35 ..	68,439,685	11,842,411	56,597,274	9,003,817	4,457,259	43,136,198	3,497,623

(a) No deduction has been made for depreciation and maintenance.

In the following table the net value of agricultural production is given by States for each year since 1928-29 as well as the net value per head of population:—

VALUE OF AGRICULTURAL PRODUCTION: AUSTRALIA.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
NET VALUE.(a)							
1928-29 ..	£ 15,631,000	£ 14,088,065	£ 10,394,896	£ 6,419,977	£ 7,229,708	£ 2,315,160	£ 56,078,806
1929-30 ..	11,373,600	8,680,082	11,044,930	5,260,716	6,298,557	1,403,766	44,061,645
1930-31 ..	9,776,000	6,314,177	10,211,044	2,183,945	2,534,495	1,294,660	32,314,261
1931-32 ..	12,969,000	11,489,164	9,682,821	8,340,631	5,550,466	1,681,650	49,713,732
1932-33 ..	15,124,000	11,130,699	8,944,145	6,282,382	4,973,710	1,231,950	47,686,886
1933-34 ..	11,724,000	10,077,018	9,703,968	5,909,760	4,598,144	1,679,380	43,692,270
1934-35 ..	12,787,000	8,735,776	9,018,187	6,375,538	4,268,547	1,951,150	43,136,198
1935-36 ..	13,285,000	11,716,768	9,699,000	7,335,655	4,678,390	1,723,180	48,438,993
1936-37 ..	19,364,000	16,356,341	10,706,000	9,057,406	5,921,108	1,708,630	63,113,485
1937-38 ..	14,829,100	14,962,112	11,264,000	9,159,941	6,142,705	2,482,500	58,840,558
1938-39 ..	11,804,000	5,619,765	11,615,000	5,489,228	4,065,616	3,084,971	41,678,580

NET VALUE PER HEAD OF MEAN POPULATION.(a)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1928-29 ..	6 5 10	7 19 11	11 13 2	11 4 5	17 8 10	10 13 11	8 16 6
1929-30 ..	4 10 4	4 17 7	12 4 5	9 3 9	14 15 10	6 8 0	6 17 0
1930-31 ..	3 16 10	3 10 5	11 2 5	3 16 0	5 17 7	5 16 2	4 19 6
1931-32 ..	5 1 0	6 7 4	10 8 1	14 9 2	12 16 0	7 8 9	7 11 9
1932-33 ..	5 16 9	6 2 8	9 10 1	10 16 10	11 7 8	5 8 1	7 4 5
1933-34 ..	4 9 9	5 10 5	10 4 2	10 2 11	10 8 10	7 6 8	6 11 4
1934-35 ..	4 17 1	4 15 2	9 7 8	10 18 3	9 12 8	8 10 4	6 8 9
1935-36 ..	5 0 0	6 7 1	9 19 6	12 10 4	10 8 11	7 9 8	7 3 6
1936-37 ..	7 4 6	8 16 7	10 17 7	15 7 11	13 2 1	7 7 2	9 5 6
1937-38 ..	5 9 6	8 0 9	11 6 4	15 10 2	13 8 8	10 8 7	8 11 5
1938-39 ..	4 6 4	2 19 11	11 10 9	9 4 8	8 15 9	13 0 5	6 0 4

(a) No deduction has been made for depreciation and maintenance.

§ 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.

Reference to the financial assistance to the wheat industry will be found in § 18, Bounties hereafter.

2. **Progress of Wheat-growing.**—(i) *Area and Production.* (a) *Seasons 1934-35 to 1939-40.* Wheat is the principal crop raised in Australia, and its progress since 1860 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 recognition of superphosphate 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 only serious interruptions in more recent years were those occasioned by the War of 1914-1919 and the economic depression. As previously mentioned, any variation in the acreage sown to this cereal is materially reflected in the total area of crops. The area and yield of wheat for grain in each State are given below for the five years ended 1938-39; the table also includes an estimate for the 1939-40 crop and the average for the decennium ended 1938-39:—

WHEAT: AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35 ..	3,892,768	2,458,583	221,729	3,188,225	2,764,373	16,656	1,844	12,544,178
1935-36 ..	3,851,373	2,323,753	239,631	2,989,490	2,540,696	10,404	1,619	11,956,966
1936-37 ..	3,982,864	2,393,827	283,648	3,058,457	2,575,283	21,317	1,466	12,316,862
1937-38 ..	4,464,664	2,686,057	372,935	3,161,739	3,026,420	21,081	2,055	13,734,931
1938-39 ..	4,650,872	2,748,362	442,017	3,080,401	3,412,818	9,849	2,061	14,346,380
1939-40 (a) ..	4,392,000	2,827,000	361,000	2,737,000	2,949,000	8,000	2,000	13,276,000
Average for ten seasons 1930-39 ..	4,302,255	3,062,668	276,728	3,526,453	3,157,503	17,202	2,082	14,344,891
PRODUCTION.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35 ..	48,678,000	25,850,528	4,076,181	27,455,600	26,985,000	307,525	40,398	133,393,232
1935-36 ..	48,822,000	37,552,062	2,699,316	31,615,744	23,315,417	186,014	36,216	144,217,769
1936-37 ..	55,665,000	42,844,816	2,016,236	28,714,653	21,549,000	570,895	26,352	151,389,952
1937-38 ..	55,104,000	48,173,191	3,749,443	43,428,423	36,224,800	526,007	49,809	187,255,673
1938-39 ..	59,898,000	18,104,369	8,583,736	31,674,418	36,843,600	205,263	59,235	155,368,621
1939-40 (a) ..	76,551,000	45,054,000	6,585,000	40,985,000	40,860,000	75,000	50,000	210,160,000
Average for ten seasons 1930-39 ..	55,934,700	38,416,401	4,117,806	34,700,164	35,812,136	373,965	42,951	169,398,123

(a) Subject to revision.

The acreage of wheat for grain increased steadily until 1915-16, when, largely as the result of a special war effort, 12,484,512 acres were sown. After that year, however, there was a serious decline, brought about by war conditions and unfavourable seasons, and the area in 1919-20 fell to 6,419,160 acres, or only half that of 1915-16.

From 1920-21 onwards there was a rapid extension of the area of wheat until, in response to the urge of Commonwealth and State Governments, the maximum area of 18 million acres was sown in 1930-31. The acreage declined to 14½ million acres in the following year, and after expanding by more than one million acres in 1932-33 declined heavily in the next three years to slightly under 12 million acres. The reduction in acreage was of course brought about by unprofitable prices for the grain during the depression years. With improved prices the area of wheat again rose until more than 14.3 million acres were sown in 1938-39.

A graph showing the distribution of the area sown to wheat for grain in Australia during 1938-39 appears on page 333.

Seasonal conditions under which the wheat crop of 1938-39 was grown were extremely difficult. Moisture conditions were very low throughout the season and as a result a considerably reduced yield was anticipated. However, all States harvested a crop in excess of expectations and the result of the 1938-39 harvest may be regarded as satisfactory except in Victoria where the driest year was experienced since 1914-15. In this State the average yield of 6.59 bushels per acre was the worst recorded during the past quarter of a century. The average for the decennium ending 1938-39 was 12.54 bushels. In New South Wales the average of 12.88 bushels was lower than the ten-yearly average by 0.12 bushels whilst in South Australia the yield was nearly half a bushel in excess of the ten-yearly average. Seasonal conditions in Western Australia were not as favourable as in the previous year but much better than during the previous three years; the average yield was 10.79 bushels per acre or half a bushel below the decennial average. The average yield per acre for Australia in 1938-39 amounted to 10.83 bushels, compared with 13.63 bushels for the previous year and 11.81 bushels, the average for the decennium ending 1938-39. The total production of grain for 1938-39 amounted to 155.4 million bushels compared with 187.3 million bushels for the previous year, and with 213.9 million bushels, the record harvest of 1932-33.

For the last nineteen years the annual production of wheat has exceeded 100 million bushels, and in the opinion of agricultural experts the improved methods of agriculture practised by wheat-growers, such as seed selection, bare fallowing, application of fertilizers, etc., will assure the crop against total failure in the future.

Final figures are not yet available in respect of the 1939-40 wheat harvest, but the area sown according to the latest estimate was 13,276,000 acres, a decrease of more than 1 million acres or 7½ per cent. on that of the previous year, whilst the production was 210.2 million bushels, or 15.83 bushels per acre, compared with 155.4 million bushels or 10.83 bushels per acre for the previous year. More than average crops were harvested in practically all States. It is unusual for the whole of the wheat area of Australia to be favored with conditions so uniformly good. As an indication of the abundance of the harvest, the average yield of 15.83 bushels per acre has been exceeded on only three occasions during the past eighty years, namely, 15.91 bushels in 1860-61, 16.35 bushels in 1866-67, and 16.08 bushels in 1920-21. In Tasmania, however, conditions were very bad and the yield of 9.38 bushels per acre was the smallest ever recorded. The production of wheat in this State is relatively unimportant.

(b) *Area, Production and Prices, 1861-70 to 1921-30.* The following table gives the average area, production and yield per acre for decennial periods since 1861, together with the average wholesale price since 1871. The price quoted represents the average at Melbourne (Williamstown), and may be accepted as fairly representative for Australia.

**WHEAT : AVERAGE AREA, PRODUCTION AND WHOLESALE PRICE,
AUSTRALIA.**

Period.	Area.	Production.	Yield per Acre.	Average Wholesale Price.	
				s.	d.
	Acres.	Bushels.	Bushels.	(a)	
1861-70	831,457	10,621,697	12.77	5 1	
1871-80	1,646,383	17,711,312	10.76	4 7	
1881-90	3,257,709	26,992,020	8.29	3 8	
1891-1900	4,086,701	29,933,993	7.32	3 10	
1901-10	5,711,230	56,058,070	9.82	5 0	
1911-20	8,927,974	95,479,866	10.69	5 8	
1921-30	11,290,543	135,399,860	11.99		

(a) Not available.

(ii) *Average Yield.* In the next table will be found the average yield of wheat per acre for specified periods :—

WHEAT : YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1933-34 ..	12.45	13.96	18.80	9.26	11.72	23.27	21.66	11.90
1934-35 ..	12.50	10.51	18.38	8.61	9.76	18.46	21.91	10.63
1935-36 ..	12.68	16.16	11.23	10.58	9.18	17.88	22.37	12.06
1936-37 ..	13.98	17.90	7.11	9.39	8.37	20.78	17.98	12.29
1937-38 ..	12.34	17.93	10.05	13.74	11.97	24.95	24.24	13.63
1938-39 ..	12.88	6.59	19.42	10.28	10.79	20.81	28.74	10.83
1939-40 (a)	17.43	15.93	18.27	14.97	13.86	9.38	25.00	15.83
Average 10 seasons, 1930-39	13.00	12.54	14.88	9.84	11.34	21.73	20.63	11.81

(a) Subject to revision.

Variation in the average yield is chiefly due to the vagaries of the seasons. The best average yields for single seasons since 1901 were obtained in 1920-21, 16.08 bushels; in 1924-25, 15.20 bushels; and in 1939-40, 15.83 bushels. Annual averages for the past three decennia were 11.17, 12.20 and 11.81 bushels per acre.

(iii) *Relation to Population.* The main wheat-producing States of Australia are New South Wales, Victoria, South Australia and Western Australia. Queensland production closely approaches local demands, but Tasmania imports from the mainland to satisfy its needs, though partly in exchange it ships flour made from local wheat which is particularly suitable for biscuits. Normally the production of wheat greatly exceeds Australian requirements, and from half to three-quarters of the crop is exported overseas. In the pre-war period 1909-1913 Australia ranked sixth on the list of exporting countries but the position has improved in recent years and its exports are now exceeded only by those of Canada and the Argentine Republic. The quantity exported from Australia was approximately 18½ per cent. of the total quantity shipped by exporting countries during the five years ended 1938.

3. *Wheat Farms.*—Particulars of the number of farms growing wheat for grain on 20 acres and upwards during the past five years 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 WHEAT FOR GRAIN ON 20 ACRES AND UPWARDS :
AUSTRALIA.**

State.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	No.	No.	No.	No.	No.
New South Wales ..	15,099	14,923	15,425	16,287	16,550
Victoria ..	12,582	12,051	12,090	12,936	12,305
Queensland ..	1,957	1,847	2,211	2,809	3,190
South Australia ..	13,053	11,974	12,155	12,251	11,842
Western Australia ..	9,161	8,681	8,625	8,841	8,989
Tasmania ..	275	171	379	372	146
Total ..	52,127	49,647	50,885	53,496	53,022

4. *Australian and Foreign Wheat Yields.*—(i) *Average Yield.* The next table gives the average return per acre in the principal wheat-growing countries of the world, ranging from a maximum in the Netherlands of 45 bushels per acre to a minimum in Palestine of nearly 6 bushels per acre :—

WHEAT : YIELD PER ACRE IN VARIOUS COUNTRIES.

Country.	Average Yield in Bushels per acre.		Country.	Average Yield in Bushels per acre.	
	Average, 1936-1938.	1939.		Average, 1936-1938.	1939.
Netherlands ..	44.90	43.50	Chile ..	16.15	(a) 17.40
Denmark ..	44.68	(a) 52.17	China ..	(e) 15.05	(f) 14.93
Belgium ..	40.50	(b) 42.90	Argentine Republic	15.35	8.30
Sweden ..	35.41	38.00	Greece ..	15.21	14.80
Germany ..	35.30	(c) 34.30	Brazil ..	(d) 14.39	(d) 14.39
Switzerland ..	33.92	32.10	U.S.S.R. (Russia)	14.23	(a) 14.85
United Kingdom ..	33.22	33.90	Syria ..	13.97	(a) 16.54
New Zealand ..	32.08	(a) 29.40	U.S.A. ..	13.25	11.30
Eire ..	31.56	31.00	Australia ..	12.24	15.83
Egypt ..	31.47	32.70	Manchukuo ..	11.99	(a) 10.40
Norway ..	30.17	(a) 30.40	Uruguay ..	11.90	(a) 11.39
Finland ..	27.10	26.00	Korea ..	11.83	(a) 12.31
Japan ..	26.92	33.50	Portugal ..	11.52	(a) 14.00
Czechoslovakia ..	26.26	(a) 29.60	Iraq ..	11.36	(a) 12.26
France ..	22.55	23.60	Spain ..	11.28	12.70
Hungary ..	21.76	24.00	India ..	10.95	10.50
Italy ..	21.56	22.90	Mexico ..	9.98	(a) 10.20
Bulgaria ..	21.38	23.40	Canada ..	9.92	17.90
Yugoslavia ..	19.07	19.40	Algeria ..	7.71	10.40
Iran ..	(d) 18.81	(d) 18.81	Colombia ..	(e) 7.48	(f) 6.75
Latvia ..	18.52	(a) 20.26	Tunisia ..	7.47	8.90
Poland ..	17.86	19.10	Union of South Africa ..	7.28	(a) 8.36
Lithuania ..	16.78	18.40	French Morocco ..	6.11	12.20
Rumania ..	16.64	17.20	Palestine ..	5.80	10.00
Estonia ..	16.58	16.20			
Turkey ..	16.31	(a) 16.40			

(a) Year 1938.
(d) Year 1936.

(b) Includes Luxemburg.
(e) Subject to revision.

(c) Includes Austria and Sudeten area.
(f) Year 1937.

(ii) *Total Production.* The latest available official statistics of the production of wheat in various countries are given in the following table :—

WHEAT : TOTAL PRODUCTION IN VARIOUS COUNTRIES.

Country.	Yield in Bushels (,000 omitted).		Country.	Yield in Bushels (,000 omitted).	
	Average, 1936-1938.	1939.		Average, 1936-1938.	1939.
U.S.S.R. (Russia)	1,418,307	a1,494,000	Chile	31,544	(a) 35,174
U.S.A.	810,433	739,400	Sweden	25,810	31,500
China	(b) 706,956	(c) 636,456	Iraq	21,015	(a) 22,046
India	373,756	371,000	Syria and Lebanon	18,961	(a) 23,674
France	284,128	276,000	French Morocco ..	18,767	38,800
Italy	272,641	294,000	Belgium	17,278	(f) 17,000
Argentine Republic	256,281	147,000	Netherlands	15,933	13,300
Canada	253,884	479,000	Union of South Africa	14,481	15,000
Germany	177,248	(d) 205,200	Denmark	13,949	14,000
Australia	163,470	210,160	Uruguay	13,702	(a) 15,461
Rumania	148,011	164,900	Tunisia	13,233	18,600
Turkey	144,970	158,000	Portugal	12,911	18,300
Spain	(e) 121,493	111,800	Mexico	12,539	13,000
Yugoslavia	101,669	105,400	Korea	9,867	12,300
Hungary	85,893	112,100	Lithuania	8,429	9,200
Iran	(e) 79,352	(e) 79,352	Eire	7,408	8,000
Poland	76,313	83,400	Finland	7,055	8,670
Bulgaria	67,722	71,200	New Zealand	6,262	(a) 5,910
United Kingdom ..	61,649	59,700	Latvia	6,208	6,500
Czechoslovakia ..	57,835	49,000	Switzerland	6,118	6,559
Japan	46,950	61,000	Brazil	(e) 5,512	(e) 5,512
Egypt	45,672	49,000	Colombia	(b) 3,734	(c) 3,336
Manchukuo	33,772	39,000	Palestine	3,936	5,000
Algeria	32,642	42,600	Estonia	2,786	3,010
Greece	32,321	35,300			

NOTE.—The harvests reported above for 1939 relate to the year 1939 for the Northern, and 1939-40 for the Southern Hemisphere.

(a) Year 1938. (b) Subject to revision. (c) Year 1937. (d) Includes Austria and Sudeten area. (e) Year 1936. (f) Includes Luxemburg.

A complete statement of the world's production of wheat is not possible owing to the failure of certain countries to supply the necessary information. The International Institute of Agriculture, Rome, has, however, compiled figures obtained from the countries reporting with the following results :—

WHEAT : WORLD'S PRODUCTION.(a)

Year.	Area.	Production.		Yield per acre.
		Bushels.	Bushels.	
Average 1909-1913	270,266,000	3,779,479,000	13.98	
„ 1928-1932	337,761,000	4,652,000,000	13.77	
1934	330,941,030	4,620,520,000	13.96	
1935	339,243,590	4,698,784,000	13.85	
1936	345,346,960	4,653,590,000	13.48	
1937	365,114,960	5,435,863,000	14.89	
1938	379,076,110	6,007,964,000	15.85	
Average 1934-1938	351,944,530	5,083,344,200	14.44	

(a) From countries reporting including the U.S.S.R. (Russia).

Australia's contribution to the world's wheat during the last five years was 3.69 per cent. as to area and 3.02 per cent. in regard to production.

The chief country excluded from the above table is China. Particulars for 1938 are not yet available but in the year 1937 this country produced 636 million bushels of wheat from an area of 42.6 million acres or an average yield of 14.93 bushels per acre. It is stated by the International Institute, however, that these figures for China are largely conjectural and can be accepted only as approximate estimates. In addition they do not include all of the Territories embraced in the Chinese Republic. By the addition of the production of this country the world's total production for the year 1937 would exceed 5,447 million bushels.

The total area harvested in 1938 increased by 14 million acres; Europe, North America, India and the Argentine Republic each contributed to this expansion. In comparison with the average for the period 1928-32, areas sown to wheat throughout the world have increased considerably.

The world's acreage and production of wheat in 1938 was the highest ever recorded. The former exceeded 379 million acres whilst the latter was slightly more than 6,000 bushels.

A succession of bountiful years commencing in 1928 led to very heavy accumulations of stocks, particularly in North America. These stocks reached their maximum in the years 1933 and 1934 but owing to reductions in world production during the three years ending in 1936, they were again reduced to normal dimensions. This led to an upward movement in price which, in turn, caused areas to again expand to the record level of 1938. Production, assisted by favourable seasonal conditions, reached record dimensions, stocks again accumulated and prices were depressed. In 1939 the position was aggravated by another abundant world harvest and prices during that year remained at the low levels reached in the depression years of 1931-34. Heavy accumulation of stocks of the dimensions reached in 1933 and 1934 are reported in surplus-producing countries.

5. **Price of Wheat.**—The collapse in the price of wheat which occurred between 1928 and 1931 was chiefly due to the accumulation of stocks in exporting countries. The weighted average price of wheat (shippers' limits Sydney, Melbourne and Adelaide) fell from 5s. 1½d. in 1928 to 2s. 4½d. in 1931, a decline of 53 per cent. In 1932 the price increased to 3s. 0½d. but dropped to 2s. 9½d. in 1933 and to 2s. 7½d. in 1934. In September, 1935, prices increased to more than 3s. 4d. and continued to rise until in December, 1936, the average price was almost 5s. 3d. From that month until October, 1937, the average exceeded 5s. The price receded to 4s. 6d. in November, and dropped further to 4s. 4d. in December, at which figure it remained until March, 1938, when it declined to 4s. After March, 1938, the price fell in successive stages to 2s. 6d. in November, 1938, and by August, 1939, had receded to 2s. 1d. per bushel. The table hereunder shows prices of Australian wheat during each of the five years ended 1938 and the average for the eight months ended 1939:—

PRICE OF WHEAT: AUSTRALIA.

(WEIGHTED AVERAGE OF SHIPPERS' LIMITS FOR GROWERS' BAGGED AND BULK LOTS, SYDNEY, MELBOURNE AND ADELAIDE.)

Item.	1935.	1936.	1937.	1938.	1939.	1940.
Price per bushel	<i>s. d.</i> 3 1½	<i>s. d.</i> 4 1½	<i>s. d.</i> 5 0½	<i>s. d.</i> 3 4½	<i>s. d.</i> 2 5½	<i>s. d.</i> 3 11½

Following the outbreak of war in September, 1939, the price of wheat rose in the world's markets. In Australia the price rose from 2s. 1d. in August to 2s. 6d. per bushel in September. Following the appointment of the Australian Wheat Board during the latter month, the open market for wheat ceased and prices of wheat both for export and for local consumption are now determined by the Australian Wheat Board. Although it is not possible in the circumstances to quote prices on the pre-war basis of shippers' limits, the approximate average price of wheat exported in 1940 was 3s. 11½d. per bushel.

6. Exports of Wheat and Flour.—(i) *Quantities.* The table appended shows the exports and net exports of wheat and flour from 1934-35 to 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 48 bushels of grain. Wheat and flour have been imported to tide over lean seasons on only two 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. During the last five years exports in terms of wheat ranged between 98,182,472 bushels in 1938-39 and 124,764,585 bushels in 1937-38, the net exports for the period averaging 107,580,295 bushels:—

WHEAT AND FLOUR : EXPORTS FROM AUSTRALIA.

Year.	Exports.			Net Exports.
	Wheat.	Flour.	Total.	
	Bushels.	Eq. Bushels.(a)	Bushels.	Bushels.
1934-35 ..	75,959,690	33,502,608	109,462,298	109,457,913
1935-36 ..	76,993,133	29,619,888	106,613,021	106,610,518
1936-37 ..	71,778,020	27,109,344	98,887,364	98,885,980
1937-38 ..	94,503,757	30,262,608	124,766,365	124,764,592
1938-39 ..	63,129,023	34,803,120	97,932,143	97,930,969

(a) Equivalent in bushels of wheat.

(ii) *Destination.* The following table gives the exports of wheat to various countries for each of the five years ended 1938-39, together with averages for the pre-war period 1909-13:—

WHEAT : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Average, 1909-13.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
United Kingdom ..	30,305,384	41,198,166	46,776,049	44,244,213	61,522,285	32,234,617
India	(a)	168,697	486,535	200	734,572	6,921,638
Else	(a)	2,622,852	4,744,435	5,698,955	1,012,370	2,302,687
Union of South Africa ..	2,992,355	21,027	326,905	2,777	954,908	1,705,737
Other British Countries	(a)	438,727	1,446,725	957,367	4,567,005	3,880,438
Belgium	1,218,131	253,920	2,428,838	612,773	162,378	323,847
China	(a)	13,663,894	5,052,790	1,272,500	143,668	10,620,913
Egypt	135,377	1,605,768	562	30,945	490,548	388,683
France	1,681,918	..	40,613	775,791	3,875,697	..
Germany	286,822	..	..	797,100	..	376,240
Italy	581,309	18,838	1,736,663	10,166,855	3,837,228	111
Japan	339,131	15,530,335	11,043,610	2,507,307	2,844,940	431,570
Other Foreign Countries	4,465,847	437,466	2,909,408	4,712,137	14,418,163	3,942,492
Total	41,997,274	75,959,690	76,993,133	71,778,020	94,503,757	63,129,023

(a) Included with "Other Foreign Countries."

Exports of flour from Australia for the periods mentioned are given in the next table:—

FLOUR : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Average, 1909-13.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
United Kingdom	27,699	99,332	130,998	177,329	187,943	118,957
Ceylon	3,389	18,821	17,090	16,210	14,305	18,147
Hong Kong	2,672	50,616	44,382	40,503	66,291	23,040
Malaya (British)	15,492	61,926	55,592	66,596	65,464	66,965
Union of South Africa	30,714	371	545	268	273	132
Other British Countries	(a)	46,158	60,314	65,758	76,623	86,494
China	(a)	814	951	2,113	31,544	216,878
Egypt	(a)	26,864	23,722	35,003	18,674	17,153
Manchuria (b)	(a)	240,181	112,789	9,422	11,941	..
Netherlands East Indies	26,099	82,147	82,077	74,928	83,079	96,524
Philippine Islands	13,680	27,437	40,491	35,522	27,280	32,722
Other Foreign Countries	47,367	43,304	48,130	41,184	47,054	48,053
Total	167,112	697,971	617,081	564,778	630,471	725,065

(a) Included with "Other Foreign Countries."

(b) Including Kwantung Peninsula.

7. Exports—Principal Countries.—The following table shows the net quantities of wheat exported from the chief exporting countries in recent years and during the period from 1909 to 1913. In the years before the War of 1914-19 the U.S.S.R. (Russia) was the outstanding contributor to the world's supply of wheat followed by the United States of America, but in recent years the net exports from both of these countries have been relatively unimportant. Canada now occupies the foremost position with the Argentine Republic and Australia coming next in order.

Although the local production of wheat is little more than 3 per cent. of the world's total, the exports from Australia represented just under 18½ per cent. of the quantities shipped during 1934 to 1938, and as an exporting country Australia has made the greatest relative advance since 1913.

WHEAT.(a) : NET EXPORTS, PRINCIPAL COUNTRIES.

Country.	Average 1909-13.		1937.	1938.	Average 1934-38.	
	'000 Bushels.	Per cent.	'000 Bushels.	'000 Bushels.	'000 Bushels.	Per cent.
U.S.S.R. (Russia)(b) ..	157,109	23.71	33,803	39,154	22,520	4.04
U.S.A.	100,864	15.22	36,416	105,540	43,648	7.83
Argentine Republic ..	95,041	14.34	147,493	75,413	122,739	22.01
Canada	89,919	13.57	112,462	125,195	175,407	31.45
British India	50,886	7.68	20,043	12,203	8,877	1.59
Australia	49,417	7.46	99,658	124,202	102,695	18.41
All Other Countries ..	119,351	18.02	108,431	99,303	81,839	14.67
Total	662,587	100.00	558,306	581,010	557,725	100.00
World's Production ..	3,779,479		5,435,863	6,007,964	5,083,344	
Percentage of Australian Net Exports on Total Net Exports	7.46		17.85	21.38	18.41	
Percentage of Australian Production on World's Production	2.39		3.46	2.51	3.02	

(a) Including flour expressed in terms of wheat. (b) The average for 1909-13 is not strictly comparable with the later years, owing to changes of frontiers during 1921.

3. *Imports—Principal Countries.*—The quantities of wheat and flour (expressed in terms of wheat) imported into the principal countries for the periods indicated are shown in the following table. The United Kingdom is easily the leading importing country. The quantities imported into certain European countries, particularly Germany, Netherlands, Belgium and Italy are both relatively and actually much smaller now than formerly owing to the encouragement given to the local wheat-growing industries in those countries. During recent years the imports of wheat into China and Japan have grown considerably, and a large share in this trade has been supplied by Australia :—

WHEAT.(a) : IMPORTS, PRINCIPAL COUNTRIES.(b)

Country Importing.	Average, 1909-13.		1937.	1938.	Average, 1934-38.	
	'000 Bushels.	Per cent.	'000 Bushels.	'000 Bushels.	'000 Bushels.	Per cent.
United Kingdom ..	219,365	30.42	202,058	208,854	208,749	33.80
Germany ..	89,732	12.44	47,161	48,253	25,606	4.15
Netherlands ..	76,340	10.59	24,058	27,009	22,584	3.66
Belgium ..	73,963	10.26	44,972	38,196	42,856	6.94
Italy ..	57,156	7.93	61,097	10,698	25,891	4.19
France ..	38,682	5.36	18,931	19,332	23,767	3.85
Brazil ..	20,774	2.88	36,226	7,146	29,812	4.83
Egypt ..	7,915	1.10	115	208	586	0.09
Union of South Africa	6,519	0.90	38	2,643	753	0.12
China (c) ..	5,526	0.77	6,914	24,242	27,471	4.45
Japan ..	3,714	0.52	7,555	2,617	11,551	1.87
All Other ..	121,409	16.83	187,599	202,295	198,051	32.05
Total ..	721,095	100.00	636,724	591,493	617,677	100.00

(a) Including flour expressed in terms of wheat. (b) In some instances the average 1909-13 is not strictly comparable with the other years shown, owing to changes of frontiers. (c) Including Manchurian ports.

9. *Consumption of Wheat in Australia.*—The estimated consumption of wheat for food and the quantity used for seed in Australia during the last five years are shown hereunder :—

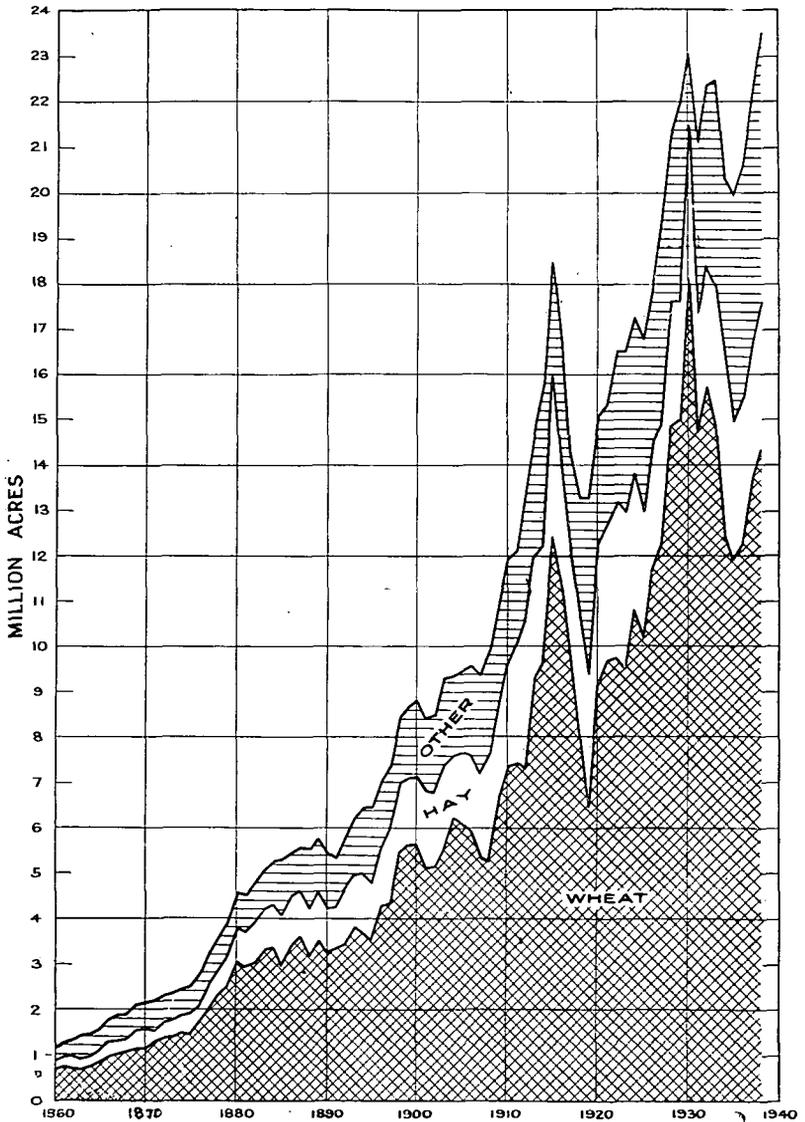
AVERAGE HUMAN CONSUMPTION, 1934-35 TO 1938-39.

Flour milled	1,303,769 tons
Less net exports of flour	647,887 tons
Less net exports of flour in biscuits	1,002 "
	648,889 ,
Change in flour stocks	+2,620 "
Net quantity consumed	657,500 "
Equivalent in terms of wheat	31,560,000 bushels
Net quantity consumed per head of population—	
As flour	193 lb.
As wheat	4.6 bushels

AVERAGE USED FOR SEED, 1934-35 TO 1938-39.

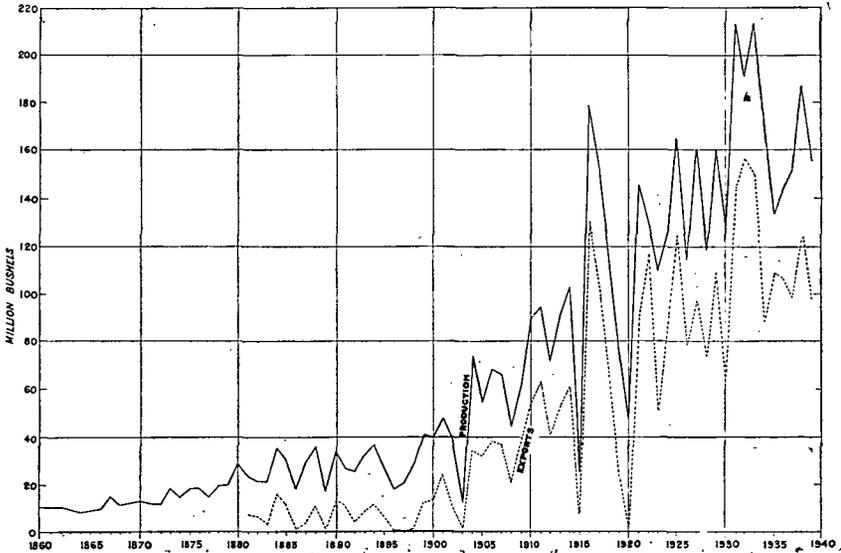
Average area sown for grain, hay and green forage ..	14,112,611 acres
Average quantity of seed used	13,903,118 bushels
Average quantity of seed used per acre	59 lb.
Average quantity per head of population	2.04 bushels

AREA OF CROPS—AUSTRALIA, 1860-61 TO 1938-39.



EXPLANATION.—The total area of crops is shown by the top curve in this graph, and the area of wheat by the bottom curve. The vertical distances between these curves and that in the centre indicate the areas of hay and other crops.

PRODUCTION AND EXPORTS OF WHEAT—AUSTRALIA, TO 1938-39.



NOTE.—The export figures for the years 1915-16 to 1920-21 do not represent the surplus available for export in each of these years because of the dislocation of shipping due to the War of 1914-1919. For these years the quantity consumed in Australia has been averaged and the balance taken as exports.

In addition to the above, allowance must be made for wheat fed to poultry and other live stock. The quantity so used, which varies according to the movement in prices, is estimated at 5,106,000 bushels or $\frac{3}{4}$ bushel per head of population for the five years ended 1938-39. Almost the whole of this quantity is used in the form of grain as feed for poultry, principally fowls, which numbered a little more than 15 million during the year 1938-39. The average quantity of flour consumed per annum for the five years under consideration was 193 lb. per head of population, which, expressed in terms of wheat, represents 4.6 bushels. The estimates of grain used for seed in Victoria, South Australia and Western Australia are based on data collected from growers. In the other States estimates supplied by the Agricultural Departments have been used. The average annual quantity used for the purposes indicated during the last five years was 2.04 bushels per head of population, or 59 lb. per acre sown. The consumption of wheat in Australia for all purposes during the period dealt with averaged 50,569,000 bushels, or 7.4 bushels per head of population.

10. **Value of the Wheat Crop.**—The estimated value of the wheat crop in each State and in Australia during the season 1938-39, including amounts paid as assistance to the wheat industry, is shown below. The amount of assistance quoted is that returned by the State Statisticians and includes, where applicable, State aid as well as that made available by the Commonwealth.

WHEAT: VALUE OF CROP(a), 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Aggregate value(b)	8,566,860	2,891,200	1,053,100	4,290,004	5,133,054	44,811	9,595	21,988,624
Value per acre (b)	£1/16/10	£1/1/0	£2/7/8	£1/7/10	£1/10/1	£4/9/1	£4/9/3	£1/10/8
Amount of Assistance—								
Total	1,329,180	515,002	149,336	650,824	641,051	3,761	1,033	3,290,187
Per acre	5/9	3/9	6/9	4/3	3/9	7/8	10/0	4/7
Per bushel	5½d.	6½d.	4½d.	5d.	4½d.	4½d.	4½d.	5d.

(a) Gross value of total crop, including seed used on farm, valued at metropolitan prices but exclusive of value of straw. (b) Including assistance.

11. **Varieties of Wheat Sown.**—Particulars of the variations of wheat sown and the areas thereunder are collected from time to time. The following table shows particulars of the nine principal varieties sown in the four main producing States and the percentage each bears to the total area sown for the year 1938.

WHEAT: PRINCIPAL VARIETIES SOWN IN STATES, 1938.

New South Wales.		Victoria.		South Australia.		Western Australia.	
Variety.	Per-cent-age.	Variety.	Per-cent-age.	Variety.	Per-cent-age.	Variety.	Per-cent-age.
	%		%		%		%
Ford ..	19.4	Ghurka ..	47.8	Ranee ..	23.1	Bencubbin ..	36.7
Dundee ..	15.9	Ranee ..	20.4	Nabawa ..	9.9	Gludub ..	13.7
Nabawa ..	14.6	Dundee ..	10.6	Bencubbin ..	8.8	Merredin ..	8.6
Bencubbin ..	14.6	Free Gallipoli ..	8.1	Sword ..	8.8	Gluyas Early ..	5.8
Waratah ..	5.6	Bencubbin ..	2.9	Dundee ..	8.3	Totagin ..	5.7
Baringa ..	5.2	Sepoy ..	2.0	Waratah ..	5.3	Noongaar ..	5.5
Ranee ..	4.0	Bobin ..	1.2	Gluyas ..	5.1	Nabawa ..	4.8
Bobin ..	2.8	Rajah ..	1.1	Ford ..	3.9	Waratah ..	2.3
Pusa No. 4 ..	2.6	Nabawa ..	0.6	Ghurka ..	3.9	Ford ..	1.8
All Others ..	15.3	All Others ..	5.0	All Others ..	22.0	All Others ..	15.1
Total ..	100.0	Total ..	100.0	Total ..	100.0	Total ..	100.0

It is interesting to note the changes that have taken place in the leading varieties during recent years. In New South Wales, Nabawa, a variety relatively unimportant in 1929, became prominent in 1933. It occupied the leading position until 1936 when it was displaced by Ford. The leading variety sown in Victoria between 1929 and 1934 was Free Gallipoli, but since 1935 it has been supplanted by Ghurka, Raneë and Dundee. In South Australia, Nabawa came into prominence in 1933, but in 1936, though still relatively important, it ceded the leading position to Raneë. Nabawa was the principal variety in Western Australia until it was displaced by Bencubbin in 1934. While this latter variety had occupied only 7 per cent. of the total area in 1933, in the year following no less than 22.5 per cent. was sown to Bencubbin and in 1938 it retained its leading position with nearly 37 per cent. More than 1,000 different varieties of Australian wheat have been catalogued by the Council for Scientific and Industrial Research.

12. *Stocks of Wheat and Flour.*—Stocks of wheat and flour held by each State at 30th November, 1939, and the total held in Australia on the same date for the previous four years will be found in the following table. The figures have been compiled from information collected from millers, merchants, the Railway Departments and other sources, but are exclusive in certain instances of stocks held by farmers :—

WHEAT AND FLOUR : STOCKS AT 30th NOVEMBER, 1939.

State.	Wheat.		Flour.	Total in terms of wheat.(a)
	Bushels.	Tons.	Bushels.	Bushels.
New South Wales	5,059,320	34,875	6,733,320	6,733,320
Victoria	3,435,783	27,350	4,748,584	4,748,584
Queensland	304,199	5,292	558,215	558,215
South Australia	4,945,444	21,479	5,976,436	5,976,436
Western Australia	2,114,766	8,592	2,527,182	2,527,182
Tasmania	162,251	1,695	243,611	243,611
Total, 30th November, 1939	16,021,763	99,283	20,787,348	20,787,348
" " 1938	9,639,443	89,502	13,935,539	13,935,539
" " 1937	5,233,866	76,450	8,903,466	8,903,466
" " 1936	3,505,469	101,063	8,356,493	8,356,493
" " 1935	12,371,270	89,637	16,673,867	16,673,867

(a) One ton of flour treated as equivalent to 48 bushels of wheat.

13. *Voluntary Wheat Pools.*—Details of wheat pools operating in Australia are given in previous issues of the Official Year Book. These pools ceased to function when the Australian Wheat Board was created in September, 1939.

14. *War-time Marketing of Wheat.*—(i) *General.* At the outbreak of war in September, 1939, the wheat industry of Australia was experiencing a period of low prices. Wheat had fallen to 2s. 1d. per bushel in August, 1939, compared with 3s. 1d. in August, 1938, 5s. 1d. in August, 1937, and 2s. 2d. per bushel in the same month of 1931, which was the lowest monthly quotation during the economic depression of that period.

Apart from low prices, other difficulties created by war conditions were those of marketing and transport. There was also a large accumulation of surplus stocks in the chief exporting countries of the world and the natural disability of Australia's remoteness from the main centres of consumption was another factor adding to a most difficult position.

In view of these circumstances, the Commonwealth Government, under the Wheat Acquisition Regulations, constituted the Australian Wheat Board on the 21st September, 1939, to acquire, with certain exceptions, all wheat held in Australia. The harvest of 1939-40 was also acquired by notification published on 16th November, 1939.

(ii) *Australian Wheat Board.* Under the Wheat Acquisition Regulations, the Board was empowered, subject to directions of the Minister for Commerce, 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 necessary to give effect to the regulations under which it was created.

(iii) *Wheat Acquired and Disposed of. No. 1 Pool.* The total quantity of wheat of the 1938-39 season acquired amounted to 17,839,505 bushels, which was sold at an average price of 2s. 9.22d. per bushel, f.o.b. main shipping ports basis.

No. 2 Pool. The quantity of wheat acquired from the 1939-40 harvest and dealt with under No. 2 Pool amounted to 195,716,000 bushels. Of this quantity 101,663,000 bushels had been sold overseas prior to 31st August, 1940, 67,769,000 bushels of which had been shipped. Local sales amounted to 25,922,000 bushels. The stocks of unsold wheat remaining in this pool amounted to 68,131,000 bushels on 31st August, 1940.

Particulars of the quantities of wheat acquired and disposed of are given by States in the following table:—

AUSTRALIAN WHEAT BOARD.—STATEMENT OF QUANTITIES OF WHEAT ACQUIRED AND DISPOSED OF AS AT 31st AUGUST, 1940.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
NO. 1 POOL (BALANCE OF 1938-39 HARVEST).							
Wheat acquired ..	6,715,030	2,804,509	..	5,883,516	2,925,450	..	17,839,505
Wheat sold—							
Overseas (a) ..	2,210,529	..	..	4,898,916	2,379,752	..	9,489,197
Locally (b) ..	4,015,501	2,804,509	..	984,600	545,698	..	8,350,308
Total Sales ..	6,226,030	2,804,509	..	5,883,516	2,925,450	..	17,839,505
NO. 2 POOL (1939-40 HARVEST).							
Wheat acquired ..	66,697,000	47,203,000	6,255,000	38,140,000	37,380,000	41,000	195,716,000
Wheat delivered against Sales—							
Overseas (a) ..	26,170,000	16,637,000	562,000	11,072,000	13,328,000	..	67,769,000
Locally (b) ..	12,143,000	7,447,000	3,318,000	1,402,000	1,364,000	248,000	25,922,000
Total Delivered	38,313,000	24,084,000	3,880,000	12,474,000	14,692,000	248,000	93,691,000
Stocks on hand	28,384,000	23,119,000	2,375,000	25,666,000	22,688,000	-207,000	102,025,000

(a) Including wheat delivered for gristing and export as flour.

(b) Including wheat sold for gristing for local consumption.

Contracts made by the Board for the sale of wheat and flour include 63 million bushels to the United Kingdom Government and 12 million bushels to Japan, but the shipment of these quantities has not been completed.

(iv) *Finance.* Under the terms of the Wheat Acquisition Regulations the Minister is empowered to arrange with the Commonwealth Bank for the making of advances to the Board, such advances to be guaranteed by the Commonwealth Government.

The financial operations of the Board under No. 2 Pool disclose that, at the 31st August, 1940, the total payments amounted to £31,529,000, of which £28,793,000 represented the amounts paid to growers and £2,736,000 the cost of expenses. The

amount received from sales totalled £14,407,000, while the proceeds under the Flour Tax were £726,000, making total receipts £15,133,000. The overdraft with the Commonwealth Bank at that date was, therefore, £16,396,000.

Details of the amounts advanced to growers to 31st August, 1940, are given below :—

**AUSTRALIAN WHEAT BOARD.—ADVANCES MADE TO GROWERS AS AT
31st AUGUST, 1940.**

Particulars.	No. 1 Pool.		No. 2 Pool.	
	Amount disbursed (f.o.b. Basis).		Amount disbursed (Trucks, Terminal Ports Basis).	
	Per Bushel.	Total.	Per Bushel.	Total.
	s. d.	£,000.	s. d.	£,000.
Advances made to Growers—				
1st Payment (a) Bulk ..	2 0	1,784	2 8½	25,579
Bagged ..	2 0		2 10½	
2nd Payment Bulk ..	0 6	501	0 4	3,214
Bagged ..	0 8		0 4	
3rd Payment Bulk ..	(b) 0 1¾	130	..	..
Bagged ..	(b) 0 1¾		..	..
Final Payment Bulk ..	..	..	..	..
Bagged ..	..	..	..	..

(a) From which rail freight was deducted.
1940.

(b) Approved for distribution on 11th September,
1940.

15. **Special Tabulation of Wheat Holdings.**—(i) *General.* With the co-operation of the State Statisticians an extensive analysis was made of the returns collected at the annual agricultural census of 1935-36 in respect of all holdings growing wheat for grain in the principal producing States. The results are published in the following tables.

(ii) *Wheat Holdings: Number, Area and Production.* The areas of the holdings growing wheat for grain are shown in the following table together with the production of wheat thereon :—

WHEAT HOLDINGS : NUMBER, AREA AND PRODUCTION, 1935-36.

State.	Holdings.			Wheat.			
	Growing Wheat for Grain.	Total Area.	Average Area.	Area Sown.	Average Area Sown.	Production.	Average Pro- duction per Holding.
	No.	Acres.	Acres.	Acres.	Acres.	Bushels.	Bushels.
New South Wales ..	15,923	24,379,178	1,531	3,851,373	242	48,822,000	3,066
Victoria ..	13,780	12,482,336	906	2,323,753	169	37,552,062	2,725
South Australia ..	12,787	17,896,496	1,400	2,989,490	234	31,615,744	2,472
Western Australia ..	9,039	19,339,951	2,140	2,540,696	281	23,315,417	2,579
Total (Four States)	51,529	74,097,961	1,438	11,705,312	227	141,305,223	2,742

(iii) *Wheat Holdings and Sheep.* One of the objects of the analysis was to ascertain the extent to which certain other forms of farm production were combined with the growing of wheat. It will be seen from the table below that 75 per cent. of the wheat holdings carried sheep, the numbers depastured forming a considerable proportion of the sheep populations of the individual States.

WHEAT HOLDINGS AND SHEEP, 1935-36.

State.	Holdings.				Number of Sheep.	Total Number of Sheep in State. (a)	Percentage on Wheat Farms.
	Without Sheep.		With Sheep.				
	No.	%	No.	%			
New South Wales ..	2,296	14.42	13,627	85.58	13,393,541	51,936,000	25.78
Victoria ..	3,806	27.62	9,974	72.38	4,841,152	17,457,291	27.73
South Australia ..	4,115	32.18	8,672	67.82	3,750,864	7,945,745	47.21
Western Australia ..	2,295	25.39	6,744	74.61	4,482,667	11,082,972	40.45
Total (Four States)	12,512	24.28	39,017	75.72	26,468,224	88,422,008	29.93

(a) Including Sheep outside Wheat Areas.

(iv) *Wheat Holdings and Dairy Cows.* In addition to sheep, the great majority of holdings also carried dairy cows. As indicated in the footnote to the table below the particulars available for New South Wales refer only to those holdings which are registered as dairies and therefore an effective comparison cannot be made for the four States.

WHEAT HOLDINGS AND DAIRY COWS, 1935-36.

State.	Holdings.				Number of Dairy Cows.	Total Number of Dairy Cows in State. (a)	Percentage on Wheat Farms.
	Without Dairy Cows.		With Dairy Cows.				
	No.	%	No.	%			
New South Wales ..	(b)	..	(b)	..	(b)	(1,091,562)	(b)
Victoria ..	1,993	14.46	11,787	85.54	109,049	987,676	11.00
South Australia ..	1,080	15.48	10,807	84.52	79,159	173,706	45.57
Western Australia ..	1,791	19.01	7,248	80.19	32,243	130,132	24.78
Total (Three States)	5,764	16.19	29,842	83.81	220,451	1,291,514	17.07

(a) Including dairy cows outside wheat areas. (b) The particulars available for New South Wales refer to registered dairies only. These details show that of the 15,923 holdings growing wheat for grain, 1,775 were also registered as dairies and the number of dairy cows carried was 51,344.

(v) *Wheat Holdings and Pigs.* The extent to which pig-raising is conducted in conjunction with the growing of wheat for grain is indicated in the next table:—

WHEAT HOLDINGS AND PIGS, 1935-36.

State.	Holdings.				Number of Pigs.	Total Number of Pigs in State. (a)	Percentage on Wheat Farms.
	Without Pigs.		With Pigs.				
	No.	%	No.	%			
New South Wales ..	10,462	65.70	5,461	34.30	59,673	436,944	13.66
Victoria ..	8,298	60.22	5,482	39.78	41,100	314,301	13.08
South Australia ..	5,425	42.43	7,362	57.57	58,628	93,458	62.73
Western Australia ..	5,318	58.83	3,721	41.17	62,079	98,026	63.33
Total (Four States)	29,503	57.26	22,026	42.74	221,480	942,729	23.49

(a) Including Pigs outside Wheat Areas.

(vi) *Wheat Holdings: Area Sown and Yield per Acre.* The holdings growing wheat for grain were classified for each of the principal producing States according to areas sown and yields per acre. It is possible to show only the totals for the four States combined in this publication. Details for the States are published in *Production Bulletin* No. 30 issued by this Bureau. The classification according to areas sown is as follows:—

WHEAT HOLDINGS CLASSIFIED ACCORDING TO AREAS SOWN, 1935-36.
(PRINCIPAL PRODUCING STATES.)

Area of Wheat for Grain. Acres.	Holdings.		Area of Grain.		Production.	
	No.	%	'000 Acres.	%	'000 Bushels.	%
1-19	3,843	7.5	36	0.3	517	0.4
20-49	4,167	8.1	132	1.1	1,908	1.4
50-99	5,521	10.7	390	3.3	5,894	4.2
1-99	13,531	26.3	558	4.7	8,319	6.0
100-199	11,979	23.2	1,712	14.6	25,320	17.9
200-299	11,064	21.5	2,623	22.4	33,967	24.0
300-399	7,160	13.9	2,373	20.3	26,808	19.0
400-499	3,691	7.2	1,594	13.6	16,668	11.8
100-499	33,894	65.8	8,302	70.9	102,763	72.7
500-599	1,805	3.5	955	8.2	10,124	7.2
600-699	946	1.8	594	5.1	6,105	4.3
700-799	489	0.9	357	3.1	3,864	2.7
800-899	284	0.6	236	2.0	2,582	1.8
900-999	188	0.4	175	1.5	1,865	1.3
1,000-1,999	368	0.7	453	3.9	4,716	3.3
2,000 and over	24	..	75	0.6	967	0.7
500 and over	4,104	7.9	2,845	24.4	30,223	21.3
Total	51,529	100.0	11,705	100.0	141,305	100.0

Wheat is grown in the principal producing States on an extensive scale; more than 76 per cent. of the production in 1935-36 was sown on areas of 200 acres or more. Although 13,531 holdings grew wheat on small areas of under 100 acres the yield therefrom was only 6 per cent. of the total. At the other end of the scale less than 10 per cent. was reaped from the very large areas of 700 acres or over. The average area sown was 227 acres.

In the next table the classification according to average yields is shown:—

WHEAT HOLDINGS CLASSIFIED ACCORDING TO AVERAGE YIELDS, 1935-36.
(PRINCIPAL PRODUCING STATES.)

Average Yield per Acre. Bushels.	Holdings.		Area of Grain.		Production.	
	No.	%	'000 Acres.	%	'000 Bushels.	%
Under 3	5,404	10.5	1,445	12.3	1,998	1.4
3 and under 6	5,817	11.3	1,585	13.5	7,132	5.1
6 " " 9	6,672	12.9	1,751	15.0	13,085	9.3
9 " " 12	6,830	13.3	1,659	14.2	17,283	12.2
12 " " 15	6,180	12.0	1,405	12.0	18,828	13.3
15 " " 18	5,885	11.4	1,170	10.0	19,195	13.6
18 " " 21	4,929	9.6	906	7.7	17,629	12.5
21 " " 24	3,628	7.0	684	5.8	15,305	10.9
24 " " 27	2,994	5.8	544	4.7	13,852	9.8
27 " " 30	1,551	3.0	298	2.6	8,471	6.0
30 " " 33	1,109	2.2	182	1.6	5,700	4.0
33 " " 36	290	0.6	46	0.4	1,593	1.1
36 " " 39	172	0.3	23	0.2	867	0.6
39 " " 42	36	0.1	4	..	144	0.1
42 " " 45	13	..	2	..	79	0.1
45 " " 48	15	..	1	..	59	..
48 " " 54	4	..	..	..	25	..
Total	51,529	100.0	11,705	100.0	141,305	100.0

The most significant feature of the above tabulation is the very low returns obtained from considerable areas sown; more than 3 million acres, or one-quarter of the total sowings, yielded less than 6 bushels to the acre and practically one-half of this acreage returned yields of under 3 bushels. On the other hand the productivity of vast tracts of wheat country is indicated by the yields of 15 bushels or more over an area of 3.9 million acres, whilst nearly 1 million acres returned 25 bushels or over to the acre.

§ 5. Oats.

1. Progress of Cultivation.—(i) *Area and Production.* Oats are usually next in importance to wheat amongst the grain crops cultivated in Australia, but while wheat grown for grain accounted for 61.05 per cent., oats represented only 7.59 per cent. of the area of crops in 1938-39. The acreage and production of oats for the last five years are shown in the table hereunder.

OATS: AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35	237,405	506,638	4,566	367,192	408,810	36,611	331	1,561,553
1935-36	279,622	505,623	6,823	299,771	448,156	23,928	248	1,564,171
1936-37	235,817	381,069	7,932	414,723	463,129	21,953	238	1,524,861
1937-38	255,144	394,436	7,709	332,434	386,112	32,439	148	1,408,422
1938-39	399,449	657,999	8,650	266,842	426,110	24,831	324	1,784,205
Average 10 seasons, 1930-39	228,455	478,147	5,312	282,309	368,871	29,501	191	1,392,786
PRODUCTION.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35	3,856,680	5,248,787	82,198	2,412,117	4,244,322	1,054,256	7,662	16,906,022
1935-36	4,735,740	6,365,056	119,459	2,380,908	4,557,774	556,776	5,061	18,720,774
1936-37	3,967,560	6,107,885	22,417	2,363,806	3,445,167	751,244	4,200	16,662,279
1937-38	3,395,130	5,327,199	79,323	2,960,944	4,364,370	1,032,173	5,922	17,165,061
1938-39	4,831,110	2,909,260	93,128	2,401,128	4,668,036	644,960	7,113	15,554,735
Average 10 seasons, 1930-39	3,577,551	5,750,344	67,808	2,232,883	3,973,338	830,554	4,267	16,436,745

The oat crop showed considerable variation during the past decennium, ranging from 14,424,186 bushels in 1929-30 to 18,720,774 bushels in 1935-36, with an average for the period of 16,436,745 bushels. For Australia as a whole the record yield of oats was obtained during 1924-25, when 19,393,737 bushels were harvested. The demand for the grain for oatmeal varies from 1½ million bushels to 2 million bushels annually. The cereal is mainly used as feed grain, and its value, particularly in good seasons, does not warrant an extension of area.

The principal oat-growing State is Victoria, which produces on the average more than one-third of the total quantity grown in Australia. Considerable quantities are produced in the other States. In Queensland, however, the area sown to this cereal is negligible.

(ii) *Average Yield.* The average yield per acre of oats varies considerably in the different States, being highest in Tasmania and lowest in South Australia. Averages for each of the last five seasons, and for the decennium 1930 to 1939 are given in the table below:—

OATS: AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35	16.25	10.36	18.00	6.57	10.38	28.80	23.14	10.83
1935-36	16.94	12.59	17.50	7.94	10.17	23.27	20.41	11.97
1936-37	16.82	16.03	2.83	5.70	7.44	34.22	17.65	10.93
1937-38	13.31	13.51	10.29	8.90	11.30	31.82	40.01	12.19
1938-39	12.09	4.42	10.77	8.99	10.95	25.97	21.95	8.72
Average for 10 seasons 1930-39	15.66	12.03	12.77	7.91	10.77	28.15	22.35	11.80

The smallest average yield per acre ever recorded for Australia was that experienced in the abnormally dry season 1914-15, namely, 5.60 bushels, while the largest in the last ten years was that of the season 1932-33, amounting to 15.73 bushels per acre.

2. *World's Production.*—The world's production of oats for the year 1938, as computed by the International Institute of Agriculture, amounted to 3,704 million bushels. This quantity was harvested from 136 million acres, and represents an average yield of 27.24 bushels per acre. In comparison with this average return per acre, that of Australia for the same period (8.72 bushels) appears very small. Yields in excess of 40 bushels per acre are not uncommon, and some European countries record averages in excess of 50 bushels per acre. The following table shows the world's production and average yield for the last six years, together with the average for the quinquennium 1928-32:—

OATS: WORLD'S PRODUCTION.

Year.	Area.	Production.	Average Yield per Acre.
	Million Acres.	Million Bushels.	Bushels.
Average 1928-32	146	3,670	25.13
1933	139	3,365	24.09
1934	136	3,222	23.69
1935	146	3,732	25.56
1936	137	3,290	24.01
1937	138	3,605	26.12
1938	136	3,704	27.24

3. *Prices of Oats.*—The average wholesale prices in the Metropolitan markets for the year 1938-39 are given in the following table:—

OATS: AVERAGE WHOLESALE PRICES, 1938-39.

Particulars.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Average price per bushel ..	3 3½	3 5½	4 4½	2 3½	2 1	3 10½

4. Imports and Exports.—The production of oats in Australia is sufficient to admit of a small regular export trade. The quantities and values of oats imported into and exported from Australia during the years 1934-35 to 1938-39 are given hereunder :—

OATS : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£	Bushels.	£	Bushels.	£
1934-35 ..	7,302	1,728	576,062	61,581	568,760	59,853
1935-36 ..	3,790	1,065	244,698	28,783	240,908	27,718
1936-37 ..	11,828	1,676	258,703	35,923	246,875	34,247
1937-38 ..	5,268	1,777	234,990	37,136	229,722	35,559
1938-39 ..	10,428	2,762	117,347	18,866	106,919	16,104

(a) Australian currency values.

The quantity of oats imported into Australia is usually not very large, although in 1927-28 the net imports amounted to 460,581 bushels. New Zealand is the chief supplier. The principal countries to which oats were exported during the years quoted were the United Kingdom, New Zealand, Malaya (British), Ceylon, India and Mauritius.

5. Oatmeal, etc.—The production of oatmeal in Australia during 1938-39 amounted to 304,501 cwt., practically the whole of which is consumed locally, the quantity of oats used for oatmeal being 1,912,080 bushels, or about 12 per cent. of the total production. Oversea trade in this and similar products is small; the imports of oatmeal, wheatmeal and rolled oats during 1938-39 amounted to 1,747 cwt., and exports to 21,386 cwt.

6. Value of Oat Crop.—The estimated value of the oat crop for the season 1938-39 was as follows :—

OATS : VALUE OF CROP,(a) 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Aggregate value..	644,150	509,121	20,178	346,538	432,766	131,680	9,18	2,085,381
Value per acre ..	£1/12/3	£0/15/6	£2/6/7	£1/7/10	£1/0/4	£5/6/1	£2/18/6	£1/10/8

(a) Exclusive of the value of straw.

§ 6. Maize.

1. States Growing Maize.—Maize is grown for grain chiefly in New South Wales and Queensland, the area so cropped in these States during the 1938-39 season being 305,616 acres, or 94 per cent. of the total for Australia. Of the balance, Victoria contributed 18,485 acres, South Australia 37 acres, and Western Australia 8 acres. The climate of Tasmania is unsuitable for the growing of maize for grain. In the States mentioned the crop is grown to a greater or lesser extent for green forage, particularly in connexion with the dairying industry.

2. Progress of Cultivation.—(i) Area and Production. Notwithstanding its extensive cultivation in other countries the area of maize in Australia has fluctuated around 294,000 acres during the past decennium. Compared with the previous year, the area in 1938-39 increased by 3,939 acres, but the acreage sown was considerably less than the comparatively large areas of 414,914 and 400,544 acres sown respectively in 1910-11 and 1927-28.

The area and production of maize for grain in each State for the last five years and the average for the decennium 1930-1939 are given in the following table.

MAIZE : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	N.T.	A.C.T.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35 ..	115,570	18,727	160,607	30	34	..	13	294,981
1935-36 ..	119,849	20,377	157,370	3	..	..	17	297,616
1936-37 ..	116,286	20,115	181,266	..	38	..	5	317,710
1937-38 ..	125,049	20,879	174,243	22	1	..	13	320,207
1938-39 ..	122,201	18,485	183,415	37	8	..	..	324,146
Average 10 seasons 1930-39 ..	114,881	18,413	161,380	12	15	..	7	294,708
PRODUCTION.								
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35 ..	3,238,590	719,360	4,142,079	450	216	..	132	8,100,827
1935-36 ..	3,324,780	638,643	3,504,045	108	..	..	129	7,467,705
1936-37 ..	3,302,520	794,506	3,148,814	..	486	..	57	7,246,383
1937-38 ..	3,403,140	783,835	2,628,458	1,050	3	..	126	6,816,612
1938-39 ..	2,905,020	416,578	3,733,424	1,530	90	..	..	7,056,642
Average 10 seasons 1930-39 ..	3,071,517	631,262	3,524,929	364	153	..	64	7,228,289

The greatest production of maize in Australia was recorded in 1910-11, when it amounted to over 13,000,000 bushels. A bountiful harvest in Queensland increased the Australian total to 12,400,000 bushels in 1924. The production in 1938-39 amounted to 7,056,642 bushels, and the average for the decennium ended 1938-39 was 7,228,289 bushels.

(ii) *Average Yield.* The following table gives particulars of the average yields per acre of the maize crops of the States for the seasons 1934-35 to 1938-39 and for the decennium 1930-1939 :—

MAIZE : AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	N. Terr.	A.C.T.	Aust.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35 ..	28.02	38.41	25.79	15.00	6.35	..	10.15	27.46
1935-36 ..	27.74	31.34	22.27	36.00	..	..	7.59	25.09
1936-37 ..	28.40	39.50	17.37	..	12.79	..	11.40	22.81
1937-38 ..	27.21	37.54	15.08	47.73	3.00	..	9.69	21.29
1938-39 ..	23.77	22.54	20.36	41.35	11.25	..	..	21.77
Average for 10 seasons 1930-39	26.74	34.28	21.84	29.84	10.02	..	8.48	24.53

The average for Victoria is generally amongst the highest in the world. The area, however, is comparatively small and is situated in specially favourable districts. The average for New South Wales is generally higher than that for Queensland.

(iii) *Production per Acre—Various Countries.* The average for Australia for the past 10 years was 25.43 bushels per acre. During the period 1928-32 the United States of America averaged 25.1 bushels, Argentine Republic 30.7 bushels, Rumania 17.7 bushels, and the U.S.S.R. (Russia) 14.0 bushels per acre.

3. **World's Production.**—The following table furnishes particulars of the world's acreage, production and average yield per acre of maize according to the data compiled by the International Institute of Agriculture :—

MAIZE : WORLD'S PRODUCTION.

Year.				Area.	Production.	Average Yield per Acre.
				Million Acres.	Million Bushels.	Bushels.
Average 1928-32	..	..	..	204	4,449	21.81
1934	..	..	..	201	3,669	18.25
1935	..	..	..	201	4,299	21.39
1936	..	..	..	200	3,700	18.50
1937	..	..	..	196	4,617	23.56
1938	..	..	..	196	4,547	23.20

The United States of America is the most important maize-producing country in the world. Approximately 100,000,000 acres are planted there annually, and in normal seasons more than 2,000 million bushels are reaped, representing about 50 per cent. of the world's production. About 85 per cent. of the production is fed to live stock on farms, 10 per cent. is used for human food, and only a very small fraction—less than 1 per cent.—is exported.

4. **Price of Maize.**—The average wholesale price of maize in the Sydney market for each of the last five years is given in the following table :—

MAIZE : AVERAGE PRICE, SYDNEY.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	<i>s. d.</i>	s. d.	s. d.	s. d.	s. d.
Average price per bushel ..	3 5	4 10½	5 3	5 2½	4 6½

5. **Oversea Imports and Exports.**—The imports of maize into Australia during the five years ended 1938-39 were negligible, averaging 20,000 bushels compared with nearly 600,000 bushels during the five years ended 1929-30. Details of imports and exports for the years 1934-35 to 1938-39 are as follows :—

MAIZE : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Imports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£	Bushels.	£	Bushels.	£
1934-35..	7	16	3,430	851	-3,423	-835
1935-36..	47,609	12,233	527	129	47,082	12,104
1936-37..	7,934	2,326	1,130	366	6,804	1,960
1937-38..	47,442	8,493	54	20	47,388	8,473
1938-39..	54	55	282,018	41,489	-281,964	-41,434

NOTE.—The minus sign (-) denotes net exports.

(a) Australian currency values.

6. **Maize Products.**—A small quantity of cornflour is imported annually into Australia, the principal countries of supply being the United Kingdom, Union of South Africa and the United States of America. During the year 1929-30 the imports amounted to 702,062 lb., and represented a value of £7,956, but since then they have been unimportant. Exports from Australia are small, and in 1938-39 were only 163,570 lb., valued at £1,317.

7. **Value of Crop.**—The value of the crop for the season 1938-39 was as follows:—

MAIZE : VALUE OF CROP, 1938-39.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Australia.
	£	£	£	£	£	£
Aggregate value ..	653,630	107,466	740,962	427	41	1,502,526
Value per acre ..	£5/7/0	£5/16/3	£4/0/10	£11/10/10	£5/2/6	£4/12/9

§ 7. Barley.

1. **Progress of Cultivation.**—(i) *Area and Production.* Despite wide annual fluctuations the area sown to barley has expanded considerably during the past ten years; the average annual area sown for the decennium 1930-39 amounted to 494,569 acres, compared with an average of 318,486 acres for the previous ten years. Victoria was originally the principal barley-growing State, but since 1913-14 South Australia has been the chief producing State, accounting for 61 per cent. of the Australian acreage in 1938-39. Victoria was next in importance with 24 per cent., leaving a small balance of about 15 per cent. distributed among the other States. The figures here given relate to the areas harvested for grain; small areas only are sown for hay, but more considerable quantities are cut for green forage. These, however, are not included in this section. The area and production of barley for grain in the several States for the last five years and the average for the decennium 1930-39 are shown in the following table:—

BARLEY : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AREA.							
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35 ..	9,480	87,599	9,604	316,807	26,589	5,779	(a) 455,921
1935-36 ..	11,583	116,371	6,380	393,741	31,568	5,227	564,870
1936-37 ..	12,004	100,003	6,652	304,559	40,092	6,947	470,257
1937-38 ..	11,542	139,777	8,655	411,288	44,930	9,296	(b) 625,495
1938-39 ..	14,194	175,891	13,989	457,039	74,928	8,694	(c) 744,737
Average 10 seasons 1930-39 ..	10,437	107,111	7,925	330,475	31,183	7,388	(d) 494,569
PRODUCTION.							
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35 ..	168,990	1,609,518	156,604	5,682,923	237,765	175,503	(a) 8,032,455
1935-36 ..	214,866	2,314,427	91,366	6,493,983	417,627	92,714	9,624,977
1936-37 ..	205,890	2,143,109	37,378	4,260,462	449,235	240,693	7,336,767
1937-38 ..	166,860	2,708,519	121,021	8,647,043	584,055	306,164	(b) 12,531,082
1938-39 ..	217,680	1,671,809	245,629	7,541,090	946,287	208,168	(c) 10,830,714
Average 10 seasons 1930-39 ..	173,382	1,975,494	132,104	5,714,007	370,681	186,241	(d) 8,552,853
	(a) Including Australian Capital Territory, 63 acres, 1,152 bushels.						
	(b) " " " " " " 7 acres, 420 bushels.						
	(c) " " " " " " 2 acres, 51 bushels.						
	(d) " " " " " " 50 acres, 944 bushels.						

South Australia and Victoria were the only States producing more than 1,000,000 bushels on the average during the past decade, the yields being respectively 5,714,007 and 1,975,404 bushels.

(ii) *Malting and Other Barley.* (a) Year 1938-39. Particulars for the season 1938-39 are as follows:—

BARLEY-MALTING AND OTHER: AREA AND PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Malting barley ..	6,961	150,984	10,304	417,276	56,651	8,042	650,218
Other barley ..	7,233	24,907	3,685	39,763	18,277	652	(a) 94,519
Total ..	14,194	175,891	13,989	457,039	74,928	8,694	(a)744,737
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
Malting barley ..	111,780	1,411,139	183,625	7,061,778	745,332	190,753	9,704,407
Other barley ..	105,900	260,670	62,004	479,312	200,955	17,415	61,126,307
Total ..	217,680	1,671,809	245,629	7,541,090	946,287	208,168	10,830,714 (b)

(a) Including Australian Capital Territory, 2 acres.
 (b) " " " " " " 51 bushels.

Taking Australia as a whole, about 87 per cent. of the area of barley in 1938-39 was sown with malting or English barley while the remainder consisted of Cape and other varieties. The proportion, however, varied largely in the several States. The disposal of barley during the season 1938-39 was as follows: malt works, 3,729,730 bushels; flour and other grain mills, 143,087 bushels; distilleries, 73,737 bushels; exports, 2,618,168 bushels; leaving a balance of 4,265,992 bushels for feed and seed.

(b) *Progress of Cultivation.* The following table sets out the acreage and production of malting and other barley in Australia during the last five seasons:—

BARLEY-MALTING AND OTHER: AREA AND PRODUCTION, AUSTRALIA.

Season.	Acres.			Bushels.			Average Yield per Acre.		
	Malting.	Other.	Total.	Malting.	Other.	Total.	Malting.	Other.	Total.
1934-35 ..	395,243	60,678	455,921	6,990,756	1,041,699	8,032,455	Bus. 17.69	Bus. 17.17	Bus. 17.62
1935-36 ..	485,870	79,000	564,870	8,412,712	1,212,265	9,624,977	17.31	15.35	17.04
1936-37 ..	393,797	76,460	470,257	6,382,760	954,007	7,336,767	16.20	12.48	15.60
1937-38 ..	525,409	100,086	625,495	10,801,885	1,732,197	12,534,082	20.56	17.31	20.04
1938-39 ..	650,218	94,519	744,737	9,704,407	1,126,307	10,830,714	14.92	11.92	14.54
Average 10 seasons									
1930-39..	427,673	66,896	494,569	7,480,333	1,072,520	8,552,853	17.49	16.03	17.29

During the past ten seasons the area and production of malting barley have represented nearly seven times the corresponding figures for other barley. The average yield per acre differs very little in respect of the two classes, the results for the last ten-yearly period being slightly in favour of the malting variety.

(iii) *Average Yield.* The average yield of barley per acre varies considerably in the different States, being as a rule highest in Tasmania and Victoria, and lowest in Western Australia. Details for each State during the last five seasons, and for the decennium 1930-39, are given in the following table :—

BARLEY : YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1934-35	17.83	18.37	16.31	17.94	8.94	30.37	17.62
1935-36	18.55	19.89	14.32	16.49	13.23	17.74	17.04
1936-37	17.15	21.43	5.62	13.99	11.21	34.65	15.60
1937-38	14.44	19.38	13.98	21.02	13.00	32.94	20.04
1938-39	15.34	9.50	17.56	16.50	12.63	23.94	14.54
Average for 10 seasons 1930-39	16.62	18.44	16.67	17.29	11.89	25.21	17.29

2. *Comparison with Other Countries.*—In comparison with the barley production of other countries, that of Australia appears extremely small. Particulars for some of the leading countries during 1938 are as follows :—United States of America, 242 million bushels; Germany, 187 million bushels; Turkey, 106 million bushels; and Canada, 98 million bushels. Details of production in the U.S.S.R. (Russia) are not available but in 1935 production approximated 360 million bushels, whilst China produced 281 million bushels in 1937.

3. *World's Production.*—The following table shows the world's acreage of barley, together with the production and average yield per acre, according to the results compiled by the International Institute of Agriculture :—

BARLEY : WORLD'S PRODUCTION.

Period.	Area.	Production.	Average Yield per Acre.
	Million Acres.	Million Bushels.	Bushels.
Average 1928-32	91.1	1,809	19.85
1934	87.2	1,663	19.07
1935	94.0	1,845	19.63
1936	89.7	1,744	19.44
1937	91.7	1,820	19.85
1938	90.7	1,915	21.11

4. *Prices.*—The average prices in the Melbourne market during each of the last five years are given in the following table :—

BARLEY : AVERAGE MELBOURNE PRICES PER BUSHEL.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	s. d.	s. d.	s. d.	s. d.	<i>s. d.</i>
Malting barley	2 11	2 10½	4 0½	4 1½	3 5½
Cape barley	2 5	2 5	3 7	3 7	2 11½

5. Imports and Exports.—Australian exports of barley during the last five years averaged 3,278,809 bushels. The grain was consigned mainly to the United Kingdom, New Zealand and Belgium, South Australia being the principal exporting State. Particulars of the Australian oversea imports and exports for the last five years are contained in the following table :—

BARLEY : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£	Bushels.	£	Bushels.	£
1934-35	12	5	2,901,708	394,466	2,901,696	394,461
1935-36	2	3	3,472,084	369,391	3,472,082	369,388
1936-37	126	69	2,605,620	504,495	2,605,494	504,426
1937-38 .. ..	..	..	4,796,468	805,943	4,796,468	805,943
1938-39	44	24	2,618,168	341,935	2,618,124	341,911

(a) Australian currency values.

In some years there is an export of Australian pearl and scotch barley, the total for 1938-39 reaching 567,280 lb., valued at £2,640, consigned mainly to the United Kingdom.

6. Imports and Exports of Malt.—In the years before the War of 1914-1919 the imports of malt into Australia were fairly extensive, the supply being obtained principally from the United Kingdom. Since 1914, however, imports have practically ceased. The production of malt in Australia is more than sufficient to meet local requirements and the surplus is shipped chiefly to the East and New Zealand. Details of imports and exports for the five years ended 1938-39 are given in the next table :—

MALT : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	Bushels.	£	Bushels.	£	Bushels.	£
1934-35	152	74	55,990	17,209	55,838	17,135
1935-36	300	195	62,518	19,457	62,218	19,262
1936-37	395	217	123,463	40,352	123,068	40,135
1937-38	252	155	164,548	62,327	164,296	62,172
1938-39	140	91	137,473	49,552	137,333	49,461

(a) Australian currency values.

7. Value of Barley Crop.—The estimated value of the barley crop for the season 1938-39 and the value per acre are shown in the following table :—

BARLEY : VALUE OF CROP(a), 1938-39.

Value.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Total	32,390	272,118	49,387	1,022,842	134,879	39,686	b1,551,308
Per acre	£2/5/8	£1/10/11	£3/10/8	£2/4/9	£1/16/0	£4/11/4	£2/1/8

(a) Exclusive of the value of straw.

(b) Including Australian Capital Territory, £6.

§ 8. Rice.

Experimental rice cultivation was carried on at the Yanco Experimental Farm in New South Wales for a number of years, but it was not until 1924-25 that an attempt was made to grow the crop on a commercial basis. In that year production amounted to 16,240 bushels from 153 acres, or an average of 106 bushels per acre. Favoured by tariff protection and high average yields the development of rice culture in the Murrumbidgee Irrigation Area made rapid progress, and the production now exceeds the annual requirements of Australia.

The area which growers may plant is now subject to control. Each year representatives of the Rice Marketing Board, Rice Growers, the Department of Agriculture and the Water Conservation and Irrigation Commission of New South Wales meet to decide the maximum area which growers may plant in the following season. Since 1933-34, the area has been fixed at 80 acres per grower. During the past five years an annual average of 272,000 centals of cleaned and 9,000 centals of uncleaned rice has been exported from Australia, mainly to the United Kingdom, New Zealand, Canada and the Pacific Islands.

Figures relating to area, production, trade and price, since 1931-32 will be found in the following table:—

RICE : AREA, PRODUCTION, TRADE AND PRICE, AUSTRALIA.

Year.	No. of Growers. (a)	Area.	Production Paddy Rice.	Average Yield.	Imports.		Exports.		Weighted Average Retail Price.
					Un-cleaned.	Cleaned.	Un-cleaned.	Cleaned.	
		Acres.	Bushels.	Bushels.	Centals.	Centals.	Centals.	Centals.	Pence per lb.
1931-32 ..	277	19,589	1,349,869	68.91	..	40,363	40,968	92,157	3.48
1932-33 ..	280	22,034	1,901,476	86.30	..	44,063	29,623	79,860	3.24
1933-34 ..	292	20,226	2,171,544	107.36	..	41,368	7,556	209,348	3.24
1934-35 ..	290	21,746	1,888,445	88.84	67	37,725	28,613	235,872	3.22
1935-36 ..	304	21,715	2,163,580	99.64	993	41,697	9,820	215,793	3.27
1936-37 ..	320	23,384	2,276,575	97.36	26	32,605	2,137	320,893	3.07
1937-38 ..	319	23,737	2,268,907	95.59	9,535	33,315	2,825	308,844	3.09
1938-39 ..	313	23,533	2,774,987	117.92	29	46,019	3,386	277,851	3.24

(a) New South Wales.

The production from several small experimental plots in States other than New South Wales is included in the foregoing figures, but the quantity is negligible.

§ 9. Other Grain and Pulse Crops.

In addition to the grain crops already specified, the principal other grain and pulse crops grown in Australia are beans, peas and rye. The total area of the first two mentioned crops for the season 1938-39 was 43,151 acres, giving a yield of 495,018 bushels, or an average of 11.47 bushels per acre, which was less than the average yield for the decennium ended 1938-39, namely, 14.91 bushels per acre. Beans and peas are grown chiefly in Tasmania, South Australia and Victoria. Peas are exported in considerable quantities to the United Kingdom, the chief exporting State being Tasmania. The total area of rye in Australia during the season 1938-39 was 17,787 acres, yielding 165,375 bushels, or an average of 9.30 bushels per acre, as compared with the average of 11.54 bushels for the last ten seasons. Of the total area sown to rye in 1938-39, about 30 per cent. was located in South Australia, 58 per cent. in New South Wales, and 6 per cent. in Victoria.

§ 10. Potatoes.

1. Progress of Cultivation.—(i) *Area and Production.* Victoria possesses peculiar advantages for the growth of potatoes, as the rainfall is generally satisfactory, and the climate is unfavourable to the spread of Irish blight; consequently the crop is grown in nearly every district except in the wheat belt. Tasmania comes next in order of importance, followed by New South Wales. The area for these three States accounted for 80 per cent. of the total for Australia in 1938-39.

The area and production of potatoes in each State during the last five years and the average for the decennium 1930-39 are given hereunder :—

POTATOES : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35 ..	19,662	54,214	11,666	4,664	4,050	36,358	15	130,629
1935-36 ..	22,743	44,287	13,620	4,612	4,946	34,719	62	124,989
1936-37 ..	24,909	45,627	13,448	4,657	4,324	36,967	88	130,020
1937-38 ..	21,372	41,105	10,817	4,387	4,202	32,468	34	114,385
1938-39 ..	16,866	34,396	10,389	4,290	5,355	26,696	56	98,048
Average 10 seasons								
1930-39..	19,199	54,658	11,039	5,042	4,953	34,684	30	129,605
PRODUCTION.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35 ..	46,033	109,329	21,627	19,377	19,162	70,018	17	285,563
1935-36 ..	62,882	104,125	24,765	19,257	26,278	85,806	127	323,240
1936-37 ..	66,255	196,623	15,826	20,923	22,916	138,557	218	461,318
1937-38 ..	50,833	134,712	16,565	21,615	21,587	99,969	101	345,382
1938-39 ..	39,385	81,415	19,183	18,487	26,532	89,330	109	274,441
Average 10 seasons								
1930-39..	44,122	150,238	18,100	20,202	23,410	94,500	63	350,635

(a) Includes Northern Territory, 1 acre.

The area sown to potatoes fluctuated around 140,000 acres over a long term of years, but it has declined to an average of 130,000 acres during the past decade. Victoria was mainly responsible for this decline; the areas in the other States showed little movement except in New South Wales where the reduction in area amounted to 15 per cent.

The greatest yield during the past decade was 461,318 tons in 1936-37, compared with the record output of 507,153 tons in 1906-7.

(ii) *Average Yield.* Particulars for each State for the five seasons ended 1938-39 and for the decennium ended 1938-39 are given hereunder :—

POTATOES : AVERAGE YIELD PER ACRE.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35 ..	2.34	2.02	1.82	4.15	4.73	1.92	1.13	2.19
1935-36 ..	2.76	2.35	1.82	4.18	5.31	2.47	2.05	2.59
1936-37 ..	2.66	4.31	1.18	4.49	5.30	3.75	2.48	3.55
1937-38 ..	2.38	3.28	1.53	4.93	5.14	3.08	2.97	3.02
1938-39 ..	2.34	2.37	1.85	4.31	4.95	3.35	1.95	2.80
Average for 10 seasons 1930-39..	2.30	2.75	1.64	2.50	4.73	2.72	2.09	2.71

Compared with the average yield per acre obtained in other countries, that returned for Australia is very low; the production in New Zealand, for example, in 1938-39 averaged 4.86 tons per acre from an area of 18,032 acres, as compared with 2.80 tons per acre from 98,048 acres in Australia.

(iii) *Relation to Population.* The average annual production of potatoes for the last five seasons was approximately 50 tons per 1,000 of population. In Tasmania, where this crop is of far greater importance in relation to population than is the case in any other State, the production per head in 1906-7 was nearly a ton, while for the last five seasons it has averaged $8\frac{1}{2}$ cwt. Details for each State for the five seasons ended 1938-39 are as follows :—

POTATOES : PRODUCTION PER 1,000 OF POPULATION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35 ..	17	59	23	33	43	306	2	43
1935-36 ..	24	56	25	33	59	373	13	48
1936-37 ..	25	106	16	35	51	596	22	68
1937-38 ..	19	72	17	37	47	420	10	50
1938-39 ..	14	43	19	31	57	377	9	40

(iv) *Consumption.* The consumption in Australia during the last five years averaged about 49 tons per 1,000 of population. These figures include the quantities used for seed. Omitting seed potatoes the consumption per 1,000 of population would be 43 tons or 96 lb. per head. From the figures shown above, therefore, it is apparent that New South Wales, Queensland and South Australia do not produce the quantities necessary for their requirements and must import from Tasmania and Victoria which have a surplus.

2. *Imports and Exports.*—Under normal conditions small quantities of potatoes are exported, principally to the Pacific Islands and Papua. In case of a shortage in Australia, supplies are usually obtained from New Zealand. Figures showing the trade for the last five years are given in the following table :—

POTATOES : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value. (a)	Quantity.	Value. (a)	Quantity.	Value. (a)
	Tons.	£	Tons.	£	Tons.	£
1934-35 .. ..	..	18	1,165	12,510	1,165	12,492
1935-36	19	364	1,303	14,034	1,344	13,670
1936-37	1	13	1,368	12,641	1,367	12,628
1937-38 .. ..	..	3	4,269	26,565	4,269	26,562
1938-39	2	35	1,255	17,443	1,253	17,408

(a) Australian currency values.

3. *Value of Potato Crop.*—The estimated value of the potato crop of each State for the season 1938-39 is given in the following table :—

POTATOES : VALUE OF CROP, 1938-39.

Value.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Total	497,560	1,095,032	211,013	260,224	309,453	1,274,070	1,377	3,648,729
Per acre	£29/10/0	£31/16/9	£20/6/3	£60/13/9	£57/15/9	£47/14/6	£24/11/10	£37/4/3

§ 11. Other Root and Tuber Crops.

1. *General.*—Root crops, other than potatoes, are not extensively grown in Australia, the total area of such crops for the season 1938-39 being only 37,958 acres. The most important were onions, mangolds, sugar-beet, turnips and sweet potatoes. Of these, onions and sugar-beet are most largely grown in Victoria, turnips in Tasmania, and mangolds and sweet potatoes in Queensland. The total area of onions in Australia

during the season 1938-39 was 6,708 acres, giving a yield of 18,372 tons, and averaging 2.74 tons per acre. The area in 1938-39 of root crops other than potatoes and onions was 31,250 acres, from which a production of 171,715 tons was obtained, or an average of 5.49 tons per acre. The areas and yields here given are exclusive of the production of "market gardens," reference to which is made in § 17 par. 2.

2. Imports and Exports.—The only root crop, other than potatoes, in which any considerable overseas trade is carried on by Australia is that of onions. During the last five years 8,495 tons, valued at £A.124,814, were imported, principally from Japan, the United States of America, New Zealand and Egypt, while during the same period the exports, which amounted to 17,028 tons, valued at £A.123,505, were shipped mainly to New Zealand, the Pacific Islands, the Philippine Islands and Canada.

§ 12. Hay.

1. General.—(i) *Area and Production.* As already stated, the chief crop in Australia is wheat grown for grain. Next in importance is hay, which for the season 1938-39 averaged 13.83 per cent. of the total area cropped. In most European countries the hay consists almost entirely of meadow and other grasses, but in Australia a very large proportion consists of wheat, oats and lucerne. The area of hay of all kinds in the several States during the last five years is given hereunder.

HAY : AREA AND PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Aust.
AREA.								
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35 ..	757,414	1,261,552	86,477	561,071	413,138	96,019	2,502	3,178,173
1935-36 ..	658,810	1,140,361	71,309	566,064	494,495	74,741	1,690	3,007,470
1936-37 ..	747,927	1,181,612	62,758	539,127	478,099	89,394	1,959	3,100,876
1937-38 ..	759,562	1,079,039	73,629	562,057	432,399	73,047	2,732	2,982,465
1938-39 ..	1,068,925	1,104,558	65,732	519,309	408,276	79,959	3,501	3,250,260
Average 10 seasons								
1930-39 ..	757,010	1,110,616	67,850	541,265	432,217	83,118	2,338	2,994,414
PRODUCTION.								
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35 ..	1,004,761	1,464,264	154,157	571,133	462,947	150,083	3,363	3,810,708
1935-36 ..	837,386	1,346,953	122,687	586,658	504,571	96,888	2,534	3,497,677
1936-37 ..	917,499	1,403,049	73,787	501,003	412,982	136,871	2,456	3,447,647
1937-38 ..	825,309	1,245,935	98,218	687,312	450,419	112,995	3,565	3,423,753
1938-39 ..	1,181,264	792,975	109,761	585,554	437,809	109,533	4,265	3,221,161
Average 10 seasons								
1930-39 ..	958,549	1,263,127	104,297	577,100	463,981	119,826	2,830	3,489,710

Owing to various causes, the principal being the variation 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 liable to fluctuate considerably. The area of hay in Australia during the season 1915-16, 3,597,771 acres, was the largest on record, whilst the average during the decennium ended 1938-39 amounted to 2,994,414 acres.

(ii) *Average Production.* During the last ten years Queensland and Tasmania show the highest average production per acre, although the area sown in these States is small. For the same period the lowest yield for Australia as a whole was that

of 21 cwt. per acre in 1929-30, while the highest was that of 26 cwt. in 1932-33. The average for the decennium was nearly 24 cwt. Particulars for the several States for the seasons 1934-35 to 1938-39 and the average for the ten years ended 1938-39 are given hereunder :—

HAY : PRODUCTION PER ACRE.

Season.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aust.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35	1.33	1.16	1.78	1.02	1.12	1.56	1.34	1.20
1935-36	1.27	1.18	1.72	1.04	1.02	1.30	1.50	1.16
1936-37	1.23	1.19	1.18	0.93	0.86	1.53	1.25	1.11
1937-38	1.09	1.15	1.33	1.22	1.04	1.55	1.31	1.15
1938-39	1.11	0.72	1.67	1.13	1.07	1.37	1.22	1.02
Average for 10 seasons 1930-39.. ..	1.27	1.14	1.54	1.07	1.07	1.44	1.21	1.17

(iii) *Varieties Grown.* Information in regard to the crops cut for hay is now available for all States.

Details for the last five seasons are given in the following table :—

HAY : VARIOUS KINDS GROWN.

Varieties.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Acres.	Acres.	Acres.	Acres.	Acres.
NEW SOUTH WALES—					
Wheaten	271,272	224,632	293,854	348,339	559,437
Oaten	349,174	328,866	342,334	312,337	413,002
Barley	1,354	930	912	815	2,225
Lucerne	134,703	103,478	110,422	97,354	92,598
Other	911	904	405	717	1,663
Total	757,414	658,810	747,927	759,562	1,068,925
VICTORIA—					
Wheaten	117,436	77,795	72,837	90,244	258,839
Oaten	1,016,205	926,293	940,058	817,001	722,528
Lucerne, etc.	127,911	136,273	168,717	171,794	123,191
Total	1,261,552	1,140,361	1,181,612	1,079,039	1,104,558
QUEENSLAND—					
Wheaten	3,472	1,789	5,259	6,004	6,628
Oaten	3,426	2,928	3,218	4,187	4,901
Lucerne	75,538	62,779	42,526	51,084	50,228
Other	4,041	3,813	11,755	12,354	3,975
Total	86,477	71,309	62,758	73,629	65,732
SOUTH AUSTRALIA—					
Wheaten	264,373	213,703	243,561	194,196	227,604
Oaten	280,710	334,529	277,413	343,480	270,425
Lucerne	4,444	5,093	3,944	6,052	4,805
Other	11,544	12,739	14,209	18,329	16,475
Total	561,071	566,064	539,127	562,057	519,309
WESTERN AUSTRALIA—					
Wheaten	138,980	214,406	201,792	175,374	165,153
Oaten	251,288	250,039	241,485	220,922	204,610
Lucerne	238	63	120	335	..
Other	22,623	29,987	34,702	35,768	38,513
Total	413,138	494,495	478,099	432,399	408,276
TASMANIA—					
Wheaten .. ..	..	..	..	525	979
Oaten	136,291	88,075	121,288	60,479	64,310
Barley .. ..	..	..	..	920	533
Other	13,792	8,813	15,583	11,123	14,137
Total	150,083	96,888	136,871	73,047	79,959

Oats is generally the predominant hay crop throughout Australia except in Queensland where lucerne is the chief variety grown. For all States the proportions of the areas sown to the principal kinds of hay were 52 per cent. for oats, 37 per cent. for wheat, 6 per cent. for lucerne, and 5 per cent. for other hay.

2. **Comparison with Other Countries.**—As already noted, the hay crops of most European countries consist of grasses of various kinds, amongst which clover, lucerne, sainfoin and rye grass occupy prominent places. The statistics of hay production in these countries are not prepared on a uniform basis, consequently any attempt to furnish extensive comparisons would be misleading. It may be noted, however, that in Great Britain the production of hay from clover, sainfoin, etc., for the year 1937 amounted to 2,846,000 tons from 1,878,391 acres, while from permanent grasses a yield of 5,252,000 tons of hay was obtained from 4,856,651 acres, giving a total of 8,098,000 tons from 6,735,042 acres, or an average of about 24 cwt. per acre.

3. **Imports and 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 imports and exports of Australia. During 1938-39, 153 tons were imported, while the exports amounted to 2,213 tons, valued at £15,034, the principal purchases being made by Malaya (British), Philippine Islands, Korea, Ceylon, India and Netherlands East Indies.

4. **Value of Hay Crop.**—The following table shows the value, and the value per acre, of the hay crop of the several States for the season 1938-39:—

HAY : VALUE OF CROP, 1938-39.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Total Value ..	6,002,110	3,652,849	577,441	1,374,559	757,986	416,217	23,103	12,704,325
Value per acre ..	£5/12/4	£3/6/2	£8/15/8	£2/9/1	£1/17/1	£5/4/1	£6/13/3	£3/18/2

§ 13. Green Forage.

1. **Nature and Extent.**—A considerable area is devoted to the production of green forage, mainly in connexion with the dairying industry. Under normal conditions, the principal crops cut for green forage are maize, sorghum, rape and lucerne, while small quantities of sugar-cane also are so used. In certain circumstances the area sown to green forage may be supplemented by areas of cereals sown originally for grain. In an adverse season some cereal crops may show no promise of producing grain or even hay and consequently the area may be turned over to stock for grazing. Particulars concerning the area of green forage in the several States during each of the last five years are given in the following table:—

GREEN FORAGE : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35	477,060	115,037	338,312	91,783	186,233	24,941	548	1,233,914
1935-36	610,401	111,056	379,651	98,121	197,931	25,500	548	1,423,208
1936-37	645,713	102,744	429,782	136,548	284,676	24,742	836	1,625,041
1937-38	638,408	121,839	441,560	144,320	268,589	24,764	442	1,639,922
1938-39	573,569	108,796	448,643	275,988	352,442	28,681	681	1,788,800

2. **Value of Green Forage Crops.**—The value of these crops is variously estimated in the several States, and the Australian total for the season 1938–39 exclusive of Western Australia may be taken approximately as £2,999,046, or about £2 1s. 9d. per acre.

§ 14. Sugar-cane and Sugar-beet.

1. **Sugar-cane.**—(i) *Area.* Sugar-cane for sugar-making purposes is grown only in Queensland and New South Wales, and much more extensively in the former than in the latter State. Thus, of a total area of 368,429 acres of sugar-cane grown for this purpose in Australia for the season 1938–39, there were 347,199 acres, or about 94 per cent., in Queensland. This latter area is made up of 251,847 acres cut for crushing, 11,254 acres cut for plants, and 84,098 acres left to stand-over or young cane on areas not ready for cutting. Sugar-cane growing appears to have been started in Australia in or about 1862, as the earliest statistical record of sugar-cane as a crop is that which credits Queensland with an area of 20 acres for the season 1862–63. In the following season the New South Wales returns show an area of 2 acres of this crop. The area of cane in New South Wales reached its maximum in 1895–96 with a total of 32,927 acres. Thenceforward, with slight variations, it gradually fell to 10,490 acres in 1918–19, but from that year it expanded until 1924–25, when about 20,000 acres were planted. Since 1924–25, the area has fluctuated between 15,000 acres and 20,000 acres, the average for the decennium ended 1938–39 amounting to 18,129 acres. In Queensland, although fluctuations in area are manifest, the general trend has been upwards. In 1938–39 the acreage of cane was the highest on record, namely, 347,199 acres. The area of sugar-cane in Australia from 1934–35 and the average for the decennium ended 1938–39 are given in the following table:—

SUGAR-CANE : AREA.

Season.	New South Wales.		Queensland.		Australia.		Total.
	Pro-ductive.	Unpro-ductive.	Pro-ductive.	Unpro-ductive.	Pro-ductive.	Unpro-ductive.	
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934–35	7,572	10,959	218,426	85,500	225,998	96,459	322,457
1935–36	10,416	9,794	228,515	86,185	238,931	95,979	334,910
1936–37	10,231	10,190	245,918	92,768	256,149	102,958	359,107
1937–38	10,716	10,137	245,131	103,709	255,847	113,846	369,693
1938–39	10,458	10,772	251,847	95,352	262,305	106,124	368,429
Average 10 seasons 1930–39	9,106	9,023	229,327	84,917	238,433	93,940	332,373

(ii) *Productive and Unproductive Cane.* The areas given in the preceding table do not include the small acreage cut for green forage which in 1938–39 amounted to 3,602 acres in Queensland. The whole area was not necessarily 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.

(iii) *Production of Cane and Sugar.* For Queensland, statistics of the production of sugar-cane are not available prior to the season 1897–98. In that season the total for Australia was 1,073,883 tons, as against the maximum production of 5,678,894 tons in 1938–39. The average production of cane during the decennium ended 1938–39 was 4,703,390 tons. With the exception of 1932–33, the yield of sugar during each of the eight years ended 1938–39 has exceeded 600,000 tons. The average for the decennium

amounted to 657,106 tons. Particulars of the total production of cane and sugar for the last five years are as follows. The average for the ten seasons ended 1938-39 is also included for comparison :—

SUGAR-CANE : PRODUCTION OF CANE AND SUGAR.

Season.	New South Wales.		Queensland.		Australia.	
	Cane.	Sugar.	Cane.	Sugar.	Cane.	Sugar.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35	227,424	29,428	4,271,380	611,161	4,498,804	640,589
1935-36	280,472	36,461	4,220,435	610,080	4,500,907	646,541
1936-37	275,169	38,158	5,170,571	744,676	5,445,740	782,834
1937-38	361,724	47,077	5,132,886	763,242	5,494,610	810,319
1938-39	336,701	45,022	5,342,193	778,064	5,678,894	823,086
Average 10 seasons 1930-39	241,402	30,317	4,461,988	626,789	4,703,390	657,106

The production of raw sugar in Australia in 1938-39 amounted to 823,086 tons manufactured from 5,678,894 tons of cane, and exceeded the previous highest recording of 810,319 tons in 1937-38. Official data are not available regarding the total number engaged in the sugar industry in Queensland, other than the number of separate holdings growing cane and employees in sugar mills which in 1938-39 totalled 7,855 and 4,631 respectively. In the report of the Sugar Inquiry Committee, 1931, however, it was stated that the number of persons employed in all branches of the industry was 28,737. In addition, there is the employment afforded in New South Wales, particulars of which are not available, but the number is probably in the vicinity of 2,000.

Final figures for the 1939-40 season are not yet complete, but latest estimates indicate a yield of 928,000 tons of raw sugar from 6,400,000 tons of cane crushed.

(iv) *Average Production of Cane and Sugar.* Owing to climatic variation, comparison between the average yields of cane per productive acre in Queensland and New South Wales cannot be accurately made 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 decennium ending 1938-39 were 14.46 tons for New South Wales, and 17.96 tons for Queensland. Similarly, the yields of sugar per acre crushed for the same period were estimated at 1.82 tons and 2.52 tons respectively. Leaving aside the consideration mentioned above, the yields of cane and sugar per acre crushed for Australia for the ten years ended 1938-39 were 19.73 tons and 2.76 tons respectively, as compared with 18.03 tons and 2.27 tons for the decennium ended 1928-29.

SUGAR-CANE AND SUGAR : YIELD PER ACRE.

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.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35	30.03	3.89	7.73	19.56	2.80	6.99	19.91	2.83	7.02
1935-36	26.93	3.50	7.69	18.47	2.67	6.92	18.84	2.71	6.96
1936-37	26.90	3.73	7.21	21.03	3.03	6.94	21.26	3.06	6.96
1937-38	33.76	4.39	7.63	20.94	3.11	6.73	21.48	3.17	6.78
1938-39	32.20	4.31	7.48	21.21	3.09	6.87	21.65	3.14	6.90
Average 10 seasons 1930-39	26.51	3.33	7.96	19.46	2.73	7.13	19.73	2.76	7.15

(v) *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 decennium ended 1938-39 it took 7.15 tons of cane to produce 1 ton of sugar or 13.99 per cent. of its total weight. 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, and in 1937-38 only 6.78 tons of cane were required to produce one ton of sugar. It is believed that this is the highest sugar content obtained anywhere in the world. During the ten years ended 1928-29 it required on the average 7.96 tons of cane to produce one ton of sugar in Australia, whereas the average figure for the decennium ended 1938-39 was reduced to 7.15 tons.

The Bureau of Sugar Experiment Stations in Queensland is rendering useful service to the sugar industry by advocating and demonstrating better methods of cultivation, the more scientific use of fertilizers, lime, etc., and by producing and distributing improved varieties of cane.

(vi) *Relation to Population.* The yield of raw sugar in Australia during the last five years was more than sufficient to supply local requirements, the average production during the period amounting to 244 lb. per head of population. Details for the period 1934-35 to 1938-39 are as follows:—

RAW SUGAR : PRODUCTION PER HEAD OF POPULATION.

State.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	lb.	lb.	lb.	lb.	lb.
New South Wales ..	25	31	32	39	37
Queensland	1,425	1,406	1,695	1,718	1,731
Australia	214	215	258	264	266

(vii) *Consumption.* The average annual consumption of raw sugar during the five years ended 1938-39 was estimated at 359,872 tons, equal to 118.37 lb. of raw sugar or 113.05 lb. of refined sugar per head of population. Sugar contained in jam, preserved fruit, milk, etc., exported during the period has been excluded in arriving at the figures quoted. The quantity of sugar used during the five years in factories is shown in the following table, the figures including, where necessary, estimates of consumption based on the sugar content of the finished product. Particulars of sugar used in establishments not classified as factories are not available, and consequently the quantities shown below are deficient to that extent.

SUGAR : CONSUMPTION IN FACTORIES, AUSTRALIA.

Factories.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Tons.	Tons.	Tons.	Tons.	Tons.
Aerated Waters and Cordials	6,490	7,786	8,905	10,744	11,810
Bacon Factories ..	66	165	276	281	267
Bakeries—including Cakes and Pastry	9,032	10,404	17,150	18,182	18,801
Biscuits	6,339	6,663			
Breweries	11,208	12,404	13,451	15,663	16,733
Cereal Foods	(a)	(a)	(a)	478	1,287
Condensed and Concentrated Milk	7,501	5,547	7,637	8,034	6,747
Confectionery, Ice Cream, &c.	20,356	21,123	24,809	25,644	26,926
Jams, Jellies and Preserved Fruit	28,022	31,930	(b)40,721	(b)42,218	(b)40,537
Jelly Crystals	699	665			
Total	89,713	96,687	112,949	121,244	123,108

(a) Not available.

(b) Including Condiments, Pickles, etc.

2. **Sugar-beet.**—(i) *Area and Production.* Victoria is the only State at present growing beets for sugar, and particulars in regard to acreage and production for the last four years and for the decennium 1930-39 are incorporated in the table below:—

SUGAR-BEET: AREA AND PRODUCTION, VICTORIA.

Particulars.		1935-36.	1936-37.	1937-38.	1938-39.	Average 10 seasons 1930-39.
Area harvested ..	acres	3,165	3,475	4,046	4,268	3,312
Production ..	tons	37,634	31,079	48,594	13,454	36,094
Average per acre ..	„	11.89	8.94	12.01	3.15	11.08
Sugar produced ..	„	5,115	4,180	5,625	1,507	4,642

As in the case of other agricultural production in this State, seasonal conditions were exceptionally adverse during 1938-39 and production dropped to the lowest level recorded since 1926-27. The quantity of beet required to produce one ton of sugar was 8.93 tons as compared with 8.64 tons for the previous year and 7.90 tons, the average for the decennium ended 1938-39.

(ii) *Encouragement of Beet-growing.* The irrigation scheme on the Macallister River has provided an assured water supply for the district and has enabled the industry to expand. A fine grade of white sugar is manufactured at Maffra, and considerable quantities of beet pulp and molasses are distributed for stock feed.

3. **Sugar Bounties.**—Reference is made to the various Acts in connexion with sugar bounties and sugar excise tariffs in early issues of the Official Year Book. (See No. 6, pp. 394-6.)

4. **Sugar Purchase by Commonwealth Government.**—The steps taken by the Commonwealth Government in connexion with this matter are also referred to in the Official Year Book. (See No. 18, p. 720.)

5. **Sugar Agreement in Australia—Embargo on Imports, etc.**—By agreement between the Commonwealth and Queensland Governments in 1925, the embargo on the importation of foreign sugar, which was first introduced in September, 1915, was extended for three years from 1st September, 1925. The price of raw sugar needed for home consumption was fixed at £27 per ton, £1 of which was to defray administrative and general expenses of the Sugar Board and to provide special concessions to certain consumers of sugar. The embargo was later extended for a further period of three years until 1st August, 1931, on practically the same terms as previously.

In response to representations, the Commonwealth Government appointed a Committee of Inquiry on the 23rd August, 1930, to report on the industry. The Committee consisted of eight members, representing the various interests concerned. The reports of the Committee were made available in March, 1931, and the renewal of the sugar agreement with certain modifications was recommended. The terms of the new agreement closely followed those previously in force, particularly as regards the embargo on imports and the fixation of prices. The assistance to the fruit industry was increased from an average of £180,000 per annum to £315,000 by way of grant from the sugar industry. The agreement was signed on 1st June, 1931, and was to remain in force for a period of five years from 1st September, 1931. In 1932, however, conferences arranged between the Commonwealth Government and representatives of the industry agreed to a reduction of $\frac{1}{4}$ d. per lb. in the retail price of sugar from 1st January, 1933, until the end of the period of the agreement (31st August, 1936). It was also decided to reduce the amount of the assistance to the fruit industry to £200,000. A renewal of the agreement for a period of five years commencing 1st September, 1936, was negotiated between the Commonwealth and Queensland Governments in July, 1935, and in May, 1940, the agreement was extended for a further period of five years to 31st August, 1946. The wholesale and retail price of sugar remains unaltered but the concession to the fruit industry was increased to £216,000 in 1936.

6. **International Sugar Agreement.**—Delegates of 21 Nations representing 90 per cent. of producers met in London and entered into an agreement on 6th May, 1937, providing for the regulation of the production and marketing of sugar in the world during a period of five years from 1st September, 1937. The object of the agreement is to assure an adequate supply of sugar at a price not exceeding the cost of production, including a reasonable profit, to efficient producers. For this purpose, each country was given a basic annual export quota, which will be increased in proportion to any expansion in sugar consumption. By this means, and by limitations on stocks and measures to encourage more consumption it is expected that the International Sugar Council, which has been established to administer the agreement, will be able to hold in proper balance the supplies and requirements of sugar. The export quota originally allotted to Australia was 400,000 long tons. This figure may be increased, however, where the delivery from any British Colony falls short of its quota. In such circumstances, the deficiency may be allocated among other producing countries of the Empire including Australia.

7. **Net Return for Sugar Crop.**—Calculations by the Sugar Board regarding the disposal of the crop, net value of exports and the average price realized during each of the last five years will be found in the following table:—

SUGAR : NET RETURNS, AUSTRALIA.

Year.	Percentage Exported.	Net Value of Exports per Ton.	Average Price per Ton for Whole Crop.	Estimated Value of Crop.
	(a)	(a)	(a)	
	Per cent.	£ s. d.	£ s. d.	£
1934-35	50.56	7 11 3	15 13 9	10,791,092
1935-36	47.97	7 18 9	16 5 11	11,010,892
1936-37	54.97	7 19 0	15 7 4	12,203,675
1937-38	54.94	8 6 0	15 7 6	12,748,348
1938-39	55.78	8 4 3	15 3 11	12,806,376

(a) As supplied by the Queensland Sugar Board.

The estimated value of the raw sugar produced has been 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 not deducting concessions to the fruit industry and other rebates which in 1938-39 amounted to £323,901. The value thus obtained represents the net market value of all raw sugar sold, and since 1933 is divided between the growers and millers in the approximate proportions of 70 per cent. and 30 per cent. respectively. Prior to that year the distribution was about two-thirds to the grower and one-third to the miller.

8. **Imports and Exports of Sugar.**—Owing to the embargo and the increased production of sugar in Australia imports have practically ceased. Particulars concerning the imports and exports of cane sugar for the last five years are as follows:—

SUGAR : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	(a)	(a)	(a)	(a)	(a)	(a)
	Tons.	£	Tons.	£	Tons.	£
1934-35	1	38	311,513	2,733,190	311,512	2,733,152
1935-36	22	415	300,680	2,758,170	300,658	2,757,755
1936-37	33	620	406,250	3,707,360	406,217	3,706,740
1937-38	47	817	427,184	4,026,698	427,137	4,025,881
1938-39	42	705	443,021	4,177,741	442,979	4,177,036

(a) Australian currency values.

9. **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 proportions used for distilling, fuel, manure and other purposes will be found in Chapter XVIII. "Manufacturing Industry". A distillation plant erected at the Plane Creek Central Sugar Mill, Mackay, was opened during 1927 and produces power alcohol of excellent quality. Another distillery was erected in Melbourne after the outbreak of war in 1939, and production began in 1940.

Boards are now being made from the residuum of crushed fibre after the removal of the sugar content from the sugar-cane. These boards are used in the building industry for walls and ceilings and possess high insulating and sound-absorbing properties.

10. **Sugar Prices.**—The prices of sugar in Australia from 1915 to 1946 are shown in the following table. During recent years the prices were fixed in accordance with the agreements referred to on page 395.

SUGAR : PRICES FOR CONSUMPTION IN AUSTRALIA.

Date of Determination.	Raw Sugar.	Refined Sugar.	
	Price to Grower and Miller per Ton.	Wholesale Price per Ton.	Retail Price per lb.
	£ s. d.	£ s. d.	d.
19.7.15 to 15.1.16	18 0 0	25 10 0	3
16.1.16 to 30.6.17	18 0 0	29 5 0	3½
1.7.17 to 24.3.20	21 0 0	29 5 0	3½
25.3.20 to 30.6.20	21 0 0	49 0 0	6
1.7.20 to 31.10.22	30 6 8	49 0 0	6
1.11.22 to 30.6.23	30 6 8	42 0 0	5
1.7.23 to 21.10.23	27 0 0	42 0 0	5
22.10.23 to 31.8.25	26 0 0	37 11 4	4½
1.9.25 to 31.8.31	(a)26 10 0	37 6 8	4½
1.9.31 to 4.1.33	26 0 0	37 6 8	4½
5.1.33 to 31.8.36	24 0 0	33 4 0	4
1.9.36 to 31.8.41	24 0 0	33 4 0	4
1.9.41 to 31.8.46	24 0 0	33 4 0	4

(a) The price of raw sugar for the years 1925 to 1937 was estimated at from £24 to £26 10s. per ton, but as the result of the values received for the surpluses exported, the actual price obtained in 1925-26 was £19 10s. 7d.; in 1926-27, £24 10s. 10d.; in 1927-28, £22 0s. 4d.; in 1928-29, £20 17s. 11d.; in 1929-30, £20 8s. 2d.; in 1930-31, £19 12s. 11d.; in 1931-32, £18 2s. 11d.; in 1932-33, £18 17s. 9d.; in 1933-34, £16 6s. 3d.; in 1934-35, £15 13s. 9d.; in 1935-36, £16 5s. 11d.; in 1936-37, £15 7s. 4d.; in 1937-38, £15 7s. 6d.; and in 1938-39, £15 3s. 11d.

11. **War-time Contract.** At the outbreak of war in September, 1939, the British Ministry of Food concluded arrangements with the Queensland Government for the purchase of Australia's surplus production of raw sugar for the season 1939. The quantity involved amounted to 332,500 tons. Prior to this arrangement, about 200,000 tons of the 1939 crop had already been shipped, so the total exports for that season were expected to be about 530,000 tons, the greatest quantity ever shipped from Australia in any single year. The price was fixed at £Stg.7 10s. per ton at United Kingdom ports plus the existing tariff preference on dominion sugar of £Stg.3 15s. per ton. This was expected to give a net return in Australia of £A.10 7s. 6d. per ton compared with £A.8 4s. 3d. per ton in 1938.

An official statement announced that the conditions under which the 1940 season's crop will be disposed of were not unfavourable. It is forecast that 400,000 tons will be taken from Australia, of which 300,000 tons will be shipped to the United Kingdom and the balance will go to Canada and New Zealand. This is 100,000 tons less than was shipped during the 1939 season, when about 300,000 tons went to the United Kingdom, 120,000 tons to Canada and 80,000 tons to New Zealand.

§ 15. Vineyards.

1. Progress of Cultivation.—(i) *Area of Vineyards.* The date of introduction of the vine into Australia has been variously set down by different investigators, the years 1815 and 1828 being principally favoured. It would seem, however, that plants were brought out with the first fleet in 1788, consequently the Australian vine is as old as Australian settlement. As already mentioned, a report by Governor Hunter gives the area of vines in 1797 as 8 acres. From New South Wales the cultivation spread to Victoria and South Australia, and these States have now far outstripped the mother State in the area of this crop. In Queensland and Western Australia also, vine-growing has been carried on for many years, but little progress has been made. In Tasmania the climate is not favourable to the growth of grapes. 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 last five years and the average for the decennium ended 1938-39 are given in the following table:—

VINEYARDS : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35..	15,143	41,180	1,926	53,361	5,737	..	117,347
1935-36..	15,158	41,081	2,470	54,219	6,051	..	118,979
1936-37..	16,542	41,895	2,501	56,122	6,105	..	123,165
1937-38..	16,950	41,883	2,716	57,414	6,208	..	125,171
1938-39..	16,979	42,436	2,793	58,020	6,277	..	<i>a</i> 126,507
Average 10 seasons							
1930-39 ..	15,777	40,563	2,142	54,156	5,666	..	118,304

(a) Includes Australian Capital Territory 2 acres.

The total area of vines in Australia has shown a substantial expansion since 1860. This development has been interrupted from time to time, decreases occurring in 1896, the years between 1904 and 1910, and in 1914. Since the latter year the area increased without interruption from about 61,000 acres to more than 114,000 acres in 1924-25, due largely to the planting of varieties suitable for drying. Subsequently the area fluctuated somewhat but increased again to the record area of 126,507 acres in 1938-39.

(ii) *Report on the Wine Industry.* An investigation into conditions in the wine industry was undertaken by the Commonwealth Director of Development and the Senior Inspector of Excise, Department of Trade and Customs, and a comprehensive report was presented to Parliament on the 17th July, 1931.

(iii) *Wine Production, Bounties, etc.* The production of wine has not increased as rapidly as the suitability of soil and climate would appear to warrant, owing chiefly to two causes. In the first place Australians are not a wine-drinking people; it is estimated that they consume approximately 2½ million gallons only or 0.3 gallons per head per annum and consequently the local market is restricted. Secondly, the comparatively new and unknown wines of Australia must compete in the markets of the old world with the well-known and long-established brands from other countries. Continued efforts are being made to bring the Australian wines under notice, and with the assistance of a Commonwealth bounty on the export of fortified wine of specified strength, the industry has been greatly stimulated. Particulars of the Wine Export Bounty are shown in § 18 hereafter. The Wine Export Bounty Act 1930 which provided for payment at the rate of 1s. 9d. per gallon was replaced by a new Act in

1934 which fixed the rate at 1s. 3d. per gallon for the two years ending 28th February, 1937, and thereafter at a reduction of 1d. per gallon for each succeeding year until 1940. The payment of a bounty at the rate of 1s. per gallon for a period of five years to 28th February, 1945, was provided for under the Wine Export Bounty Act of 1939.

At the Imperial Economic Conference at Ottawa in 1932, a margin of preference was granted by the Government of the United Kingdom on Australian wines. The rates of duties on foreign and Empire wines have since been increased as a war-time measure.

The quantity of wine produced in the several States during the last five seasons together with the average for the decennium ended 1938-39 are given in the table hereunder :—

WINE : PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
1934-35 ..	1,539,274	1,276,176	38,050	12,914,905	496,252	..	16,264,657
1935-36 ..	2,567,812	1,683,049	22,569	13,023,587	430,941	..	17,727,958
1936-37 ..	2,944,494	1,818,917	29,121	15,026,502	348,960	..	20,167,994
1937-38 ..	2,690,315	1,433,637	16,909	15,888,878	400,292	..	20,430,031
1938-39 ..	2,501,747	825,056	44,594	11,147,046	438,894	..	14,957,537
Average 10 seasons 1930-39	2,099,171	1,448,711	35,688	12,349,550	396,798	..	16,329,938

(a) Includes Australian Capital Territory 200 gallons.

(b) Includes Australian Capital Territory 20 gallons.

2. Imports and Exports of Wine.—(i) *Imports.* The principal countries of origin of wine imported into Australia are France, Spain, Portugal and Italy, the bulk of the sparkling wines coming from France. The imports for the last five years are given hereunder :—

WINE : IMPORTS INTO AUSTRALIA.

Year.	Quantity.			Value.(a)		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
	Gallons.	Gallons.	Gallons.	£	£	£
1934-35 ..	7,936	20,367	28,303	26,577	17,422	43,999
1935-36 ..	5,701	24,214	29,915	19,017	18,258	37,275
1936-37 ..	7,197	27,039	34,236	20,721	20,799	41,520
1937-38 ..	9,002	40,759	49,761	21,598	26,926	48,524
1938-39 ..	10,759	30,451	41,210	23,303	22,792	46,095

(a) Australian currency values.

(ii) *Exports.* Practically all of the wine exported from Australia is sent to the United Kingdom; approximately 190,000 gallons are sent to other countries. New Zealand absorbs the major portion of this quantity although exports to Canada have increased under the Canadian Australian Trade Treaty; the former took 107,642 gallons valued at £42,662 while the latter imported 73,409 gallons valued at £28,808, during 1938-39.

Wine was not included among the commodities sold by contract to the Government of the United Kingdom as a war-time emergency. On account of the prior claims of other commodities to shipping space, the wine industry is facing a most difficult position.

Exports for the last five years are given in the following table.—

WINE : EXPORTS FROM AUSTRALIA.

Year.	Quantity.			Value.(a)		
	Sparkling.	Other.	Total.	Sparkling.	Other.	Total.
	Gallons.	Gallons.	Gallons.	£	£	£
1934-35 ..	4,111	3,392,570	3,396,681	5,854	806,334	812,188
1935-36 ..	4,070	3,705,557	3,709,627	5,649	928,955	934,604
1936-37 ..	3,400	4,085,563	4,088,963	6,231	1,038,198	1,044,429
1937-38 ..	4,908	3,893,549	3,898,457	5,760	938,916	944,676
1938-39 ..	2,369	3,718,135	3,720,504	3,507	978,570	982,077

(a) Australian currency values.

3. **Other Viticultural Products.**—(i) *Table Grapes.* Grapes for table use are grown in all the States except Tasmania, but the area cultivated to this variety is only about 7½ per cent. of the productive area of grapes. The greatest development in the industry has taken place in the drying of raisins and currants, particularly in Victoria and South Australia. The quantities of table grapes grown during the last five seasons are as follows:—

TABLE GRAPES : PRODUCTION.

Season.	N.S.W.		Victoria.		Q'land.		S. Aust.		W. Aust.		Australia.	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35	3,638	3,113	1,900	646	3,214	12,511						
1935-36	4,376	4,215	2,184	547	2,676	13,998						
1936-37	5,107	3,754	2,058	582	2,720	14,221						
1937-38	5,076	4,372	2,259	657	2,918	15,282						
1938-39	4,034	4,089	2,313	985	3,139	14,560						

(ii) *Raisins and Currants.* The quantities of raisins (sultanas and lexias) and currants dried during each of the last five seasons are given in the following table. The production for the 1939-40 season is estimated at the record quantity of 94,000 tons, of which 69,500 tons are raisins and 18,000 tons are currants.

RAISINS(a) AND CURRANTS : PRODUCTION.

Season.	N. S. Wales.		Victoria.		South Aust.		Western Aust.		Australia.	
	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.	Raisins.	Currants.
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35	3,381	755	29,637	8,801	12,234	9,259	646	2,037	45,898	20,852
1935-36	4,158	864	35,486	4,421	10,508	5,871	778	1,958	50,930	13,114
1936-37	5,416	1,094	37,267	7,610	11,381	8,093	707	1,887	54,771	18,684
1937-38	6,139	1,155	48,504	8,948	16,609	9,367	725	1,837	71,977	21,357
1938-39	4,837	1,239	33,659	10,301	11,656	9,569	737	2,762	50,889	23,871
Average 10 seasons 1930-39	4,234	796	35,235	7,995	11,494	8,007	697	1,789	51,660	18,587

(a) Sultanas and Lexias.

4. Imports and Exports of Raisins and Currants.—The following table gives the oversea imports and exports of raisins and currants during each of the last five years :—

RAISINS AND CURRANTS : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value. (a)	Quantity.	Value. (a)	Quantity.	Value. (a)
RAISINS.						
	Tons.	£	Tons.	£	Tons.	£
1934-35 ..	(b)104	(b)5,988	40,041	1,447,686	39,937	1,441,698
1935-36 ..	(c)	20	37,998	1,501,146	37,998	1,501,126
1936-37 ..	(c)	51	40,875	1,540,909	40,875	1,540,858
1937-38 ..	..	..	47,490	1,968,450	47,490	1,968,450
1938-39 ..	(c)	6	49,550	1,974,045	49,550	1,974,039
CURRANTS.						
	(c)	15	14,562	583,422	14,562	583,407
1934-35 ..	(c)	35	9,945	375,923	9,945	375,888
1935-36 ..	(b)14	(b)678	11,739	440,734	11,725	440,056
1936-37 ..	..	..	15,266	571,143	15,266	571,143
1937-38 ..	..	..	23,759	772,966	23,759	772,966

(a) Australian currency values. (b) Reimports. (c) Quantity negligible.

Since 1912 Australia has not only produced sufficient raisins and currants for home consumption, but has been able to maintain a large export trade. The average annual production for the decennium ended 1938-39 was 70,000 tons, of which 53,500 tons were exported and about 16,500 tons were available for local requirements. The chief countries importing Australian raisins and currants are the United Kingdom, Canada and New Zealand, the quantities exported thereto in 1938-39 being, 51,265, 16,422 and 4,803 tons or 70, 22 and 7 per cent. respectively. Exports to Canada have increased from 4,600 tons in 1928-29 to 16,422 tons in 1938-39.

5. War-time Contract. All unsold stocks of dried vine fruits in Great Britain and afloat were acquired by the Government of the United Kingdom. These stocks included 14,343 tons of Australian origin harvested during the 1939 season.

The surplus production of the 1940 season after providing for the Canadian and New Zealand requirements was also sold to the United Kingdom, the quantities involved being 18,000 tons of currants and 33,000 tons of raisins.

§ 16. Orchards and Fruit-Gardens.

1. Progress of Cultivation.—The greatest area of orchards and fruit-gardens was attained in 1933-34 when 281,989 acres were planted. The total area of orchards and fruit-gardens in the several States during the last five years is given in the following table :—

ORCHARDS AND FRUIT-GARDENS : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934-35 ..	87,035	76,254	30,646	29,167	20,811	33,779	70	277,762
1935-36 ..	82,702	75,788	28,544	29,122	21,667	33,372	76	271,271
1936-37 ..	87,887	76,760	28,828	29,755	22,143	32,285	66	277,724
1937-38 ..	87,293	75,067	31,136	29,874	21,976	31,677	98	277,121
1938-39 ..	85,598	71,300	32,641	28,943	22,029	31,580	97	272,238

(a) Includes 50 acres Northern Territory.

2. Varieties of Crops.—(i) *General*. The varieties grown differ in various parts of the States, ranging from such fruits as the pineapple, paw-paw, mango and guava of the tropics to the strawberry, the raspberry and the currant of the colder parts of the temperate zone. The principal varieties grown in Victoria are the apple, peach, pear, orange, plum and apricot. In New South Wales, citrus fruits (oranges, lemons, etc.) occupy the leading position, although apples, peaches, plums, pears, cherries and bananas are extensively grown. In Queensland, the banana, pineapple, apple, orange, peach, plum, and coco-nut are the varieties most largely cultivated. In South Australia, in addition to the apple, orange, apricot, plum, peach and pear, the almond and the olive are extensively grown. In Western Australia, the apple, orange, pear, plum, peach, apricot and fig are the chief varieties. In Tasmania, the apple occupies nearly four-fifths of the fruit-growing area, but small fruits, such as the currant, raspberry and gooseberry are extensively grown, while the balance of the area is taken up with the pear, apricot, plum and cherry. The following tables give the acreage—bearing and non-bearing—of the principal kinds of fruit, and the quantity and value of fruit produced.

(ii) *Area*. The table hereunder shows the total acreage for 1938–39 :—

ORCHARDS AND FRUIT-GARDENS : AREA, 1938–39.

Fruit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Apples ..	17,601	27,780	5,578	9,906	13,012	23,411	63	97,351
Apricots ..	1,903	4,296	245	3,112	659	1,401	4	11,620
Bananas ..	13,871	..	8,781	..	243	..	..	22,895
Cherries ..	3,513	1,299	5	1,073	61	102	2	6,055
Citrus—								
Oranges ..	20,273	4,374	4,344	4,490	3,023	..	..	} 40,406
Mandarins ..	3,726	(a)	(a)	(a)	176	..	..
Lemons ..	2,873	1,545	413	429	492	..	..
Other ..	616	(a)	25	58	73	..	..
Nectarines and								
Peaches ..	8,456	13,617	1,417	1,834	1,112	93	7	26,536
Nuts ..	933	517	156	2,716	378	..	5	4,705
Pineapples ..	233	..	7,049	..	5	..	..	7,287
Pears ..	4,074	12,001	360	1,770	1,034	2,343	5	21,587
Plums and Prunes	5,535	3,655	1,216	2,210	1,078	416	9	14,119
Small Fruits ..	18	610	417	363	28	3,741	..	5,177
Other Fruits ..	1,973	1,606	2,635	982	655	73	2	7,926
Total ..	85,598	71,300	32,641	28,943	22,029	31,580	97	272,188

(a) Included with oranges, etc.

(iii) *Production*.—(a) *Quantities*. The production in 1938–39 is shown in the next table :—

ORCHARDS AND FRUIT-GARDENS : PRODUCTION, 1938–39.

Fruit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.					
Apples .. bushel	936,766	1,574,916	282,158	808,020	1,797,490	5,724,000	2,190	11,125,540					
Apricots .. "	153,685	251,028	10,457	343,509	67,053	161,000	88	986,880					
Bananas .. "	1,582,706	..	879,449	..	32,170	..	..	2,494,331			
Cherries .. "	127,459	40,888	301	43,478	876	3,800	24	216,826					
Citrus—													
Oranges .. "	2,478,140	683,705	} 354,052	{ 815,460	322,350	..	..	} 4,994,064			
Mandarins .. "	305,753	17,285							(a)	17,319	
Lemons .. "	256,462	161,920							30,458	55,862	63,139
Other .. "	68,504	508							1,548	8,663	3,248
Nectarines and													
Peaches .. "	611,613	1,672,163	86,269	155,189	88,278	7,000	130	2,620,642					
Nuts .. lb.	283,978	195,777	17,120	1,205,464	68,694	..	80	1,771,113					
Pineapples .. dozen	43,133	..	1,847,673	..	20	..	..	1,890,826			
Pears .. bushel	338,467	1,204,340	27,596	195,995	157,349	376,000	97	2,299,841					
Plums and Prunes	260,549	146,247	60,622	134,030	85,849	84,000	93	771,390					
Small Fruits .. cwt.	392	9,014	7,702	6,810	648	121,631	..	146,197					

(b) *Gross Values.* The gross value of production for the various classes of fruit for the year 1938-39 is given in the following table:—

ORCHARDS AND FRUIT-GARDENS : VALUE OF PRODUCTION, 1938-39.

Fruit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
	£	£	£	£	£	£	£	£
Apples	378,690	452,788	112,521	187,575	654,258	1,574,100	885	3,357,817
Apricots	78,210	69,033	6,223	115,190	29,056	30,860	45	328,617
Bananas	840,810	.. ..	343,724	.. ..	22,345	.. ..	.. ..	1,206,879
Cherries	106,710	33,733	361	33,152	1,768	1,900	20	177,644
Citrus—								
Oranges	891,660	243,998	116,636	183,875	106,107	.. ..	.. ..	1,695,483
Mandarins	87,020	6,122						
Lemons	82,520	62,744	5,593	19,370	15,785	.. ..	.. ..	188,922
Other	28,820	197	310	2,178	1,002	.. ..	.. ..	32,507
Nectarines and Peaches	267,030	399,665	32,954	53,954	29,059	1,490	61	784,213
Nuts	12,510	7,404	513	32,526	2,719	.. ..	2	55,674
Pineapples	10,240	.. ..	392,340	.. ..	17	.. ..	.. ..	402,597
Pears	139,620	316,139	8,508	50,535	61,345	98,700	40	674,887
Plums and Prunes	111,960	29,936	24,156	28,923	26,112	11,550	44	232,681
Small Fruits	1,620	21,143	18,048	9,520	2,065	176,400	.. ..	229,696
Other Fruits	64,670	146,673	77,667	16,177	21,126	1,300	37	327,650
Total	3,102,090	1,789,575	1,143,364	784,453	978,351	1,896,300	1,131	9,695,267

3. *Principal Fruit Crops.*—(i) *Area.* The area in Australia of the principal fruit crops for the year 1913-14 and for each of the last five years is shown hereunder:—

PRINCIPAL FRUIT CROPS : AREA, BEARING AND NON-BEARING, AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.(a)
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1913-14	56,577	7,778	24,840	13,645	9,657	8,410
1934-35	102,414	26,593	49,247	22,990	20,578	15,741
1935-36	102,003	21,801	47,506	22,876	20,316	15,290
1936-37	103,507	21,126	48,520	23,858	21,298	15,647
1937-38	100,647	23,134	47,416	25,705	22,154	14,727
1938-39	97,351	22,895	46,930	25,054	21,587	14,119

(a) Includes Prunes.

(ii) *Production*—(a) *Quantities.* In the next table the total production for the principal varieties of fruit grown in Australia is shown for the same periods:—

PRINCIPAL FRUIT CROPS : PRODUCTION IN AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.(a)
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1913-14	5,000,178	835,868	1,638,961	930,144	951,277	621,525
1934-35	9,569,161	2,550,693	5,307,146	2,011,542	1,934,975	1,004,821
1935-36	9,771,290	2,500,791	5,057,081	1,762,673	2,458,087	905,936
1936-37	10,998,866	2,369,175	4,971,761	2,132,654	2,692,207	1,115,129
1937-38	10,958,868	2,630,624	5,106,061	2,639,722	2,595,954	1,077,082
1938-39	11,125,540	2,494,331	5,644,376	2,522,767	2,299,841	771,390

(a) Includes Prunes.

(b) *Values.* The value of the principal fruit crops during the periods mentioned is given in the subjoined table:—

PRINCIPAL FRUIT CROPS : VALUE OF PRODUCTION, AUSTRALIA.

Year.	Apples.	Bananas.	Citrus Fruits.	Peaches.	Pears.	Plums.(a)
	£	£	£	£	£	£
1913-14 ..	1,132,427	157,710	719,808	306,433	258,235	135,654
1934-35 ..	2,581,568	900,657	1,444,203	572,643	499,937	269,626
1935-36 ..	2,500,361	915,409	1,575,662	554,094	639,429	268,669
1936-37 ..	2,794,633	1,114,025	1,686,569	640,433	669,782	333,186
1937-38 ..	2,826,451	1,455,355	1,717,270	754,929	675,887	333,041
1938-39 ..	3,357,817	1,206,879	1,916,912	737,791	674,887	232,681

(a) Includes Prunes.

4. *Imports and Exports of Fruit.*—(i) *General.* A considerable export trade in both fresh and dried fruits is carried on by Australia with oversea countries. The import trade in fresh fruits declined heavily when a Customs duty of 1d. per lb. was imposed in 1920-21 on imported bananas, which had previously been the chief variety of fresh fruit imported into Australia. Under the terms of the agreement reached at Ottawa in 1932, however, 40,000 cents of bananas may be admitted annually from Fiji at the rate of duty of 2s. 6d. per cental. The imports of dried fruits at present consist mainly of dates. The export trade in fresh and dried fruits has grown to considerable dimensions, the value of the shipments in 1938-39 amounting to £2,022,936 and £2,864,819 respectively. Apples constitute the bulk of the fresh fruit exported although the exports of citrus fruits and pears are fairly considerable, and experiments are being conducted in regard to the dispatch of other fruits. Shipments of raisins and currants have increased greatly since 1914-15, and are mainly responsible for the growth in the dried fruits exports. Dried apricots also figure amongst the exports.

(ii) *Fresh Fruits.* Information with regard to the Australian oversea trade in fresh fruits is given hereunder:—

FRESH FRUITS : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	lb.	£	lb.	£	lb.	£
1934-35 ..	4,212,300	20,247	228,463,300	1,821,967	224,251,000	1,801,720
1935-36 ..	3,720,500	18,910	251,762,400	2,027,222	248,041,900	2,008,312
1936-37 ..	3,704,000	19,986	249,329,200	1,980,102	245,625,200	1,960,116
1937-38 ..	4,251,800	22,469	255,622,600	2,055,186	251,370,800	2,032,717
1938-39 ..	6,988,300	29,843	275,243,700	2,022,936	268,255,400	1,993,093

(a) Australian currency values.

(iii) *Exports of Apples, Pears and Citrus Fruits.* The quantity and value of apples, pears and citrus fruits exported during each of the last five years are shown in the following table:—

APPLES, PEARS AND CITRUS FRUITS : EXPORTS FROM AUSTRALIA.

Year.	Apples.		Pears.		Citrus Fruits.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Cental.	£	Cental.	£	Cental.	£
1934-35 ..	1,745,337	1,307,791	254,978	240,836	242,932	212,170
1935-36 ..	2,008,656	1,494,524	275,860	270,262	190,094	188,255
1936-37 ..	1,847,189	1,344,885	336,812	320,325	256,784	228,356
1937-38 ..	1,929,088	1,399,773	258,433	245,505	313,649	317,793
1938-39 ..	2,111,139	1,433,440	294,930	264,805	274,229	221,184

(iv) *Dried Fruits.* The quantity and value of oversea imports and exports of dried fruits, other than raisins and currants, for the last five years are shown below; approximately 90 per cent. of the total imports consisted of dates obtained almost entirely from Iraq:—

DRIED FRUITS(a) : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(b)	Quantity.	Value.(b)	Quantity.	Value.(b)
	lb.	£	lb.	£	lb.	£
1934-35..	13,187,250	94,903	5,507,100	134,426	7,680,150	39,523
1935-36..	11,912,272	86,590	4,144,611	110,423	7,767,661	23,833
1936-37..	10,917,696	76,653	2,660,332	78,553	8,257,364	1,900
1937-38..	13,744,312	94,445	5,331,569	144,892	8,412,743	50,447
1938-39..	11,096,736	80,752	3,926,958	117,814	7,169,778	37,062

(a) Excluding raisins and currants referred to separately under Vineyards, § 15 par. 4. (b) Australian currency values.

(v) *Jams and Jellies.* Jams and jellies were exported in large quantities during the War of 1914-1919 and in 1918-19 the record shipment of 79,277,560 lb., valued at £1,847,970 was dispatched from Australia. Since that year, however, the trade has dwindled, the value of the exports in 1938-39 amounting to only £262,486. Particulars relative to imports and exports during each of the last five years are as follows:—

JAMS AND JELLIES : IMPORTS AND EXPORTS, AUSTRALIA.

Year.	Imports.		Exports.		Net Exports.	
	Quantity.	Value.(a)	Quantity.	Value.(a)	Quantity.	Value.(a)
	lb.	£	lb.	£	lb.	£
1934-35..	30,322	1,265	2,949,105	63,425	2,918,783	62,160
1935-36..	50,010	1,910	7,019,191	134,796	6,969,181	132,886
1936-37..	59,852	2,333	5,541,620	106,433	5,481,768	104,100
1937-38..	125,604	4,461	6,206,248	121,395	6,080,644	116,934
1938-39..	80,749	3,253	13,872,059	262,486	13,791,310	259,233

(a) Australian currency values.

(vi) *Preserved Fruit.* Details concerning the quantities and values of preserved fruit imported into Australia cannot readily be obtained, owing to the fact that in the Customs returns particulars concerning fruit and vegetables are in certain cases combined. The total value of fruit and vegetables preserved or partly preserved in liquid, or pulped, imported into Australia during 1938-39 was £59,781, or £74,876 in Australian currency. Oversea exports in 1938-39 were as follows:—Apricots, 9,484,118 lb., £161,358; peaches, 44,382,980 lb., £627,748; pears, 20,858,179 lb., £332,668; pineapples, 3,449,221 lb., £72,499; and other, 10,922,692 lb., £218,702; or a total shipment valued at £1,412,975.

5. *Apple and Pear Acquisition.* The development of the apple and pear industry is dependent upon the expansion of exports; normally, little more than half of Australia's production is needed to meet the local demand. The interruption to exports due to the war imposed a severe strain on the industry and, as a result of representations made, the Commonwealth Government introduced legislation to minimize the disorganization thus created. Committees were formed to assist in the marketing and administration

of the scheme while financial arrangements were made with the Commonwealth Bank. The following table shows details of the quantities acquired, and marketed and the stocks held on the 31st May, 1940:—

APPLES AND PEARS : AUSTRALIA.

QUANTITIES ACQUIRED AND MARKETED AND STOCKS HELD ON 31ST MAY, 1940.

Particulars.					Apples.	Pears.
					Bushels.	Bushels.
Quantity sold in Australia .. .. .	..	..	..	..	1,405,359	280,394
Quantity exported overseas .. .. .	..	..	..	..	1,436,611	126,141
Quantity used in factories .. .. .	..	..	..	..	307,102	..
Quantity unmarketable .. .. .	..	..	..	..	350,000	..
Stocks on hand .. .. .	..	..	..	..	3,331,406	271,175
Total acquired .. .. .	..	..	..	..	6,830,478	677,710

§ 17. Minor Crops.

1. **General.**—In addition to the crops previously dealt with, there are many others which, owing either to their nature, or to the fact that their cultivation has advanced but little beyond the experimental stage, do not occupy so prominent a position. Some of the more important of these are included under the headings—Market Gardens, Pumpkins and Melons, Nurseries, Grass Seed, Tobacco and Millet. Cotton-growing has received considerable attention in the tropical portions of Queensland, and the prospects of establishing this industry are hopeful. The total area in Australia during the season 1938–39 devoted to crops not dealt with in previous sections was 282,208 acres, the major portion of which consisted of cotton, market gardens, grass seed, pumpkins and melons, canary seed and tobacco.

2. **Market Gardens.**—Under this head are included all areas on which mixed vegetables are grown. Where considerable areas are devoted to the production of one vegetable, such for instance as the potato, the onion, the melon, the tomato, etc., the figures are usually not included with market gardens, but are shown either under some specific head, or under some general head as “Other Root Crops,” or “All Other Crops.” The area of market gardens during each of the last five seasons is given hereunder:—

MARKET GARDENS : AREA.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Aus- tralia.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1934–35	6,696	20,728	801	1,994	3,024	869	13	34,125
1935–36	7,026	20,633	950	1,555	3,074	812	52	34,102
1936–37	7,335	20,790	1,105	1,499	3,399	752	48	34,928
1937–38	7,268	19,819	947	1,546	3,497	584	34	33,695
1938–39	7,528	21,059	1,546	1,691	3,292	508	41	35,665

3. **Grass and Other Seed.**—Particulars of the area of crops grown for seed cannot be accurately determined as seed is obtained from certain crops such as clover, lucerne, etc., at a second cutting. The production of seed recorded in 1938–39 was 574,550 bushels, but no particulars are available for New South Wales.

4. Tobacco.—Tobacco-growing some years ago promised to occupy an important place amongst the agricultural industries of Australia. Thus, 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. This promise was, however, not fulfilled, and after numerous fluctuations, in the course of which the Victorian area rose in 1895 to over 2,000 acres, and that in Queensland to over 1,000 acres, the total area declined considerably.

In all the States in which its cultivation has been tried, the soil and climate appear to be suitable for the growth of the plant, and the large import of tobacco in its various forms is an index of the market for a satisfactory product. The total net imports of tobacco into Australia during the year 1938-39 were valued at £A.1,982,913, while the net quantity of unmanufactured tobacco imported was 22,237,334 lb. valued at £A.2,171,186.

In the following table particulars of the area and production of tobacco are given by States for each year since 1930-31. In the table previously published, there was some confusion regarding the seasons to which the figures related. In the table below, however, the figures are comparable throughout and consistently reflect the movement from season to season:—

TOBACCO : AREA AND PRODUCTION, AUSTRALIA.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Total.
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AREA IN ACRES.

1930-31 ..	547	2,650	382	83	3	3,665
1931-32 ..	2,869	12,191	3,817	959	348	72	10	20,266
1932-33 ..	4,105	13,418	4,004	859	466	171	..	(a) 23,037
1933-34 ..	1,187	8,900	2,081	467	291	100	..	13,026
1934-35 ..	560	4,765	3,117	151	313	55	..	8,961
1935-36 ..	934	5,840	3,973	141	426	80	..	11,394
1936-37 ..	851	5,492	3,812	102	1,041	113	..	11,411
1937-38 ..	610	4,736	3,740	90	1,216	159	..	10,551
1938-39 ..	629	2,559	3,554	39	908	130	1	7,820

PRODUCTION OF DRIED LEAF.

1930-31 ..	lb. 229,376	lb. 1,269,520	lb. 260,670	lb. 33,936	lb. 2,464	lb. ..	lb. ..	lb. 1,795,966
1931-32 ..	2,613,632	6,658,512	2,303,861	374,416	201,488	51,520	..	(b) 12,203,429
1932-33 ..	2,807,392	4,073,552	2,079,754	180,880	334,768	22,624	..	9,498,970
1933-34 ..	425,600	1,470,826	1,025,049	113,680	199,284	59,820	..	3,294,259
1934-35 ..	229,824	1,501,350	1,555,083	23,072	289,460	44,560	..	3,043,349
1935-36 ..	666,736	2,879,075	2,005,031	31,024	352,435	72,951	..	6,007,252
1936-37 ..	606,032	1,753,096	2,317,066	23,823	666,572	143,198	..	5,510,387
1937-38 ..	408,688	2,336,320	2,197,240	13,821	788,559	115,175	..	5,859,803
1938-39 ..	397,600	720,384	2,094,000	13,328	766,752	53,450	360	4,045,874

(a) Includes Australian Capital Territory, 14 acres. No leaf was produced from this area.
(b) No leaf produced.

In 1929 a Select Committee was appointed by the House of Representatives to report on the tobacco industry in Australia. The report of the Committee was submitted on 1st July, 1930, and among the recommendations made was one for the formation of a Tobacco Investigation Committee. This Committee was formed, and was financed jointly by the Commonwealth Government and the British-Australasian Tobacco Company, the Company undertaking to contribute up to £3,000 on a £ for £ basis. In 1933 another Committee was appointed. The recommendation of this Committee, which

reported on 16th November, 1933, that the sum of £20,000 should be provided annually for five years to assist the States to continue economic and scientific investigations, was adopted and this amount was distributed during the succeeding five years. The annual allocation was £5,000 to the Council for Scientific and Industrial Research, £3,750 to each of the States of New South Wales, Victoria and Queensland, and £1,250 each to South Australia, Western Australia and Tasmania. At the end of this period, the Commonwealth Government made a further grant for another five-year term. Commencing with 1939 the amount allotted was £15,000. This sum decreases annually by £1,250 until, in 1943, the amount will be £10,000. The total for the five years amounts to £62,500 and is allocated as follows:—Council for Scientific and Industrial Research, £25,000; New South Wales, £5,250; Victoria, £7,500; Queensland, £9,750; South Australia, £3,000; Western Australia, £9,000; and Tasmania, £3,000. The Council for Scientific and Industrial Research is investigating diseases affecting the tobacco plant, including work on disease-resisting varieties, and is making tests of smoking quality. The Council has been successful in discovering effective means of preventing blue mould, and consequently the development of the industry should proceed on much sounder lines than hitherto. The States are carrying out field investigations on disease resistance, selection, yield and quality improvement, and are conducting instructional, demonstrational and field experimental work.

In 1938–39, the quantity of stemmed leaf used in tobacco factories in Australia amounted to 20 million lb. of which 4.5 million was of local origin and the balance was imported chiefly from the United States of America.

An expansion of the tobacco-growing industry is hoped for as a war-time measure. This development is expected eventually to reach an area of 15,000 acres and a production of about 9 million lb. With this end in view a conference of growers, Government technical experts and manufacturers was held in 1940 at which the latter undertook to increase their purchases of suitable Australian leaf to double the present quantities.

5. **Pumpkins and Melons.**—The total area of this crop in Australia during 1938–39 was 30,677 acres, of which 5,153 acres were in New South Wales, 1,429 acres in Victoria, 23,266 acres in Queensland, 410 acres in South Australia, 407 acres in Western Australia, 10 acres in Tasmania and 2 acres in the Australian Capital Territory. The production for Australia amounted to 81,101 tons.

6. **Hops.**—Hop-growing in Australia is practically confined to Tasmania and some of the cooler districts of Victoria, the total area for the season 1938–39 being 1,105 acres, of which 951 acres were in Tasmania, 135 acres in Victoria and a small area of 19 acres in Western Australia. The Tasmanian area, though still small, has increased during the present century, the total for the season 1901–2 being 599 acres. In Victoria the area, which in 1901–2 was 307 acres, dwindled to 71 acres in 1918–19, then rose to 312 acres in 1925–26 and dropped to 135 in 1938–39. The cultivation of hops was much more extensive in Victoria some 50 years ago than at present, the area in 1883–84 being 1,758 acres. During the year 1938–39 the imports of hops exceeded the exports by 175,047 lb., valued at £A.11,232. New Zealand supplied the whole of the quantity imported.

7. **Flax.**—For many years flax was grown intermittently in the Gippsland district of Victoria, and attempts were made to introduce its cultivation into Tasmania and New South Wales, but without success. About the end of 1917 the shortage of flax fibre was acute, and endeavours were made by the Commonwealth Government to encourage local cultivation. The acreage in Victoria increased from 419 acres in 1917–18 to 1,611 acres in 1919–20, but fell to 179 acres in 1928–29. As the result of a bounty introduced in 1930 the area increased to 1,216 acres in 1930–31, but this expansion was not maintained during the years following. In 1938–39, however, another attempt was made to establish the industry and 1,358 acres were planted in this State compared with 1,167 acres in the previous year. In South Australia, 4 acres producing 6 cwt. of seed valued at £7 was also recorded.

The linseed flax industry has been the subject of two investigations during recent years, namely, in 1933 and in 1936 (see Official Year Book, No. 32, p. 658).

Bounty was paid on flax and linseed grown in Australia between the years 1907 and 1918 and again for a period of five years ending 28th February, 1935. During these periods the total amounts disbursed as bounty were £2,376 and £2,839 respectively.

As a war-time measure, a rapid expansion of the flax-growing industry is now taking place. Owing to the failure of supplies from European countries, the British Empire is experiencing a shortage of flax necessary for war and civil needs. Arrangements have been made to increase the area sown to flax in Australia to 8,000 acres and a further 13,000 acres is contemplated. Fibre and tow produced will be sold to the Government of the United Kingdom at prices already arranged.

8. *Millet*.—Millet figures in the statistical returns of three of the States. The total area devoted thereto in 1938-39 was 4,057 acres, of which 2,868 acres were in New South Wales, 624 in Victoria, and 565 in Queensland. The particulars here given relate to millet grown for grain and fibre, the quantity for green forage being dealt with in the section relating thereto.

9. *Nurseries*.—In all the States fairly large areas are occupied as nurseries. Figures in regard to acreages under flowers, fruit-trees, etc., are available for New South Wales, Victoria, South Australia, Western Australia, and Tasmania. During 1938-39 the areas in these States were 842, 1,229, 177, 190, and 330 acres respectively.

10. *Cotton*.—(i) *General*. The production of cotton in Australia is restricted to Queensland where cultivation began in 1860, and ten years later the area cropped had increased from 14 acres to over 14,000 acres. The reappearance of American cotton in the European market on the conclusion of the Civil War gave a severe setback to the new industry, and the area declined continuously until 1888, when only 37 acres were planted. Later on the industry was revived, and manufacturing on a small scale was undertaken on two separate occasions at Ipswich, but low prices over a term of years checked development.

(ii) *Bounties, etc.* In 1913 the Queensland Government made an advance of 1½d. per lb. on seed cotton, and ginned it on owner's account, the final return being equal to about 1¾d. per lb. The rise in price enabled the Government to offer a guarantee of 5½d. per lb. for seeded cotton of good quality for the three years ended 31st July, 1923, and the area picked increased from 166 acres in 1920 to 50,186 acres in 1924. Guarantees were continued until 1926, when the Commonwealth Government granted a bounty varying from ¾d. to 1½d. per lb. according to grade. In addition, the cotton-manufacturing industry received a graduated bounty on all cotton yarn manufactured in Australia which contained 50 per cent. of home-grown cotton. This bounty, however, ceased to operate after 30th June, 1932. The cotton-growing industry was further assisted by the Bounty Act of 1934, which extended the period to 1940 as well as varying the rate of bounty.

The Raw Cotton Bounty Act 1940 provided an extension of assistance for a further period of five years ended 31st December, 1945.

(iii) *Expansion of the Cotton-growing Industry*. The increased demand for raw cotton to meet Australia's war and civil needs has stimulated production. At present Australia is only producing one-third of its requirements and efforts are being directed to reduce the nation's dependence upon imported raw cotton obtained chiefly from the United States of America and India. Production is to be increased by means of an extension of area and the introduction of irrigation methods. The expansion of the industries connected with the spinning and weaving of cotton is referred to in Chapter XVIII. "Manufacturing Industry".

The area under cultivation and the production in Queensland since the year 1929 are shown hereunder:—

COTTON : AREA AND PRODUCTION IN QUEENSLAND.

Season Ended September.	Area Harvested.	Production of Cotton.			Average Yield per Acre Harvested.	
		Unginned.	Ginned.	Ginned Equivalent in Bales.(a)	Unginned.	Ginned.
		Acres. lb.	lb.	Bales.	lb.	lb.
1929 ..	15,003	8,024,502	2,535,743	5,044	535	169
1930 ..	22,652	17,022,897	5,600,533	11,051	752	247
1931 ..	22,452	15,244,644	4,908,775	9,689	679	219
1932 ..	29,995	6,270,116	2,018,977	3,989	209	67
1933 ..	68,203	17,718,306	5,545,830	10,974	260	81
1934 ..	43,397	26,924,179	8,777,282	17,471	620	202
1935 ..	54,947	20,785,418	7,067,042	14,515	378	129
1936 ..	62,200	19,198,600	6,653,973	13,504	309	107
1937 ..	52,692	11,792,828	4,113,684	8,519	224	78
1938 ..	66,470	13,687,872	4,773,936	9,654	206	72

(a) Bales of 500 lb.

11. **Coffee.**—Queensland is the only State in which coffee has been grown to any extent, and the results have not been satisfactory. The area of this crop reached its highest point in the season 1901-2 with 547 acres. Thereafter the acreage fluctuated, but on the whole with a downward tendency, and in 1938-39 only 19 acres were recorded with a production of 9,980 lb.

12. **Other Crops.**—Miscellaneous small crops grown in Australia include tomatoes, rhubarb, artichokes, arrowroot, chicory and flowers.

§ 18. Bounties.

1. **Bounties.**—The bounties paid by the Commonwealth Government during the year ended 30th June, 1940, amounted to £289,107. This amount refers only to bounties paid under the Bounties Acts and does not include financial assistance given to wheat-growers and other primary producers under other Acts. Particulars of the assistance so rendered by the Commonwealth Government are furnished hereafter. Details of the amounts paid as bounty during the years 1935-36 to 1939-40 are as follows:—

BOUNTIES : AUSTRALIA.

Articles on which Bounty was Paid.	Rate of Bounty Payable.	Date of Expiry of Bounty.	Amount Paid.				
			1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
			£	£	£	£	£
Iron and Steel Products Bounty Act— *Wire Netting ..	12s. per ton (a) ..	23rd Oct., 1939.	10,659	8,467	6,741	5,736	4,451
Traction Engines .. * Manufactured from Materials pro- duced and manu- factured in Aus- tralia	According to capacity, £40-£90 per tractor less 10 per cent. from 9th July, 1930, increased to 16 per cent. from 7th November, 1930, and to 40 per cent. from 11th July, 1931. Restored to original rate from 4th December, 1933(a)	23rd Oct., 1939.	9,814	20,503	25,556	17,313	6,052

(a) Subject to 20 per cent. reduction under Financial Emergency Act.

BOUNTIES: AUSTRALIA—continued.

Articles on which Bounty was paid.	Rate of Bounty Payable.	Date of Expiry of Bounty.	Amount Paid.				
			1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Wire Netting Bounty Act 1939	9s. 7d. per ton ..	23rd Oct., 1944.	£ ..	£ ..	£ ..	£ ..	£ 83
Tractor Bounty Act 1939	According to capacity, £32-£72	23rd Oct., 1944.	..	..	..	..	6,400
Motor Industry Bounty Act— Radiator Assembly ..	10s. each ..	6th Dec., 1940.	..	..	..	..	2,396
Sulphur Bounty Act— Sulphur from Australian Pyrites and other Sulphide Ores or Concentrates	£2 5s. per ton(a) ..	23rd Oct., 1939.	74,282	68,011	83,144	87,575	55,036
Wine Export Bounty Act 1934-35— Fortified Wine, containing not less than 34 per cent. of proof spirit, exported from Australia from 1st March, 1935, to 29th February, 1940	1s. 3d. per gallon	29th Feb., 1940.	194,467	214,886	184,693	167,872	..
Wine Export Bounty Act 1939	1s. per gallon from 1st March, 1940	28th Feb., 1945.	..	..	..	..	146,592
Raw Cotton Bounty Act—(a) Raw cotton produced in Australia and graded as prescribed	5½d. per lb. to 30th November, 1935, 4½d. to 30th November, 1936, and 4¼d. per lb. to 30th November, 1940, fluctuating according to variations in Liverpool price	30th Nov., 1940.	77,089	50,643	95,044	115,012	60,391
Papua and New Guinea Bounties Act—(a) Cocoa Beans ..	1½d. per lb. ..	31st Dec., 1947.	1,166	1,285	1,774	2,885	3,595
Bamboos and Rattans (Unmanufactured)	£4 per ton ..	" "	..	..	..	27	..
Manila, Sisal and Other Hemp Fibres	£6 per ton ..	" "	..	..	..	2	..
Coir Fibre ..	£3 per ton ..	" "	..	..	..	45	239
Fruit Exported— Oranges ..	2s. per export case	(b)	7,886	..	..	..	..
Oranges, Lemons, Grape Fruit and Mandarins	Varies from 1s. to 2s. per case	(b) 31st Dec., 1940.	..	7,431	..	..	..
Apples and Pears ..	4d. per bushel case	(b)	81,047	..	..	..	..
Prunes ..	4½d. " " "	(b)	..	104,045	..	..	..
	2½ " " "	(b)	..	..	54,643	..	..
	¾d. per lb. "	(b)	6,707	..	..	..	..
	½d. " "	(b)	..	2,200	..	..	..
Total .. ..	.. ..	..	6463,179	477,471	461,402	406,287	289,107

(a) Subject to 20 per cent. reduction under Financial Emergency Act on production prior to 1st January, 1938. (b) Acts passed in respect of each year. (c) Including £62 Flax and Linseed Bounties Act, 1930.

2. **Other Financial Assistance.**—In addition to the payment of bounties mentioned in the preceding paragraph financial assistance has been granted by the Commonwealth Government for the relief of wheat-growers, fruit-growers and other primary producers. The amounts shown, however, do not include such items as the expenditure on cattle tick control, banana industry, tobacco investigation and apple and pear research, which indirectly benefits the industries concerned. The distribution as bounty, relief or subsidy has been made in the following manner :—

AMOUNTS PAID BY THE COMMONWEALTH GOVERNMENT TO ASSIST PRIMARY PRODUCERS : AUSTRALIA.

Amounts paid to—	Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
		£	£	£	£	£	£	£	£
Wheat-growers as—									
Bounty (a) ..	1931-32	950,546	820,635	64,620	874,630	716,826	2,057	..	3,429,314
Relief ..	1932-33	570,902	442,421	40,744	507,138	436,145	2,342	308	2,000,000
Relief ..	1933-34	911,094	603,586	76,455	764,543	639,493	(b)57,024	805	3,053,000
Bounty (a) ..	1934-35	531,593	285,000	45,717	300,687	296,652	2,543	222	1,462,414
Special Relief	1934-35	100,000	192,000	12,000	127,000	137,000	5,250	..	573,250
Relief ..	1934-35	590,000	400,000	42,740	503,545	434,527	(b)33,906	226	2,004,944
Relief ..	1935-36	565,327	441,948	42,835	432,146	392,850	(b)40,403	360	1,915,869
Relief (c) ..	1938-39	558,489	307,564	70,824	398,559	421,296	(b)51,961	..	1,808,693
Relief (d) ..	1939-40	910,839	415,110	109,805	436,667	497,888	114,716	1,033	2,486,067
Total ..	..	5,688,790	3,908,273	505,740	4,344,915	3,972,677	310,202	2,954	18,733,551
Fruit-growers as—									
Relief (e) ..	1933-34	8,225	36,321	478	5,258	10,918	63,800	..	125,000
Relief (e) ..	1934-35	12,538	22,299	2,103	13,116	14,713	70,231	..	135,000
Total ..	..	20,763	58,620	2,581	18,374	25,631	134,031	..	260,000
Primary Producers (other than wheat-growers)—									
Manure subsidy ..	1932-33	19,903	88,697	32,588	34,930	59,823	17,711	32	244,684
Manure subsidy ..	1934-35	23,000	95,000	21,000	46,000	52,000	13,000	..	250,000
Manure subsidy ..	1935-36	56,211	203,324	40,944	99,610	105,821	28,127	94	534,131
Manure subsidy ..	1936-37	40,058	129,637	25,144	59,136	58,327	14,610	88	327,000
Manure subsidy ..	1937-38	30,048	99,746	18,828	48,000	53,028	12,450	66	262,166
Manure subsidy ..	1938-39	18,290	76,500	19,020	36,400	43,260	12,400	90	206,020
Manure subsidy (f) ..	1939-40	4,297	17,100	4,320	783	320	250	..	23,200
Total ..	..	187,937	710,004	161,844	324,859	363,579	98,608	370	1,847,201
Grand Total ..	..	5,897,490	4,676,897	670,165	4,688,148	4,361,887	542,841	3,324	20,840,752

(a) Rate of Bounty 4½d. per bushel in 1931-32 and 3d. per bushel in 1934-35. (b) Includes special grant to Tasmania.
 (c) Including the unexpended balance (£23,892) and without deducting refunds and expenses (£14,862). (d) Including refunds and administrative expenses. (e) Growers of apples, pears and mandarins. (f) Subject to revision.

The moneys granted for the assistance of wheat-growers in 1932-33 and 1933-34 were paid through the Governments of the States on an acreage basis. In 1934-35, in accordance with the recommendations of the Royal Commission on the wheat industry, assistance took the form of a bounty of 3d. per bushel, supplemented by a further relief payment of 3s. per acre. Further special relief was given to those farmers who were adversely affected by the weather conditions of the 1934-35 season. Altogether, the amount paid during 1934-35 for the benefit of wheat-growers exceeded £4 million. For the year 1935-36 the amount paid by the Commonwealth Government as relief was £1,915,869. No financial assistance was made to wheat-growers by the Commonwealth Government during the years 1936-37 and 1937-38. In 1938-39, however, a sum of £1,808,693, collected through the medium of a flour tax, was allocated for distribution as relief to wheat-growers. From the same source, a sum of £2,486,067 was allocated to the States for the same purpose during 1939-40.

The relief granted to fruit-growers was paid to growers of apples, pears and mandarins. Assistance has been given to primary producers, other than wheat-growers, in the form of a manure subsidy; the rate was 15s. for each ton of artificial manure

used in the production of primary produce, but in 1936-37 this was reduced to 10s. per ton. The payment of this subsidy ceased on 30th June, 1939. Since 1932-33 more than £1,847,000 has been distributed in this manner.

In addition to the assistance outlined above the Loan (Farmers' Debt Adjustment) Act 1935 made provision for grants, totalling £12 million, to be made available to the States for the adjustment of farmers' debts. Of this amount £10 million was allocated as follows:—New South Wales, £3,450,000; Victoria, £2,500,000; Queensland, £1,150,000; South Australia, £1,300,000; Western Australia, £1,300,000; and Tasmania, £300,000. The remaining £2 million is to be allocated in the same proportion, but is subject to review at a later date.

§ 19. 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. The divergent character of the soils presented a difficulty in the proper use of fertilizers for different crops and the outstanding development of wheat-growing made a system of crop rotation impracticable. The importance of fallowing and the application of suitable fertilizers in adequate quantities is, however, now widely 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.

2. **Fertilizers Acts.**—In order to protect the users of artificial manures, 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 will be found in Official Year Book No. 12, p. 378.

3. **Imports.**—The Australian production of prepared fertilizers is sufficient for local requirements. Imports consist chiefly of rock phosphate, which is used in making superphosphate, a valuable fertilizer for cereals. During 1938-39 the value of rock phosphate imported represented 65 per cent of the total imports of fertilizers. Nauru, Cocos Island and Gilbert and Ellice Islands Colony supplied the whole of the shipments. Sodium nitrate is obtained chiefly from Chile.

The imports of manures during the last five years are given in the following table. Although considerable quantities of manufactured superphosphate were imported up to the year 1914-15, imports have now dwindled to negligible quantities:—

FERTILIZERS: IMPORTS INTO AUSTRALIA.

Australian Currency Values.

Fertilizer.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Ammonium Sulphate	cwt.	229,200	491,208	573,979	604,566	710,065
" "	£	104,809	216,671	240,089	279,949	336,872
Potash Salts	cwt.	149,701	209,379	269,476	212,308	223,202
" "	£	59,841	75,120	115,925	97,989	102,794
Rock Phosphate	cwt.	8,201,296	10,488,165	13,259,884	15,551,909	16,008,437
" "	£	610,092	735,962	893,252	984,313	1,038,399
Sodium Nitrate	cwt.	83,548	110,273	134,311	188,129	203,666
" "	£	39,431	49,580	71,885	84,664	103,074
Superphosphate	cwt.	51,360	40	20	..	..
" "	£	3,449	9	4	..	..
Other	cwt.	7,712	116,549	38,425	3,357	125,551
" "	£	3,431	13,598	6,075	3,275	12,237
Total	cwt.	8,722,817	11,415,614	14,276,095	16,560,269	17,270,921
	£	821,053	1,090,940	1,327,230	1,450,190	1,593,377

4. Exports.—The subjoined table shows the exports of manures for the years 1934-35 to 1938-39. Practically all these fertilizers are manufactured locally, the quantities exported being consigned chiefly to the Pacific Islands, New Zealand and Japan :—

FERTILIZERS : EXPORTS FROM AUSTRALIA.

Fertilizer.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Ammonium sulphate	cwt.	2,553	4,061	5,011	2,613	2,097
" "	£	1,074	1,569	974	1,094	940
Bone-dust	cwt.	41	2,576	2,865	3,224	5,238
" "	£	17	1,396	1,597	1,809	2,931
Rock phosphate	cwt.	..	..	1	220	61
" "	£	..	..	7	60	143
Sodium nitrate	cwt.	1	..	59	10	22
" "	£	1	..	59	17	42
Superphosphate	cwt.	31,116	36,454	41,254	33,924	37,002
" "	£	5,590	6,261	7,136	5,875	6,182
Other	cwt.	18,188	29,300	68,817	102,664	53,197
" "	£	1,703	11,665	34,104	52,484	27,323
Total	cwt.	51,899	72,391	118,007	142,655	97,677
	£	8,385	20,891	43,877	61,339	37,561

5. Quantities Locally Used.—Information regarding the area manured and the quantity used in each State during the year 1938-39 is given in the following table. The details are not complete as the area manured and the quantity used in the top-dressing of pasture lands in Queensland are not available. This omission, however, does not seriously impair the value of the table. Details of the area manured with natural manure (stableyard, etc.) have been omitted ; in 1938-39 the area and quantity involved amounted to 112,979 acres and 608,403 loads :—

AREA MANURED AND QUANTITY OF MANURE USED, 1938-39.

State or Territory.	Artificial Manure (Superphosphates, Bone-dust, Nitrates, etc.)				Total Area Manured.	Total Artificial Manure Used.
	Area of Crops Manured.		Pasture Lands Top-dressed.			
	Acres.	Tons.	Acres.	Tons.		
New South Wales	4,670,693	148,646	823,430	37,923	5,494,132	186,569
Victoria	4,380,947	184,866	3,974,938	210,297	8,355,885	395,163
Queensland	238,489	61,300	(a)	(a)	(b)238,489	(b)61,300
South Australia	4,281,419	179,118	1,095,120	56,325	5,376,539	235,443
Western Australia	4,613,482	216,735	1,259,347	63,649	5,872,829	280,384
Tasmania	208,212	19,433	261,787	14,495	469,999	33,933
Northern Territory	..	..	..	..	..	..
Australian Capital Territory	7,300	366	1,571	66	8,871	432
Total	18,400,542	810,469	7,416,202	382,755	25,816,744	1,193,224

(a) Not available.

(b) Excluding Pasture Lands. Quantity considered to be negligible.

Particulars of the quantity of artificial manure used in each of the States and Territories during the past ten years are included in the next table. These details include the quantity used in the top-dressing of pasture lands except where indicated by the

ootnote. The omission of Queensland, as previously mentioned, does not detract from the value of the table as the area involved is considered to be negligible :—

QUANTITY OF ARTIFICIAL MANURE USED : AUSTRALIA.

Year.	N.S.W.		Victoria.		Q'land. (a)		S. Aust.		W. Aust.		Tas.		N.T.		A.C.T.		Total. (b)	
	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1929-30	129,076	269,967	22,925	196,746	231,128	24,810	137	874,789										
1930-31	132,619	274,420	28,783	205,110	236,146	24,870	131	902,079										
1931-32	70,374	163,234	31,255	148,707	178,509	22,050	92	614,221										
1932-33	89,955	199,557	35,505	157,995	199,337	24,335	128	706,712										
1933-34	98,313	217,251	42,517	158,989	203,848	25,844	120	746,882										
1934-35	101,885	211,657	44,279	157,189	196,741	25,824	135	737,710										
1935-36	123,472	251,897	40,393	174,593	202,325	27,104	166	819,952										
1936-37	151,088	306,846(c)	40,392	208,053	224,473	31,364	4	304	962,525									
1937-38	178,369	364,281	66,889	227,547	249,640	33,131	..	357	1,120,214									
1938-39	186,569	395,163	61,300	235,443	280,384	33,933	..	432	1,193,224									

(a) Exclusive of quantity used in top-dressing pasture lands. (b) Incomplete. See Note (a).

(c) 1935-36.

As mentioned in § 18 the Commonwealth Government has encouraged the use of artificial manure by subsidizing primary producers, other than wheat-growers, at the rate of 15s. per ton up to 1936-37 when the subsidy was reduced to 10s. per ton. The payment of this subsidy ceased on 30th June, 1939. The expansion in the use of artificial manure since 1932-33, when the subsidy was introduced, is indicated in the table above.

6. 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 1938-39 was 36, made up as follows :—New South Wales, 5 ; Victoria, 7 ; Queensland, 6 ; South Australia, 6 ; Western Australia, 5 ; and Tasmania, 7. The production of superphosphates in Australia during 1938-39 amounted to 1,199,444 tons, the largest producing States being Victoria, Western Australia and South Australia.

§ 20. Ensilage.

1. Government Assistance in Production.—The various State Governments devote a considerable amount of attention to the education of the farming community in 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.—Information regarding the number of holdings on which ensilage was made and the quantity made during the seasons 1934-35 to 1938-39 is given in the following table.

ENSILAGE MADE.

State.	1934-35.		1935-36.		1936-37.		1937-38.		1938-39.	
	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.	Holdings.	Ensilage Made.
	(a) No.	Tons.	(a) No.	Tons.	(a) No.	Tons.	(a) No.	Tons.	(a) No.	Tons.
New South Wales	1,068	88,991	1,311	109,731	1,350	113,542	1,399	109,628	1,476	124,496
Victoria	369	22,145	326	22,346	549	32,902	841	46,860	549	28,716
Queensland	105	7,566	86	5,644	(b) 86	(b) 5,644	291	14,831	291	17,772
South Australia	109	6,794	124	9,160	118	9,270	160	11,183	103	6,056
Western Australia	423	16,996	332	14,896	306	13,197	379	17,650	328	16,156
Tasmania	52	2,473	29	1,341	17	619	20	648	12	490
Australia	2,126	144,965	2,208	163,118	2,426	175,174	3,090	200,800	2,759	193,686

(a) No. of holdings on which ensilage was made. (b) 1935-36.

The drought of 1902-3 drew increased attention to the value of stocks of ensilage and during the four seasons ended 1909-10 there was an increase both in the number of holdings on which ensilage was made and in the quantity produced. The following five seasons, however, showed a falling off, but the reduction was due to the fact that stocks had not been drawn upon to any great extent during the previous seasons. The accumulated stocks proved of great value during the 1914 drought, though far below what would have been the case if more attention had been paid to production during the

previous years, when there was a surplus of green forage. The quantities made since that date have fluctuated considerably, but the output has increased during recent years. In 1938-39, the production amounted to 193,686 tons, which was slightly under the record quantity of 200,800 tons recorded in 1937-38.

§ 21. Agricultural Colleges and Experimental Farms.

1. **General.**—In most of the States agricultural colleges and experimental farms have been established with a view to the promotion of more scientific methods in agriculture, stock-breeding and dairying. In the colleges, and on some of the farms, provision is made for the accommodation of pupils to whom both practical and theoretical instruction is given by experts in various branches of agriculture. Analyses of soils and fertilizers are made, manures are tested, and elementary veterinary science, etc., are taught, while general experimental work is carried on with cereal and other crops, not merely for the purpose of showing that it is practicable to produce certain crops in a given place, but to show also how it is possible to make farming pay in the locality. Opportunities are afforded for practice in general agricultural work, and instruction is given in the conservation of fodder; in cheese and butter making; in the management, breeding and preparation for the market of live stock; in the eradication of pests and weeds; and in carpentering, blacksmithing and other trades.

Expert lecturers visit the various agricultural and dairying centres, and there is a wide distribution of periodical agricultural gazettes and bulletins.

2. **Agricultural Colleges and Experimental Farms.**—In previous issues of this publication detailed information is given regarding agricultural colleges, experimental farms and agricultural education generally (see Official Year Book No. 11, pp. 393-5). A summary in respect of the year 1938-39 will be found in the *Production Bulletin* No. 33, Part II., issued by this Bureau.

3. **Agricultural and Stock Departments.**—A synopsis of the activities and operations of the Agricultural and Stock Departments of the several States on 30th June, 1920, will be found in Official Year Book No. 14, pp. 1180-91.

§ 22. Employment in Agriculture.

Information relating to the number of persons employed is furnished annually by landholders of one acre and upwards. The particulars furnished refer to the owner, occupier or manager, those members of his family, and other employees who are permanently engaged throughout the year in the work of the farm. Casual labour, such as harvesters and fruit-pickers, is excluded. In the collection of statistics of this nature difficulty is experienced in correctly determining whether the duties of female employees are more domestic than rural and on that account it is considered advisable to leave females out of the table.

MALES EMPLOYED IN AGRICULTURE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
1913-14 ..	61,525	51,932	33,362	34,111	18,210	11,789	210,929
1923-24 ..	48,176	49,740	38,186	31,532	22,153	12,905	202,692
1933-34 ..	42,084	38,514	46,097	30,329	24,925	13,945	195,894
1934-35 ..	42,135	37,294	47,242	30,177	23,775	13,353	193,976
1935-36 ..	42,204	35,926	45,878	30,096	22,585	12,731	189,420
1936-37 ..	43,648	35,575	(a)45,878	30,273	22,317	12,138	189,829
1937-38 ..	43,279	35,592	(a)45,878	30,365	22,527	11,929	189,570
1938-39 ..	44,627	35,548	(a)45,878	28,981	19,653	11,676	186,363

(a) 1935-36.

Although the area of crops has expanded considerably during the past two decades there has been a decrease in the numbers employed in agriculture owing to the increasing use of machinery both in the cultivation of the soil and in the harvesting of the crops. For a number of years prior to the economic depression the value of machinery employed in agricultural pursuits steadily increased until it reached nearly £39 million in 1928-29. After 1929-30 machinery values declined each year to £30 million in 1934-35, but thereafter rose again to £37 million in 1938-39.

CHAPTER XV.

FARMYARD, DAIRY AND BEE PRODUCTS.

§ 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 (see Official Year Book No. 6, p. 430). It may here be noted that the original stock has been crossed with specially imported stud cattle, while further judicious crossings of strains have resulted in an increased and improved milk supply. In Australia, dairy cattle thrive in the open throughout the year, local climatic conditions demanding no protection other than tree plantations for shelter, and 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 pasturages and in the processes of manufacture, coupled with herd testing and effective State supervision, the dairying industry has shown rapid expansion. An investigation into the problems of the dairying industry was instituted by the Commonwealth Government in 1929, and the first report dealing with farm production was completed in 1930. It was proposed to issue additional reports, but the investigation was discontinued. Investigation by the British Medical Research Council into the vitamin content of Australian, New Zealand and British butter respectively showed high and uniform results for the Australian product, the figures being on a par with those for the United Kingdom and other European countries. It was demonstrated also 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. **Official Supervision of 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 *materiel*, prevails. Financial assistance of a temporary nature is also given.

The export trade is regulated by the terms of the Commonwealth Commerce Act 1905 and regulations thereunder. The provisions of this Act are set out in detail in Official Year Book No. 6, pp. 431-2. 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.

3. **Stabilization Scheme.**—(i) *Voluntary Plan.* During the period from January, 1926 to May, 1934, a voluntary scheme known as the "Paterson Plan" was in operation, and had the effect of stabilizing the price of butter in Australia. The scheme provided for the payment of a levy on all butter produced in Australia sufficient to pay a bounty on export which ranged from 3d. to 4½d. per lb. The local price was raised by the amount of the bounty per unit while the return to the producer on all butter produced was increased by approximately the difference between the rate of bounty paid and the rate of levy charged.

The scheme, however, did not receive the full support of all manufacturers of butter and was superseded by a system of compulsory control of sales.

(ii) *Compulsory Plan.* Legislation known as the Dairy Produce Act was passed by the Commonwealth Parliament towards the end of 1933, and at the same time complementary legislation was passed by the Parliaments of New South Wales, Victoria, Queensland and Tasmania. As a result of a referendum among producers held in 1936, Tasmania withdrew from the plan and the State Act expired. In the Commonwealth Act power was given to regulate interstate trade whilst the State Acts were designed to regulate trade within the respective States. The authority set up by each State Act fixed the proportion of the State's production to be sold within the State, whilst the Commonwealth Act protected this allocation by regulating the movement of butter and cheese from one State to another and so ensured the removal from the Australian market of the surplus production.

The compulsory plan was invalidated by the decision of the Privy Council which declared in the James (Dried Fruits) Case that no power existed in the Commonwealth Constitution to regulate trade between the States; the marketing of dairy produce is now being continued on a voluntary basis.

4. *Mixed Farming.*—Dairying is not now, as formerly, wholly confined to agriculturists, since many graziers in a large way of business have lately given 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. Local wants are thus met, and in many places remote from the metropolis well-equipped factories have been established. The extent to which dairy cows and pigs are run in conjunction with the growing of wheat is referred to in Chapter XIV. "Agricultural Production".

5. *Factory System.*—Cream separation and butter-making are often carried on together under the co-operative system. The creation of large central butter factories, supplied by numerous separating establishments or "creameries," has resulted in a considerable reduction in the cost of manufacture, since improved appliances such as refrigerators, etc., may be profitably worked at the larger establishments. The product is also of a more uniform quality and the number of farmers who prefer to convert the cream rather than send it to the factory is rapidly diminishing. Formerly the average quantity of milk used per pound of hand-made butter was about 3 gallons, but separator butter requires less than 2½ gallons.

6. *Butter and Cheese Factories.*—The factories in Australia for the manufacture of butter, cheese and condensed milk numbered 523 in 1938-39. They were distributed among the States as follows:—New South Wales, 129; Victoria, 174; Queensland, 102; South Australia, 50; Western Australia, 24; and Tasmania, 44. Fuller details regarding numbers of factories, output, etc., are given in Chapter XVIII. "Manufacturing Industry".

7. *Ottawa Conference.*—Details of the agreement reached at the Imperial Economic Conference at Ottawa in August, 1932, regarding the dairying, bee and poultry industries are given in previous issues of the Official Year Book.

8. *Employment.*—The number of persons employed in the dairying industry is ascertained at the annual census of dairy production. The particulars collected are in respect of those persons who are permanently engaged in the actual work of the farm and include owner, occupier or manager, members of the family and other permanent

employees. Casual hands are excluded ; so are females whose duties are mainly domestic although they may assist in the outdoor work of the farm. In the earlier years, however, these females were in many cases included as farm workers.

EMPLOYMENT IN DAIRYING INDUSTRY.

Year and Sex.		N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
		No.	No.	No.	No.	No.	No.	No.
1918-19	Males ..	24,561	25,447	14,346	1,712	586	1,457	68,109
	Females ..	17,160	19,539	13,082	9,378	630	2,005	61,794
1928-29	Males ..	30,997	26,646	22,735	2,199	2,306	2,179	87,062
	Females ..	9,765	10,101	15,622	2,203	592	1,035	39,318
1934-35	Males ..	38,231	41,833	32,132	4,339	5,089	3,138	124,762
	Females ..	6,823	8,531	20,493	3,244	1,189	1,916	42,196
1935-36	Males ..	38,150	42,072	31,457	4,500	5,465	3,539	125,183
	Females ..	6,481	7,790	21,080	2,756	1,249	2,462	41,818
1936-37	Males ..	37,450	41,922	(a)31,457	4,578	5,261	3,332	124,000
	Females ..	5,444	7,666	(a)21,080	2,331	1,143	2,234	39,898
1937-38	Males ..	35,940	41,878	(a)31,457	4,540	5,495	3,634	122,944
	Females ..	6,027	7,406	(a)21,080	2,779	1,129	2,146	40,567
1938-39	Males ..	35,860	41,829	(a)31,457	4,436	6,365	3,917	123,864
	Females ..	6,505	7,222	(a)21,080	2,812	1,661	2,200	41,880

(a) Information not available; figures for previous year shown.

The employment of males shown in the table above gives some indication of the expansion of the dairying industry since 1918-19. This is further exemplified in the following table :-

DAIRYING INDUSTRY: AUSTRALIA.

Year.	Number of Dairy Cows.	Production of Butter.	Value of Machinery employed on Dairy Farms.	Number of Males employed.
	No.	lb.	£	No.
1918-19	1,901,000	181,802,675	1,325,502	68,109
1928-29	2,466,000	290,790,190	3,437,000	87,062
1937-38	3,368,899	430,261,610	4,768,000	122,944
1938-39	3,353,825	455,834,329	5,659,000	123,864

§ 2. Dairy Cattle and Dairy Products.

1. Dairy Herds.—The dairy herds of Australia were severely depleted during the drought of 1914-15, when the number was reduced to 1,684,393. Following that year there has been a steady expansion in the number of dairy cattle until in 1938 there were nearly 3.4 million. In New South Wales, Victoria, South Australia and Tasmania the proportion of dairy cattle to all cattle is high. In Queensland, the Northern Territory and Western Australia there is a greatly preponderating number of other cattle, the main object in these areas being the production of beef. Dairying, however, has developed greatly in Southern Queensland since 1914-15, and the largest contribution to the Australian increase previously mentioned has been made by this State. The number of dairy cows shown in the following table includes heifers intended for milking and being within three months of calving. Figures for these heifers, however, are not collected in Tasmania, but in the other States they numbered 145,306.

A graph showing the distribution of dairy cows in Australia during 1938-39 appears on p. 336.

NUMBER OF CATTLE AND DAIRY CATTLE.

State.		1934.	1935.	1936.	1937.	1938.
New South Wales	All Cattle	3,482,831	3,388,538	3,288,169	3,019,581	2,811,884
	Dairy Cows	1,112,861	1,091,562	1,069,888	1,047,332	1,026,299
Victoria	All Cattle	2,085,080	2,091,246	2,005,759	1,880,429	1,697,295
	Dairy Cows	951,849	987,676	968,555	952,906	889,250
Queensland	All Cattle	6,052,641	6,033,004	5,950,572	5,959,165	6,097,080
	Dairy Cows	939,254	955,746	914,815	985,858	1,059,560
South Australia	All Cattle	346,479	335,354	328,013	324,163	318,897
	Dairy Cows	170,250	173,706	169,761	164,903	164,116
Western Australia	All Cattle	911,940	882,761	792,508	740,241	767,680
	Dairy Cows	129,875	130,132	126,301	124,278	128,726
Tasmania	All Cattle	261,588	270,935	261,597	254,812	262,407
	Dairy Cows	91,223	97,350	93,657	92,493	93,816
Northern Territory	All Cattle	899,679	900,535	855,398	891,640	899,472
	Dairy Cows	(a)	(a)	(a)	(a)	(a)
Australian Capital Territory	All Cattle	8,433	10,186	9,856	8,325	7,957
	Dairy Cows	1,019	1,052	1,116	1,129	1,046
Australia	All Cattle	14,048,671	13,911,659	13,491,872	13,078,356	12,861,781
	Dairy Cows	3,396,331	3,437,224	3,344,093	3,368,899	3,353,825

(a) Not available.

2. Milk.—The annual quantity of milk produced per dairy cow varies greatly with breed, locality and season, reaching as high as 1,000 gallons, but averaging for the whole of Australia for all dairy cows and for all seasons prior to 1916 considerably under 300 gallons per annum. In recent years not only has there been an improvement in the quality of the cattle, but the application of scientific methods is being continually extended, and the 300-gallon average has been exceeded in each year since 1924, the yield of 392 gallons in 1931 constituting a record. The average annual yields per cow given in the following table for the last five years are based on the number of dairy cows which were in milk during any part of the year. The average given, is, therefore, below 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 the total quantity of milk obtained during any year. In addition, there is the further difficulty of ascertaining with any degree of 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:—

MILK PRODUCTION.

Heading.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Australia. (b)
1934-35—								
Dairy Cows (a) .. No.	1,052,644	887,841	870,637	150,745	120,045	92,799	683	3,175,394
Production 1,000 gals.	357,459	403,939	302,173	53,359	36,758	31,840	297	1,184,925
Aver. per cow .. gal.	340	454	347	354	306	343	435	373
1935-36—								
Dairy Cows (a) .. No.	1,055,539	925,295	910,760	156,122	123,932	94,286	988	3,266,922
Production 1,000 gals.	345,346	399,742	261,266	59,042	38,138	33,737	272	1,137,543
Aver. per cow .. gal.	327	432	287	378	308	358	275	348
1936-37—								
Dairy Cows (a) .. No.	1,036,131	938,966	899,092	157,485	121,697	95,504	1,022	3,249,897
Production 1,000 gals.	317,617	423,305	266,315	63,699	36,771	31,156	365	1,079,228
Aver. per cow .. gal.	306	451	227	404	302	326	357	332
1937-38—								
Dairy Cows (a) .. No.	1,013,739	926,353	902,866	154,705	118,979	93,075	1,056	3,210,773
Production 1,000 gals.	328,008	408,271	274,043	69,067	44,740	32,425	374	1,156,928
Aver. per cow .. gal.	324	441	304	446	376	348	354	360
1938-39—								
Dairy Cows (a) .. No.	994,155	889,719	961,674	152,686	119,183	93,154	1,041	3,211,612
Production 1,000 gals.	311,384	377,882	347,336	72,251	45,541	34,102	350	1,189,116
Aver. per cow .. gal.	313	425	361	475	382	366	336	370

(a) Mean for the year.

(b) Exclusive of Northern Territory.

3. **Butter and Cheese.**—Although the quantity of dairy production is affected by the nature of the season, the large increase in the output of butter has been maintained in recent years despite the unfavourableness of some seasons. The average annual production rose from 270,000,000 lb. for the quinquennium 1924-1928 to 437,000,000 lb. for the latest five years. The largest production of butter in Australia was recorded in 1934-35, when, as a result of a specially favourable season, 470,000,000 lb. were manufactured. In 1938-39 seasonal conditions were particularly favourable in Queensland, and the output rose to a new high level of 158,000,000 lb. In the other States conditions were less favourable and the output was somewhat less than in 1937-38. The decline in these States, however, was more than offset by the increase in Queensland, the total output for Australia being only 13,000,000 lb. below that of the peak year 1934-35.

Preliminary figures indicate a total production of 476,000,000 lb. in 1939-40.

The total output of cheese is likewise dependent upon seasonal conditions. The production in 1938-39 was 65,646,000 lb., which exceeded the previous record in 1937-38 by 9,000,000 lb. The production in 1939-40 was estimated at 70,000,000 lb.

There has been a remarkable development in the production of cheese in Australia during recent years. Since 1935-36 the output has grown from 39,000,000 lb. to more than 66,000,000 lb. in 1938-39. The States contributing to this development were mainly Victoria and South Australia; the production in Victoria has nearly doubled, while that in South Australia has been even greater. Formerly Queensland was the chief producing State, but although its output is increasing, Queensland is now only the third largest producer. In Tasmania there has also been a notable increase in production, but in New South Wales the output has remained around 8,000,000 lb.

The production of butter and cheese for the five years ended 1938-39 was as follows :—

BUTTER AND CHEESE PRODUCTION.

State.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
BUTTER.					
	lb.	lb.	lb.	lb.	lb.
New South Wales	146,106,325	125,169,296	109,830,751	120,882,732	118,820,717
Victoria	147,651,179	148,132,507	154,769,391	141,321,445	130,573,918
Queensland	133,624,597	115,920,415	87,474,757	118,244,260	157,625,746
South Australia	18,513,229	20,964,305	20,892,369	22,428,298	20,716,584
Western Australia	13,308,003	12,908,745	12,360,924	15,373,334	16,244,449
Tasmania	10,689,043	10,613,358	10,918,278	11,997,323	11,835,500
Australian Capital Territory	15,086	13,849	15,223	14,218	17,415
Australia	469,907,465	433,722,475	396,261,693	430,261,610	455,834,329
CHEESE.					
	lb.	lb.	lb.	lb.	lb.
New South Wales	8,445,468	7,356,203	7,417,640	8,004,873	7,485,907
Victoria	10,095,139	10,973,804	13,350,124	16,466,038	19,554,061
Queensland	12,192,383	9,149,283	7,789,890	11,963,445	15,768,543
South Australia	6,649,661	8,103,663	12,164,819	15,516,879	18,457,598
Western Australia	643,571	865,482	1,012,139	885,418	980,254
Tasmania	1,948,963	2,150,281	2,994,227	3,770,189	3,399,626
Australia	39,975,185	38,598,716	44,728,839	56,606,842	65,645,989

4. **Condensed or Concentrated Milk.**—The manufacture of this product is of comparatively recent growth, the quantity of milk treated in 1901 being negligible, but production increased annually until in 1911 the output reached 23 million lb., nearly doubling that of the previous year. Thenceforward rapid progress was made, the greatest development taking place in Victoria. The output of condensed, concentrated and

powdered milk in this State amounted in 1934-35 to 51,390,850 lb.; in 1935-36 to 38,598,154 lb.; in 1936-37 to 53,159,599 lb.; in 1937-38 to 57,634,422 lb. and in 1938-39 to 51,741,477 lb. Production in New South Wales during 1938-39 was 13,383,734 lb. No condensed or concentrated milk is made in Tasmania. Information regarding production in the remaining States is not available for publication, but the volume is relatively unimportant. The total production for Australia in 1938-39 amounted to 72,178,827 lb. Imports of milk into Australia consist almost entirely of malted or otherwise medicated milk.

5. **War-time Contract—Butter, Cheese and Preserved Milk.** At the outbreak of war in September, 1939, contracts were negotiated between the Governments of the Commonwealth and the United Kingdom whereby the latter undertook to purchase from Australia at prices fixed according to grade 75,500 tons of butter and 13,000 tons of cheese for the period ending June, 1940. The contracts were extended for a further period to June, 1941, the prices and conditions remaining unchanged.

While no similar contract exists in regard to preserved and powdered milk, a ready market for these commodities exists in the United Kingdom and elsewhere in Eastern Asia, particularly in Malaya. Manufacturers in Australia are increasing production as far as possible to meet this demand.

6. **Oversea Trade in Butter, Cheese and Milk.**—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. The extent of this surplus is chiefly dependent upon the favourableness or otherwise of the season. Normally, the quantity of butter and cheese consumed in Australia is about 230 million lb. and 30 million lb., respectively, and production in excess of these amounts may be regarded as available for export.

The bulk of these exports is consigned to the United Kingdom. During 1938-39 217 million lb. or 95 per cent. of butter shipped went to Britain, while almost 35 million lb. or 97 per cent. of cheese exported was similarly consigned.

All butter and cheese exported comes under the provisions of the Exports (Dairy Produce) Regulations and are subject to the supervision, inspection and examination by 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. Fuller details, which include actual quantities by States, are to be found in *Production Bulletin* No. 33, Part II.

BULK BUTTER AND CHEESE, GRADED FOR EXPORT: AUSTRALIA.

Grade.	Butter.			Cheese.		
	1937-38.	1938-39.	1939-40.	1937-38.	1938-39.	1939-40.
	%	%	%	%	%	%
Choicest	61.65	54.30	51.54	15.54	17.69	17.48
First Quality ..	28.31	33.69	36.19	53.00	47.40	51.03
Second Quality ..	8.23	10.17	10.86	31.46	34.91	31.49
Third Quality ..	1.81	1.84	1.41	(a)	(a)	(a)
Total	100.00	100.00	100.00	100.00	100.00	100.00

(a) Included with Second Quality.

The following tables give the imports, exports and net exports of butter, cheese and condensed milk. In each of the five years dealt with the exports of these commodities exceeded the imports :—

BUTTER, CHEESE, AND MILK : IMPORTS AND EXPORTS, AUSTRALIA.

Australian Currency Values.

Products.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
IMPORTS.					
Butter lb.	2,096	3,826	2,678	1,691	3,425
.. .. . £	113	309	167	133	286
Cheese lb.	74,791	88,511	130,864	126,066	156,188
.. .. . £	5,949	7,052	10,225	9,969	11,551
Milk—concentrated and preserved lb.	60,289	12,861	129,039	79,737	44,135
.. .. . £	2,342	942	3,876	2,515	1,048

EXPORTS.					
Butter lb.	262,518,906	212,646,177	174,309,396	197,345,647	229,542,779
.. .. . £	9,586,776	9,832,733	8,801,643	10,781,124	12,891,837
Cheese lb.	16,829,780	12,972,627	13,924,572	27,245,638	35,924,467
.. .. . £	404,024	337,467	384,027	845,130	1,074,008
Milk—concentrated and preserved lb.	16,589,355	16,961,023	22,169,680	24,717,435	19,106,953
.. .. . £	711,242	722,301	851,769	963,873	791,100

NET EXPORTS.					
Butter lb.	262,516,810	212,642,351	174,306,718	197,343,956	229,539,354
.. .. . £	9,586,663	9,832,424	8,801,476	10,780,991	12,891,551
Cheese lb.	16,754,989	12,884,116	13,793,708	27,119,572	35,768,279
.. .. . £	398,075	330,415	373,802	835,161	1,062,457
Milk—concentrated and preserved lb.	16,529,066	16,948,162	22,040,641	24,637,698	19,062,818
.. .. . £	708,900	721,359	847,893	961,358	790,052

7. **Local Consumption of Butter and Cheese.**—The local production of butter and cheese, with the subtraction therefrom or the addition thereto of the net export or import for the corresponding period, represents approximately the quantity available for consumption in Australia. The figures for the five years ended 1938-39 are as follows :—

BUTTER AND CHEESE : LOCAL CONSUMPTION.

Products.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	lb.	lb.	lb.	lb.	lb.
Butter .. Total	207,390,655	221,080,124	221,954,975	232,917,654	226,294,975
.. .. Per head of population ..	30.94	32.75	32.62	33.93	32.67
Cheese .. Total	23,220,196	25,714,000	30,935,131	29,487,270	29,877,710
.. .. Per head of population ..	3.46	3.81	4.55	4.30	4.31

Consumption in 1938-39 averaged 32.67 lb. of butter and 4.31 lb. of cheese per head of population. The consumption of butter in the United Kingdom, Canada and New Zealand is given at 24.8 lb., 32.7 lb., and 40.7 lb. per head per annum respectively, while that of cheese amounted to 8.6 lb., 3.5 lb., and 8 lb. respectively.

§ 3. Pigs and Pig Products.

1. **Pigs.**—The number of pigs in Australia has varied considerably since the commencement of the present century. In 1904, the total amounted to 1,062,703, but after a period of fluctuations it declined to 695,968 in 1919. In 1921 the number increased to 960,000 and from that year it remained fairly constant up to 1928. Since that year more than 1,000,000 pigs have been recorded annually in Australia

with the maximum figure of 1,293,964 in 1935. The distribution of pigs among the States and Territories in 1938 was—New South Wales, 377,344; Victoria, 252,462; Queensland, 325,326; South Australia, 71,292; Western Australia, 82,922; Tasmania, 45,317; Northern Territory, 355; Australian Capital Territory, 573; total, 1,155,591. The figures for New South Wales, Victoria and the Australian Capital Territory represent the number as on the 31st March, 1939.

A more accurate index of the development of pig-raising in Australia is provided in the following table which combines the number of slaughtering with the numbers returned each year from 1929. The table discloses substantial increases in the number of pigs raised over the period under review :—

NUMBER OF PIGS AND NUMBER SLAUGHTERED : AUSTRALIA.

Year.	Number of Pigs.	Number Slaughtered.	Year.	Number of Pigs.	Number Slaughtered.
1929	1,018,324	1,337,001	1934	1,158,274	1,763,332
1930	1,071,679	1,469,718	1935	1,293,964	1,983,745
1931	1,167,845	1,510,635	1936	1,202,752	2,073,909
1932	1,162,407	1,585,133	1937	1,100,082	1,897,430
1933	1,046,867	1,636,974	1938	1,155,591	1,839,597

A great increase in the production of pork has taken place in Australia during the past ten years. Up to the year 1928-29, production was sufficient to meet local requirements and to provide a small surplus for export. Since that year, however, all local requirements have been met, and the exports have grown rapidly to more than 30 million lb. of pork.

2. **Pork Consumption.**—Particulars available regarding the consumption of pork (excluding bacon and ham) give an average for Australia of 7.53 lb. per head of population. Including bacon and ham, the average consumption amounted to 18 lb. compared with 19 lb. in New Zealand, 57 lb. in Canada, and 55 lb. in the United States of America. The figures for Australia during each of the last five years are as follows :—

PORK : LOCAL CONSUMPTION.

Product.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	lb.	lb.	lb.	lb.	lb.
Pork—Total	62,577,264	60,519,314	68,492,630	52,044,818	52,169,753
Per head of population	9.34	8.96	10.07	7.58	7.53

3. **War-time Contract.**—A contract for the sale of the surplus production of Australian pig meats was concluded between the Governments of the Commonwealth and the United Kingdom for the year ended 30th September, 1940. Fuller details of this contract will be found in Chapter XXVIII. "Miscellaneous."

4. **Bacon and Ham.**—The highest production of bacon and ham was reached in 1935-36 with an output of 77,655,178 lb. compared with 73,360,000 lb., the average for the last five years. The production in 1938-39 amounted to 74,453,963 lb. and was distributed among the several States as follows :—New South Wales, 26,418,687 lb.; Victoria, 16,510,137 lb.; Queensland, 19,021,752 lb.; South Australia, 5,987,363; Western Australia, 4,242,083 lb.; Tasmania, 2,273,601 lb.; Australian Capital Territory, 340 lb. Practically the whole of the bacon and ham produced is consumed locally. On the experience of the last five years the local consumption was about 71,200,000 lb. per year, or 10.46 lb. per unit of population. The bacon and ham exported from Australia is consigned chiefly to the Pacific Islands and the East.

5. **Oversea Trade in Pig Products.**—The oversea trade in pigs and pig products for the five years ended 1938-39 is shown in the following table:—

PIG PRODUCTS : OVERSEA TRADE, AUSTRALIA.*Australian Currency Values.*

Particulars.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
PIGS.						
Imports	No.	11	39	10	56	28
"	£	257	2,124	413	3,079	1,007
Exports	No.	240	131	164	152	69
"	£	957	708	607	979	621
Net Exports	No.	229	92	154	96	41
"	£	700	-1,416	194	-2,100	-386
BACON AND HAM.						
Imports	lb.	11,712	5,168	2,760	7,212	9,681
"	£	774	313	209	605	597
Exports	lb.	1,562,498	1,701,575	1,752,518	1,675,969	1,739,053
"	£	98,825	109,760	112,680	117,654	119,994
Net Exports	lb.	1,550,786	1,696,407	1,749,758	1,668,757	1,729,372
"	£	98,051	109,447	112,471	117,049	119,397
LARD.(a)						
Imports	lb.	25,718	13,366	29,644	28,244	106,821
"	£	493	415	941	1,240	3,065
Exports	lb.	2,523,749	2,792,008	4,051,472	4,213,026	5,490,959
"	£	41,758	53,603	69,374	63,662	67,744
Net Exports	lb.	2,498,031	2,778,642	4,021,828	4,184,782	5,384,138
"	£	41,265	53,188	68,433	62,422	64,679
FROZEN PORK.						
Imports	lb.	150,032	85,942	7,746	34	31,805
"	£	6,703	3,513	210	3	1,770
Exports	lb.	15,636,132	23,577,743	26,816,453	33,959,412	30,716,417
"	£	401,306	587,410	687,043	934,575	882,117
Net Exports	lb.	15,486,100	23,491,801	26,808,707	33,959,378	30,684,612
"	£	394,603	583,897	686,833	934,572	880,347

(a) Includes Lard Oil, and Refined Animal Fats.

NOTE.—The minus sign (—) signifies net imports.

Hitherto the output of pig products in Australia was usually sufficient to meet local requirements and provide a small surplus for export. During the five years ended 1938-39, however, oversea exports of frozen pork showed a remarkable increase averaging 26,100,000 lb. as compared with an average of 373,000 lb. for the five years ended 1930-31. The chief pig product consumed in the United Kingdom is bacon and ham, the imports of which during 1938 amounted to 7.5 million cwt., valued at £33,936,000, the supplies being obtained chiefly from Denmark.

The agreement at the Ottawa Conference regarding the regulation of supplies from foreign countries and the Dominions and its substitution by a Bacon Marketing Scheme by the British Government is referred to in detail in previous issues of the Official Year Book. At the outbreak of war in September, 1939, these arrangements were superseded by the war-time contract referred to in par. 3 above. The loss of supplies from Denmark and other European countries owing to war provides an opportunity for the expansion of the industry in Australia. Plans for this development are now being considered.

§ 4. Total Dairy Production.

The dairy production for each State in 1938-39 is shown below:—

DAIRY PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Total.
MILK.								
Used for—	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.	Gallons.
Butter ..	228,689,085	283,654,707	312,249,653	42,111,684	33,940,630	24,573,242	51,175	925,270,176
Cheese ..	7,715,208	19,882,323	15,113,855	17,682,552	1,076,495	3,524,433	..	64,994,866
Condensing and concentrating purposes ..	9,645,318	26,418,539	(a)	(a)	(a)	..	..	(b)36,063,857
Other purposes ..	65,334,610	47,926,030	19,972,525	12,726,543	10,524,195	6,004,095	298,865	162,786,863
Total ..	311,384,221	377,881,599	347,336,033	72,520,779	45,541,320	34,101,770	350,040	1,189,115,762

BUTTER.								
In Factories On Dairy and other Farms ..	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
	113,840,734	126,808,268	154,377,535	17,553,631	14,654,760	9,079,758	..	436,314,686
	4,979,983	3,765,650	3,248,211	3,162,953	1,589,689	2,755,742	17,415	19,519,643
Total ..	118,820,717	130,573,918	157,625,746	20,716,584	16,244,449	11,835,500	17,415	455,834,329

CHEESE.								
In Factories On Dairy and other Farms ..	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
	7,193,022	19,348,519	15,749,103	18,457,298	977,092	3,181,186	..	64,906,220
	292,885	205,542	19,440	300	3,162	218,440	..	739,769
Total ..	7,485,907	19,554,061	15,768,543	18,457,598	980,254	3,399,626	..	65,645,989

CONDENSED, CONCENTRATED AND POWDERED MILK.								
In Factories	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
	13,383,734	51,741,477	(a)	(a)	(a)	..	..	472,178,827

BACON AND HAM.								
In Factories On Dairy and other Farms ..	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
	25,987,245	16,024,626	18,921,278	5,554,944	4,212,970	1,934,884	..	72,635,947
	431,442	485,511	100,474	432,419	29,113	338,717	340	1,818,016
Total ..	26,418,687	16,510,137	19,021,752	5,987,363	4,242,083	2,273,601	340	74,453,963

(a) Figures not available for publication.
milk used for condensing and concentrating.

(b) Excluding States marked (a).
(d) Including States marked (a).

(c) Includes

Particulars in regard to the production of other milk products are not available for all the States, but casein amounting to 5,806,368 lb., valued at £106,233, was manufactured in Australia during 1938-39.

§ 5. Value of Dairy Production.

The values of dairy production on a gross, local and net basis are shown in the following table. The presentation of these values has become possible by the adoption in the several States of uniform principles in determining production and marketing costs. Production values for this and other industries are dealt with more fully in Chapter XXVIII. "Miscellaneous".

GROSS, LOCAL AND NET VALUE OF DAIRY PRODUCTION, 1938-39.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Farm Costs.		Net Value of Production. (a)	Depreciation (estimated).	
				Fodder fed to Farm Stock.	Value of Other Materials used in process of Production.			
	£	£	£	£	£	£	£	
New South Wales ..	14,019,000	1,556,000	12,463,000	2,004,000	13,000	10,446,000	61,000	
Victoria ..	12,682,076	485,902	12,196,174	1,937,700	303,000	9,958,474	24,000	
Queensland ..	11,439,000	275,000	11,164,000	1,053,000	233,000	9,878,000	96,000	
South Australia ..	2,585,581	83,079	2,502,502	446,977	112,531	1,942,994	11,799	
Western Australia ..	1,710,917	52,666	1,658,251	575,236	189,587	893,428	9,312	
Tasmania ..	1,107,370	42,300	1,065,070	350,600	51,610	662,860	6,680	
Total	1938-39	43,543,944	2,494,947	41,048,997	6,367,513	899,728	33,781,756	208,791
	1937-38	41,070,630	2,523,518	38,547,112	6,365,032	592,745	31,589,335	174,000
	1936-37	36,097,428	2,358,882	33,738,546	5,689,618	501,866	27,547,062	166,411
	1935-36	34,678,738	2,311,612	32,367,126	5,071,598	447,644	26,847,884	166,742
	1934-35	31,373,771	2,215,442	29,158,329	4,566,888	231,201	24,360,240	185,435

(a) No account has been taken of maintenance costs and depreciation.

§ 6. Poultry-Farming.

1. General.—Poultry is kept in varying numbers by farmers, and production therefrom furnishes a considerable addition to the annual agricultural or dairying returns. For many years, however, poultry-keeping has been carried on as a separate industry, while it is also practised in conjunction with other rural industries. Special poultry-farms have been instituted by the State Governments for scientific breeding, experts have been appointed to advise and instruct in the care and management of the various kinds of poultry, and exhibitions of leading breeds have been arranged, as well as egg-laying competitions. Co-operative egg-collecting circles have been formed in some districts; eggs are also delivered with milk and cream to the local butter factories, and thence forwarded to market.

2. Number of Principal Kinds.—The number of principal kinds of poultry is included in the annual census of live stock in all States except Victoria and Tasmania. The former State completed a census at 30th June, 1933, and the numbers at that date are shown in the table below. The details for Tasmania have been estimated. In 1913 a complete census was also taken and these data have been included for comparative purposes in the following table:—

POULTRY : NUMBER OF PRINCIPAL KINDS, AUSTRALIA.

State.	Fowls.	Ducks.	Geese.	Turkeys.
1913.				
	No.	No.	No.	No.
New South Wales ..	3,351,629	261,075	23,948	216,274
Victoria ..	3,855,538	288,413	59,851	(a) 100,000
Queensland ..	841,630	35,337	7,457	27,192
South Australia ..	1,440,385	55,059	18,245	49,066
Western Australia ..	999,452	100,828	6,243	49,588
Tasmania (a) ..	350,000	35,000	12,000	8,000
Total ..	10,838,634	776,312	127,744	450,120

POULTRY: NUMBER OF PRINCIPAL KINDS, AUSTRALIA—*continued.*

State.	Fowls.	Ducks.	Geese.	Turkeys.
1938-39.				
	No.	No.	No.	No.
New South Wales ..	5,065,643	179,814	25,055	209,469
Victoria (b) ..	5,496,969	292,882	39,283	113,966
Queensland ..	1,194,146	42,243	5,746	15,712
South Australia ..	2,042,460	42,900	14,451	49,500
Western Australia ..	1,268,093	34,707	1,661	28,643
Tasmania (a) ..	450,000	35,000	10,000	10,000
Total ..	15,517,311	627,546	96,196	427,290

(a) Estimated.

(b) 30th June, 1933.

3. **Value of Poultry Products.**—Difficulty is experienced in obtaining complete figures for the production of poultry products. The following table sets out the values accruing to the poultry industry for Australia on a gross, local and net basis, and has been compiled from data actually collected or carefully estimated by the State Statistical Bureaux:—

GROSS, LOCAL AND NET VALUE OF POULTRY PRODUCTS, 1938-39.

State.	Gross Production valued at Principal Markets.	Marketing Costs.	Gross Production valued at Farm.	Feed and Other Costs.	Net Value of Production. (a)
	£	£	£	£	£
New South Wales ..	4,220,000	367,000	3,853,000	1,195,000	2,658,000
Victoria ..	4,824,858	361,859	4,462,999	1,350,390	3,112,609
Queensland ..	780,000	121,000	659,000	283,000	376,000
South Australia ..	1,020,856	101,425	919,431	483,006	436,425
Western Australia ..	636,681	116,343	520,338	226,122	294,216
Tasmania ..	491,870	36,890	454,980	29,740	425,240
Total					
{ 1938-39	11,974,265	1,104,517	10,869,748	3,567,258	7,302,490
{ 1937-38	11,878,748	1,133,955	10,744,793	4,288,105	6,456,688
{ 1936-37	10,653,915	985,421	9,668,494	3,987,408	5,681,086
{ 1935-36	9,575,755	856,936	8,718,819	3,050,257	5,668,562
{ 1934-35	8,955,815	857,091	8,098,724	2,837,065	5,261,659

(a) No account has been taken of maintenance costs and depreciation.

4. **War-time Contract.**—At the outbreak of war in September, 1939, a contract was negotiated between the Governments of the Commonwealth and the United Kingdom whereby the latter undertook to purchase 9 million dozen eggs for the season ended 31st December, 1939. The contract was extended to 31st December, 1940. Prices are fixed according to grade, but in 1940 they were 1½d. per dozen higher than in 1939. The loss of supplies from Europe provides an opportunity for an expansion of the poultry industry in Australia and steps in this direction are under consideration.

5. **Oversea Trade in Poultry Products.**—The Australian oversea export of poultry products is confined chiefly to eggs in shell and egg contents which are mainly consigned to the United Kingdom; New South Wales, Victoria and South Australia are the largest exporters, the total exports of eggs and egg contents in 1938-39 amounting to £661,224. Exports of eggs from Australia rose from less than 3 million dozen valued at £219,000 in 1928-29 to 21.7 million dozen valued at more than £1.1 million in 1934-35, but declined during the past three years to 10.1 million dozen in 1938-39. Exports of frozen poultry declined during 1938-39.

The oversea trade during the five years ended 1938-39 was as follows :—

POULTRY PRODUCTS : TRADE, AUSTRALIA.

Australian Currency Values.

Particulars.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
LIVE POULTRY.						
Imports	No.	137	154	2,780	39	29
"	£	401	605	1,256	81	139
Exports	No.	1,233	1,733	1,099	2,175	2,189
"	£	799	973	572	860	970
Net Exports ..	No.	1,096	1,579	-1,681	2,136	2,160
"	£	398	368	-684	779	831

FROZEN POULTRY.						
Imports	lb.	3,129	11,671	11,589	1,349	83
"	£	147	467	616	150	8
Exports	pair	39,310	52,377	40,754	35,358	21,768
"	£	20,490	36,078	35,432	36,803	19,917
Net Exports ..	..	(a)	(a)	(a)	(a)	(a)
"	£	20,343	35,611	34,816	36,653	19,909

Eggs.

Imports	doz.	7,002	7,311	7,625	8,388	105,330
"	£	408	397	361	458	8,188
Exports	doz.	21,718,740	17,365,132	16,473,894	11,287,363	10,144,344
"	£	1,148,254	910,892	954,578	686,713	638,159
Net Exports ..	doz.	21,711,738	17,357,821	16,466,269	11,278,975	10,039,014
"	£	1,147,846	910,495	954,217	686,255	629,971

Egg Contents.

Imports	lb.	31,257	46,917	32,634	31,954	68,567
"	£	3,388	3,957	3,953	3,547	4,936
Exports	lb.	(a)	290,612	652,858	426,320	650,470
"	£	3,479	7,170	19,756	16,926	23,065
Net Exports ..	lb.	(a)	243,695	620,224	394,366	581,903
"	£	91	3,213	15,803	13,379	18,129

(a) Quantity not available.

§ 7. Bee-Farming.

1. **General.**—Although practised to some extent as a separate industry, bee-farming is frequently carried on in conjunction with agriculture or dairying. The returns of honey from productive hives during 1938-39 gave an average of 52.1 lb. per hive, while the average quantity of wax was 0.81 lb. per hive.

2. **Production of Honey and Bees-wax.**—The number of hives and the production of honey and bees-wax during the year 1938-39 are given in the following table. As these details have been collected from holdings of one acre and upwards, any production from smaller areas is omitted and consequently the production to that extent is understated. In Victoria and South Australia, however, the compulsory registration of bee-keepers enables the collection to cover all producers and the production for these States is considered to be complete.

BEEHIVES, HONEY AND BEES-WAX, 1938-39.

State.	Beehives.			Honey Produced.		Bees-wax Produced.	
	Pro- ductive.	Unpro- ductive.	Total.	Quantity.	Gross Value.	Quantity.	Gross Value.
	No.	No.	No.	lb.	£	lb.	£
New South Wales ..	60,346	25,895	86,241	2,723,719	44,374	43,780	3,046
Victoria ..	35,034	28,952	63,986	1,340,046	27,918	22,285	1,300
Queensland ..	16,662	4,093	20,755	1,164,536	15,770	17,463	1,091
South Australia ..	42,288	12,443	54,731	2,940,877	30,634	40,257	2,097
Western Australia ..	15,082	1,976	17,058	754,254	9,614	15,050	977
Tasmania ..	4,821	3,646	8,467	148,473	2,784	1,780	134
Aust. Cap. Territory	59	12	71	1,280	21	60	4
Australia ..	174,292	77,017	251,309	9,073,185	131,115	140,675	8,649

The table hereunder gives the production of honey and bees-wax for the latest available five years:—

HONEY AND BEES-WAX PRODUCTION.

Season.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	A.C.T.	Australia.
HONEY.								
1934-35	5,539,677	2,779,791	761,209	4,155,450	811,449	67,717	10,120	14,125,413
1935-36	4,577,097	5,901,463	584,288	4,160,006	916,929	238,055	7,000	16,384,838
1936-37	2,935,282	3,439,262	500,000	3,273,441	1,601,161	154,931	2,570	11,906,647
1937-38	3,356,609	4,541,516	435,274	2,408,043	1,541,691	297,311	2,475	12,582,919
1938-39	2,723,719	1,340,046	1,164,536	2,940,877	754,254	148,473	1,280	9,073,185
BEES-WAX.								
1934-35	70,564	30,351	9,745	45,515	11,222	1,475	22	168,894
1935-36	62,886	61,849	8,056	46,570	13,952	3,416	26	197,355
1936-37	52,461	40,612	8,000	41,660	26,424	2,171	28	171,356
1937-38	49,945	54,184	7,726	31,411	27,626	3,069	31	173,992
1938-39	43,780	22,285	17,463	40,257	15,050	1,780	60	140,675

The production of honey and bees-wax varies greatly from year to year according to the favourableness or otherwise of the seasons. During the last five years New South Wales produced on the average 3,826,000 lb. of honey and 55,900 lb. of bees-wax; Victoria produced 3,600,000 lb. of honey and 41,900 lb. of wax; and South Australia 3,388,000 lb. of honey and 41,100 lb. of wax. These States together accounted for 84.4 per cent. of the total Australian production of honey and 81.5 per cent. of the bees-wax. Next in order of importance were Western Australia, Queensland and Tasmania.

3. **Value of Production.**—The following table shows the gross, local and net values of production which have been compiled by the Statisticians of the several States on uniform methods. These data are based upon actual records but as previously explained it is known that the production in some States is understated. No production costs are taken into account and consequently the gross production valued at the farm and net values are identical.

GROSS, LOCAL AND NET VALUE OF BEE PRODUCTS, 1938-39.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Farm.	Net Value of Production.(a)
	£	£	£	£
New South Wales	47,000	4,000	43,000	43,000
Victoria	29,218	5,770	23,448	23,448
Queensland	17,000	2,000	15,000	15,000
South Australia	32,731	4,874	27,857	27,857
Western Australia	10,591	..	10,591	10,591
Tasmania	2,920	150	2,770	2,770
Total				
{ 1938-39	139,460	16,794	122,666	122,666
{ 1937-38	186,280	25,675	160,605	160,605
{ 1936-37	168,291	24,335	143,956	143,956
{ 1935-36	233,906	34,687	199,219	199,219
{ 1934-35	235,027	31,520	203,507	203,507

(a) No account has been taken of maintenance costs and depreciation.

4. **Oversea Trade in Bee Products.**—In normal years the production of honey exceeds Australian requirements, and a small quantity is available for export. The imports into the United Kingdom average 80,000 cwt. annually, of which Australia supplies approximately 1,200 cwt. At the Imperial Economic Conference at Ottawa in 1932 the representatives of the United Kingdom, on behalf of their Government, agreed to the imposition of an import duty of 7s. per cwt. on foreign honey. For the year 1938-39 the exports from Australia amounted to £14,000 compared with a total of £21,100 in the preceding year. The more general use of frame hives has reduced the production of wax, and as a result the quantity imported has exceeded that exported during each of the last five years.

For the year 1938-39, the imports of honey amounted to 197,223 lb. and the exports to 687,007 lb. The imports of bees-wax amounted to 70,745 lb. in 1938-39 and the exports to 5,565 lb.

§ 8. Exports of Australian Farmyard, Dairy and Bee Products.

The quantities and values of Australian farmyard, dairy and bee products exported during each of the five years ended 1938-39 are shown below :

AUSTRALIAN FARMYARD, DAIRY AND BEE PRODUCTS : EXPORTS.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
QUANTITY.					
Bees-wax	lb. 3,211	395	48,656	21,109	5,565
Butter	262,518,006	212,646,177	174,309,396	197,345,647	229,542,779
Cheese	16,829,780	12,972,627	13,924,572	27,245,638	35,924,467
Eggs not in shell	(a)	290,612	652,858	426,320	650,470
Eggs	21,718,740	17,365,132	16,473,894	11,287,363	10,144,344
Feathers, undressed	(a)	(a)	(a)	(a)	(a)
Honey	388,761	764,696	1,934,162	1,365,364	687,007
Lard	2,523,749	2,792,008	4,051,472	4,213,026	5,490,959
Meats—					
Bacon and ham	1,562,498	1,701,575	1,752,518	1,675,969	1,739,053
Frozen poultry	39,310	52,377	40,754	35,358	21,768
Frozen pork	15,636,132	23,577,743	26,816,453	33,959,412	30,716,417
Milk, concentrated and preserved	16,593,664	16,961,023	22,169,680	24,717,435	19,106,953
Pigs, live	No. 240	131	164	152	69
Poultry, live	1,233	1,733	1,099	2,175	2,189

VALUE.

	£	£	£	£	£
Bees-wax	198	28	2,934	1,322	148
Butter	9,586,776	9,832,733	8,801,643	10,781,124	12,891,837
Cheese	401,024	337,467	384,027	845,130	1,074,008
Eggs not in shell	3,479	7,170	19,756	16,926	23,065
Eggs	1,148,254	970,892	954,578	686,713	638,159
Feathers, undressed	1,555	2,257	3,110	1,192	307
Honey	6,828	12,840	30,380	21,081	13,957
Lard	41,758	53,603	69,374	63,662	67,744
Meats—					
Bacon and ham	98,825	109,760	112,680	117,654	119,994
Frozen poultry	20,490	36,078	35,432	36,803	19,917
Frozen pork	401,306	587,410	687,043	934,575	882,117
Milk, concentrated and preserved	711,242	722,301	851,769	963,873	791,100
Pigs, live	957	708	607	979	621
Poultry, live	799	973	572	860	970
Total	12,426,491	12,614,220	11,953,905	14,471,894	16,523,944

(a) Quantity not available.

§ 9. British Imports of Dairy Products.

1. Quantities and Values.—The following table gives the quantities and values of the principal dairy products imported into the United Kingdom during the years 1934 to 1938. Figures for 1939 are not available for publication :—

DAIRY PRODUCTS : IMPORTS INTO UNITED KINGDOM.

Products.	1934.	1935.	1936.	1937.	1938.
Butter	cwt. 9,695,394	9,608,016	9,740,735	9,417,669	9,517,913
"	£ 33,271,706	39,328,128	44,385,148	47,362,965	50,873,133
Cheese	cwt. 2,988,539	2,714,351	2,676,371	2,935,907	2,927,326
"	£ 7,014,517	6,649,093	7,783,747	9,252,915	9,681,245
Milk, concentrated and preserved	cwt. 2,344,678	2,005,528	1,926,629	1,978,313	1,989,552
"	£ 3,269,018	2,435,822	2,407,028	2,819,107	3,160,266
Bacon and ham	cwt. 8,326,535	7,603,672	7,241,374	7,600,134	7,532,236
"	£ 33,172,222	30,462,249	30,247,252	32,440,620	33,936,331
Pork (a)	cwt. 1,105,420	915,098	1,025,156	1,057,159	1,180,866
"	£ 2,926,863	2,509,315	2,780,455	3,250,389	3,680,644

(a) Chilled or frozen.

2. **Butter.**—(i) *Imports.* Australia has for many years supplied a large proportion of the butter imported into the United Kingdom. The quantity in 1938 amounted to 1,797,811 cwt., or 19 per cent. of the total importation. The Australian contribution was valued at £9,629,939 and was exceeded only by that received from New Zealand and Denmark. These three countries combined supplied 71 per cent. of the total imports in 1937 and in 1938:—

BUTTER : IMPORTS INTO UNITED KINGDOM, 1938.

Country from which Imported.	Quantity.	Value.	Country from which Imported.	Quantity.	Value.
	Cwt.	£		Cwt.	£
New Zealand ..	2,592,251	14,524,140	Estonia ..	183,159	883,506
Denmark ..	2,364,799	12,960,434	Argentine Republic	89,876	407,678
Australia ..	1,797,811	9,629,939	Union of South Africa ..	51,195	295,618
Netherlands ..	711,910	3,465,835	British Possessions, n.e.i. ..	44,905	244,270
Latvia ..	339,899	1,589,146	Foreign Countries, n.e.i. ..	77,862	362,010
Eire ..	326,604	1,914,837			
Sweden ..	300,769	1,525,371			
Lithuania ..	228,086	1,084,748			
Finland ..	209,714	1,056,909			
Poland ..	199,073	928,692	Total ..	9,517,913	50,873,133

(ii) *London Prices.* Fluctuations in prices in London during recent years are given in the following table. The prices quoted represent the mean of the top prices quoted weekly for choicest salted Australian butter together with their f.o.b. equivalents in Sydney and Melbourne in terms of Australian currency, omitting pence.

AVERAGE PRICE PER CWT. OF AUSTRALIAN BUTTER IN LONDON (WITH F.O.B. EQUIVALENTS IN AUSTRALIAN CURRENCY).

Month.	1935-36.		1936-37.		1937-38.		1938-39.		1939-40.	
	London.	Australia. (a)								
	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).	Shillings (Stg.).	Shillings (Aust.).
July ..	88	96	113	126	112	126	120	135	114	127
August ..	94	103	118	132	116	130	118	132	110	123
September ..	110	123	108	120	119	134	116	130	120	135
October ..	117	131	100	111	139	158	111	124	(b)121	(b)137
November ..	101	112	108	120	130	147	104	115	(b)121	(b)137
December ..	89	97	98	108	111	124	107	119	(b)121	(b)137
January ..	94	103	94	103	109	122	120	134	(b)121	(b)137
February ..	93	102	86	94	111	124	118	132	(b)121	(b)137
March ..	84	91	97	107	117	131	115	128	(b)121	(b)137
April ..	87	95	104	116	124	140	113	126	(b)121	(b)137
May ..	94	103	106	118	127	143	107	119	(b)121	(b)137
June ..	106	118	108	120	120	135	113	126	(b)121	(b)137

(a) Sydney and Melbourne, and the United Kingdom.

(b) Price fixed under contract between Governments of Australia

3. **Cheese.**—The value of cheese imported into the United Kingdom in 1938 was £9,683,627, of which £5,466,696 was received from New Zealand, and £2,331,142 from Canada. Small experimental shipments from Australia were made in 1908 and following years, fair prices being realized. The value of the imports from Australia during 1938 amounted to £751,194 or double that of the previous year.

4. **Bacon and Ham.**—Of a total import of bacon and ham valued in 1938 at £33,937,026, the United Kingdom received imports to the value of £15,940,376 from Denmark, £6,613,635 from Canada, £2,336,729 from the Netherlands, £1,971,621 from Poland and £2,258,993 from Eire. The import from Australia was small.

5. **Pork.**—The value of the United Kingdom imports of pork (frozen and chilled) was £3,680,289 in 1938. Imports from Australia were valued at £881,639, showing a further increase over the imports in previous years. The bulk of the supplies were received from New Zealand, namely, £1,768,227.

6. **Other Products.**—The imports to the United Kingdom from Australia of bees-wax, poultry, game, lard and honey in 1938 were unimportant, but frozen rabbits to the value of £252,288 and eggs in shell to the value of £599,991 representing 81 per cent. and 5 per cent. respectively of the total imports were imported during the year.

CHAPTER XVI.

FORESTRY.*

§ 1. General.

1. **Objects of Forestry.**—Scientific forestry aims at the preservation and development of existing forest areas by safeguarding them against fire, pests and destructive agencies generally, by expert supervision of the removal of timber, by judicious thinning and by reforestation of denuded areas with suitable forest growths of local or exotic origin. It provides also for the continuance of this indispensable form of national wealth by the afforestation of available bare lands proved capable of producing various timbers. Only small areas of virgin forests still remain in Australia, as extensive inroads have been made by timber-getters, by agriculturalists and by pastoralists—who have destroyed large areas by “ring-barking”—and it is not unlikely that climatological changes have resulted therefrom. It is recognized that beneficial consequences follow on the planting of trees on denuded lands, or along eroding coasts, and that a forest covering tends to regulate to the best advantage the effects of rainfall. The existing virgin forests consist of hardwood jungle, or brush, with very little softwood, and the need for extensive softwood planting is urgent.

Efficient forestry is of particular interest in connexion with the Murray River Basin, where a large expenditure from the public funds has been incurred in the provision of locks and weirs and in the formation of irrigation settlements in the lower course of the river. The stability of flow of this river in so far as it can be assured by forest plantation may be regarded as of national importance.

Successful planting of exotics in various parts of Australia has demonstrated that both climate and soil are suitable for the cultivation of a number of highly serviceable softwoods.

2. **Extent of Forests.**—(i) *Australia.* The bulk of the present local timber supply comes from the thickly forested areas in the 30-inch and over rainfall belt south of the tropics, and the 70-inch and over rainfall belt within the tropics. The total forest area included in the divisions specified is comparatively small, and is confined to the following regions:—(a) The coastal belt in the extreme south-west of Western Australia, from a little north of Perth to Albany; (b) the Otway country in the south of Victoria, and the whole of the south-eastern portion of that State; (c) the mountain forests of Victoria and New South Wales; (d) the coastal districts of New South Wales and Queensland; (e) the greater portion of Tasmania; (f) the forests on the Murray River near Echuca; and (g) the cypress pine belt from the Murray northward to Queensland and westward of the coastal belt.

Over 90 per cent. of the timber trees of Australia consists of hardwoods belonging to the genus *Eucalyptus* (Gum Trees). Including the mallees over 400 species are now recognized, but the chief commercial varieties are confined to about 50 species.

In addition to the hardwood forests and the cypress pine belt the coastal strip in Queensland and northern New South Wales provides “rain” or “brush” forests. These tropical forests furnish the serviceable hoop pine and furniture timbers such as black bean, Queensland walnut and maple, silkwood, etc.

* A specially contributed article dealing with Forestry in Australia appeared as part of this Chapter in Official Year Book No. 19 (see pp. 701-12 therein).

The drier wooded area of the continent contains a large number of xerophilous trees and woody shrubs which thrive in regions receiving less than 10 inches of rain per annum. Country devoid of tree growth is rare. Unsuitable soil conditions such as basalt formations, clay-pans, rock exposures or sand-dunes are as a rule more responsible for treeless areas than lack of rainfall. The 300-mile stretch of the Nullarbor Plain is a treeless area where the non-retentive limestone foundation accentuates the effects of a low rainfall. While, however, the major portion of Australia carries trees, and may be said to be wooded (the term "desert" applying to relatively small areas only), dense forest is confined to a very narrow fringe. The savannah forests of the interior yield minor products such as sandalwood and tan barks, but do not produce timber. These open, park-like formations carry scattered trees of low habit only. Practically the whole of Papua and New Guinea carry or has carried dense forests, the exceptions being certain small dry belts where the rainfall is less than 70 inches. Norfolk Island was originally covered with a thick jungle.

Special articles relating to Australian Eucalyptus timbers and the chemical products of Eucalyptus appears in Official Year Book No. 10, pp. 85-98.

Scientific surveys of the forests of the various States have not yet been completed and there are, in consequence, conflicting reports regarding the total forest area of Australia. At the Interstate Conference on Forestry, held at Hobart in April, 1920, it was resolved that a forest area of 24,500,000 acres was necessary to provide for the future requirements of Australia. This area was subsequently adopted at the Premiers' Conference held in May of the same year. Expert foresters, however, consider that approximately 19,500,000 acres represent the possible limit for permanent reservation in Australia. The distribution of the latter area throughout the States was estimated as follows:—

ESTIMATED FOREST AREA.

State.	Total Forest Area.		Percentage on Total Area.
	Acres.		Per cent.
New South Wales	..	4,000,000	2.02
Victoria	..	5,500,000	9.78
Queensland	..	6,000,000	1.40
South Australia	..	500,000	0.21
Western Australia	..	3,000,000	0.48
Tasmania	..	500,000	2.98
Australia	..	19,500,000	1.02

(ii) *Comparison with Other Countries.* The table hereunder shows the absolute and relative forest areas of Australia and other countries, and the relative areas owned by the State, by Public Institutions and by private individuals, in so far as the details are available. The term "Public Institutions" appears to include local governmental and ecclesiastical authorities, while those held by public companies, co-operative societies, etc., are included with private individuals.

The figures are based on information supplied to the International Institute of Agriculture and are the latest available. Comparisons of the returns for different countries are, however, subject to the qualification that the significance of the term "forest" is not identical in all cases. In older countries, and chiefly in Europe, scientific forestry has been practised for centuries, whereas in newer lands, such as Australia, Canada, etc., it is of comparatively recent application. Moreover, considerable areas included as forests in the newer countries contain indigenous growth of little or no commercial value, and effective comparisons cannot, therefore, be made with countries where efficient forestry has been practised for many years.

FORESTS: AREA AND OWNERSHIP, VARIOUS COUNTRIES.

Country.	Forest Area.	Per cent. of Total Area.	Percentage Owned by—		
			State.	Public Institutions other than State.	Privately.
	Sq. miles.	Per cent.	Per cent.	Per cent.	Per cent.
U.S.S.R. (Russia) ..	3,667,530	44.7	100.0	..	..
Canada ..	1,151,402	32.8	(a)	(a)	(a)
United States of America ..	733,539	24.7	(a)	(a)	(a)
India ..	307,928	27.5	(a)	(a)	(a)
Nigeria ..	234,990	63.8	(a)	(a)	(a)
Finland ..	97,540	73.5	39.8	1.7	58.5
Sweden ..	89,500	56.5	20.1	3.8	76.1
Japan ..	87,678	59.5	(a)	(a)	(a)
Germany ..	49,991	27.5	32.6	17.2	50.2
France ..	40,768	19.2	13.9	23.6	62.5
Poland ..	32,246	21.5	36.1	..	63.9
Australia (b) ..	30,469	1.0	(a)	(a)	(a)
Yugoslavia ..	29,504	30.6	37.5	28.9	33.6
Norway ..	29,454	24.7	13.0	6.4	80.6
Turkey ..	28,703	9.7	94.4	..	5.6
Rumania ..	27,544	24.2	30.5	18.3	51.2
Italy ..	22,425	18.7	3.0	34.0	63.0
New Zealand ..	20,778	20.2	(a)	(a)	(a)
Spain ..	19,305	10.0	(a)	(a)	(a)
Czechoslovakia ..	17,925	33.0	20.4	15.6	64.0
Union of South Africa ..	15,958	3.4	(a)	(a)	(a)
Algeria ..	12,257	10.7	(a)	(a)	(a)
Austria ..	12,116	37.4	15.7	12.6	71.7
Dutch East Indies ..	11,737	23.1	(a)	(a)	(a)
Bulgaria ..	11,469	28.8	23.0	58.8	18.2
Greece ..	9,291	18.5	69.3	10.3	20.4
Latvia ..	6,406	25.2	83.6	1.8	14.6
Great Britain ..	4,745	5.4	10.4	1.3	88.3

(a) Not available.

(b) Estimate of forest area possible for permanent reservation.

3. **Requisite Proportion of Forest Area.**—It is generally held that when the forest area in any country falls below 0.86 acres per head of population, that country will be obliged to import timber. Australia possesses 2.8 acres of forest per head of population and normally the excess of imports of timber over exports amounts to approximately 28,000,000 cubic feet. There are two reasons for the excess. In the first place, the area of 19,500,000 acres given as the wooded area comprises all forest lands, reproductive or otherwise. The bulk of this area consists of cut-over forests swept by fire at frequent intervals, and the area of really productive forests has not been ascertained. Secondly, Australia does not possess a sufficient supply of softwoods, and must, therefore—with the exception of a small quantity produced in Queensland and New South Wales—import the bulk of its requirements from overseas. Provided that the area of 19,500,000 acres considered possible of permanent reservation by foresters was yielding under silvicultural treatment its maximum of hard and soft woods the timber supply of Australia would be sufficient for a population of 22½ millions.

§ 2. Forestry Activities of the Commonwealth Government.

Forestry was not included amongst the matters transferred from the States to the control of the Commonwealth, and federal supervision, therefore, is restricted to the forests in the Commonwealth Territories. These territories (including Papua, New Guinea and Norfolk Island) cover a large area, and, with the exception of the Northern

Territory, are capable of sound forestry development. It is only within comparatively recent years, however, that any attempt has been made to take stock of the forestry position. The Commonwealth Forestry Bureau was instituted in 1925 to initiate sylvicultural and other forest research work and to take charge of the education and training of the professional staffs required by the Commonwealth and the State services. The Bureau received statutory powers under an Act passed in 1930. In the meantime, the Australian Forestry School was established in 1926, and not only was the training of the State forest officers begun, but a nucleus of qualified officers was sent abroad to undergo special courses of instruction with the object of staffing the research side of the Bureau. The financial situation since 1930 has delayed progress on the research side, and the educational work of the Australian Forestry School is at present the Bureau's main activity.

The forest resources of the Territories of Papua, New Guinea, Norfolk Island and the Australian Capital have been investigated, and reports in connexion therewith have been published. In the case of the Australian Capital area an active forest policy has been inaugurated.

The investigation of the dead product of the forests is entrusted to the Council for Scientific and Industrial Research, which has established a Forest Products Division. Research work is being carried out by this institution in regard to various matters, e.g., paper pulp, seasoning, preservation, tan barks, the chemistry of woods, and the utilization of forest products generally, including the substitution of local for imported woods for such purposes as butter boxes and fruit cases.

§ 3. State Forestry Departments.

1. **Functions.**—With the exception of 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 specially charged with forestry work. 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 existing deficiency in softwoods.

Annual reports are issued by each State forest authority.

In Victoria a forestry school has been established at which recruits are trained for the forestry service of the State.

2. **Forest Reservations.**—At the Interstate Forestry Conference held at Hobart in 1920, the State forestry authorities agreed in regard to the necessity of reserving an area of 24,500,000 acres of indigenous forest lands in order to meet the future requirements of Australia but, as previously mentioned, it is the considered opinion of expert foresters that 19.5 million acres only are possible of permanent reservation. This area was distributed among the States as set out in § 1, 2 *ante*.

Having been endorsed by the Premiers' Conference held later in the same year, this area was adopted as the Australian forest requirement towards the permanent reservation of which the authorities are now aiming. The progress made in the various States to the end of June, 1939, is set out in the following table:—

AREA OF FOREST RESERVATIONS, 30th JUNE, 1939.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Dedicated forests	5,193,164	4,845,890	3,054,768	(a) 264,521	3,367,257	1,561,537	18,287,137
Timber and fuel reserves	1,328,843	(b)	3,204,075	..	2,265,106	951,600	(c) 7,749,624
Total	6,522,007	4,845,890	6,258,843	264,521	5,632,363	2,513,137	26,036,761

(a) Includes Timber and Fuel Reserves.

(b) Not available.

(c) Incomplete.

In addition to the work of permanently reserving their respective areas the State foresters are endeavouring to survey all timbered lands with a view to the cutting out of all 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 area of State forests reserved in perpetuity amounted in June, 1939, to 18,287,137 acres, or 94 per cent. of the area considered possible of permanent reservation in Australia. Of this area a considerable proportion consists of inaccessible mountainous country and cut-over lands, while the Australian area recommended refers to merchantable forest only. The foresters of Australia are, therefore, faced with a difficult task in improving and preserving the existing forests, and in securing the reservation of further suitable forest country to ensure a permanent supply.

The Forestry Departments also control 7,749,624 acres of temporary timber and fuel reserves, but, while these areas contain some land of high value for forestry purposes, the greater part does not justify permanent reservation.

3. **Sylvicultural Nurseries and Plantations.**—Recognition of the necessity for providing by systematic sylviculture for the future softwood timber needs has led to the creation in all of the States of a number of nurseries and plantations. A brief statement showing the locality of these establishments and the nature of their activities will be found in previous issues of the Official Year Book. (See Official Year Book No. 6, pp. 451-3.) Details regarding forest plantations and the number of persons employed are given hereunder:—

FORESTRY : AREAS AND EMPLOYMENT, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
Total area of indigenous forest improved or regenerated	1,279,912	980,788	328,893	9,928	480,851	1,935	3,082,307
Total area of effective plantations—							
Softwoods .. acres	43,764	41,382	19,722	91,012	11,705	1,375	208,960
Hardwoods .. acres	..	2,500	2,297	4,972	411,873	..	21,642
Number of persons employed in Forestry Departments—							
Office staff .. No.	111	35	115	30	40	20	351
Field staff .. No.	109	143	1,769	286	(b) 484	323	3,114

(a) Mallet—mainly for bark for tanning.

(b) Including 340 casual hands.

4. **Revenue and Expenditure.**—The revenue and expenditure of State Forestry Departments from 1934-35 to 1938-39 are given below:—

STATE FORESTRY DEPARTMENTS : REVENUE AND EXPENDITURE.

State.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
REVENUE.					
	£	£	£	£	£
New South Wales ..	188,471	87,674	206,770	201,416	224,266
Victoria ..	158,608	176,626	199,360	213,694	198,157
Queensland ..	608,935	660,455	669,457	835,311	764,557
South Australia ..	95,730	115,513	114,638	117,305	101,312
Western Australia ..	119,232	143,158	164,888	176,201	145,724
Tasmania ..	23,066	26,904	30,693	30,722	32,765
Total ..	1,194,042	1,210,330	1,385,806	1,574,649	1,466,781

STATE FORESTRY DEPARTMENTS : REVENUE AND EXPENDITURE—*contd.*

State.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
EXPENDITURE.					
	£	£	£	£	£
New South Wales ..	(a) 349,119	(a) 179,234	84,857	190,215	250,355
Victoria ..	165,431	196,279	(a) 610,604	(a) 491,964	(a) 406,175
Queensland ..	420,178	496,928	495,740	624,087	764,545
South Australia ..	170,426	175,913	174,973	182,534	182,633
Western Australia ..	(a) 190,348	(a) 235,186	(b) 196,698	(b) 182,283	(b) 164,943
Tasmania ..	11,118	15,674	20,234	58,869	71,437
Total ..	1,306,620	1,299,214	1,583,106	1,729,952	1,840,088

(a) Including expenditure from Unemployment Relief Funds as follows :—1934-35—New South Wales, £236,735; Western Australia, £157,627; 1935-36—New South Wales, £117,703; Western Australia, £183,549; 1936-37—Victoria, £350,564; 1937-38—Victoria, £258,341; and 1938-39—Victoria, £167,611.

(b) Including expenditure from General Loan and Trust Funds, 1936-37, £122,011; 1937-38, £155,178; 1938-39, £136,254.

§ 4. The Australian Forestry School.

The Australian Forestry School situated at Canberra in the Australian Capital Territory was established in 1926 by the Commonwealth Government to meet the demand of the States for an institution which would give a professional training at least equal to that afforded by the recognized forestry schools abroad.

Under existing arrangements the head of the State forestry service may nominate candidates for enrolment at the school. According to the system in vogue in each State, the nomination may be made either at school-leaving age or after the candidate has successfully completed the specified university course. In the first case, the youth is helped throughout his university career and is given employment in practical work during the long vacations to test his suitability as a forestry officer; in the second case he is chosen later, and the practical tests are not made until the long vacation immediately preceding his entry to the school. The possession of a nomination by a State government service is not, however, essential for enrolment, since any candidate possessing the necessary qualifications will be accepted for the diploma course, and in special cases applicants desirous of studying a particular branch of forestry will be required to follow certain lectures only. Refresher or post-graduate courses are arranged to meet the needs of senior foresters.

A candidate for enrolment in the diploma course must possess—(a) a degree of a university, or (b) a certificate that he has completed the special two years' preliminary course at a university.

The qualifications for enrolment may be waived to assist an applicant of exceptional ability with a record of long service in a State Forestry Department, who has been specially recommended by the head of that service. Such applicants must show proof of education equal to that required for a school leaving certificate.

The course of instruction extends over three years, the first two of which are spent at the school, and the third in one of the forestry services of Australia.

The Commonwealth diploma of forestry is awarded to students on the following conditions :—(a) Successful completion of theoretical course; (b) Satisfactory field work during the course; and (c) One year's satisfactory practical forestry work following the school course.

Students who have passed the approved two-year preliminary science course at the Universities of Adelaide, Melbourne, Western Australia or Queensland, and two years of Diploma course at the School, may be granted the degree B.Sc.F. by their Universities, subject to certain conditions laid down, particulars of which may be obtained from the Registrar of the University concerned.

§ 5. Forest Congresses.

References to the various Forestry Conferences held in Australia and elsewhere will be found in Official Year Book No. 22, p. 743, but owing to limitations of space, the information cannot be repeated herein. The Third British Empire Forestry Conference was held in Australia and New Zealand in 1928, and the Fourth in South Africa in 1935. Publications issued in connexion with these Conferences are available on application to the various State and Commonwealth forestry authorities.

§ 6. Forestry Production.

1. Timber.—Particulars regarding logs treated and the production of rough sawn timber in forest sawmills in each State for the year 1938-39 are shown in the following table :—

OUTPUT OF NATIVE TIMBER : FOREST SAWMILLS, 1938-39.

Particulars.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	Total.
LOGS TREATED INCLUDING THOSE SAWN ON COMMISSION.							
Hardwood— Quantity 1,000 sup. ft.	141,287	205,516	108,500	5,443	329,140	156,717	946,603
Softwood— Quantity 1,000 sup. ft.	45,431	3,456	160,284	11,503	418	2,434	223,526
Total— Quantity 1,000 sup. ft.	186,718	208,972	268,784	16,946	329,558	159,151	1,170,129

ROUGH SAWN TIMBER PRODUCED FROM LOGS ABOVE.

Hardwood— Quantity 1,000 sup. ft.	92,024	109,726	70,267	2,746	124,981	81,047	480,791
Softwood— Quantity 1,000 sup. ft.	28,130	1,657	106,610	7,096	220	1,449	145,162
Total— Quantity 1,000 sup. ft.	120,154	111,383	176,877	9,842	125,201	82,496	625,953

The next table gives the sawn output of native timber in both forest and town sawmills and in joinery works, box and case factories and other woodworking establishments in each State for 1923-24, 1928-29 and the last three years.

SAWN OUTPUT OF NATIVE TIMBER : ALL MILLS.

State.	1923-24.	1928-29.	1936-37.	1937-38.	1938-39.
	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.
New South Wales	167,493	136,051	145,930	168,042	179,350
Victoria	134,639	79,018	122,907	141,439	120,197
Queensland	141,672	106,862	160,744	208,098	193,250
South Australia	1,350	3,219	13,038	16,167	14,537
Western Australia	161,749	145,043	131,204	129,986	125,453
Tasmania	63,120	46,195	69,875	83,009	84,228
Total	670,023	516,388	643,698	746,741	717,015

In addition to the sawn timber shown in the 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. In Western Australia, particulars are obtained of the quantities of timber hewn by contractors for the Railway Department, mines, etc., as

well as of the quantities produced by other agencies outside forest sawmills, but the figures have not been included in the preceding two tables. The quantities so produced in the last five years were as follows:—1934-35, 43,259,941 sup. feet; 1935-36, 45,614,500 sup. feet; 1936-37, 44,771,668 sup. feet; 1937-38, 46,775,418 sup. feet; and 1938-39, 35,862,540 sup. feet. The annual reports of the Forest Departments in the States contain particulars concerning the output of timber from areas under departmental control, but owing to lack of uniformity in measurements accurate determination of total production cannot be made. Moreover, there is a moderate quantity of hewn timber produced from privately owned land, but information regarding output is not available.

2. **Stocks of Timber, Logs and Sawn.**—Particulars are given below of timber stocks held on 30th June, 1939, as reported by mills and other factories included in the wood-working group. These latter establishments include box and case factories and joinery works, etc.

STOCKS OF TIMBER REPORTED BY FACTORIES, 30th JUNE, 1939.

State.	Logs.			Sawn Timber.		
	Hardwood.	Softwood.	Total.	Hardwood.	Softwood.	Total.
	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.	1,000 sup. feet.
New South Wales	9,918	17,164	27,082	(a)	(a)	61,953
Victoria ..	9,921	5,239	15,160	19,955	18,432	38,387
Queensland ..	(a)	(a)	(a)	(a)	(a)	(a)
South Australia ..	610	3,358	3,968	2,477	9,476	11,953
Western Australia	1,810	..	1,810	35,238	937	36,175
Tasmania ..	4,695	278	4,973	5,546	586	6,132
Total ..	(a)	(a)	(a)	(a)	(a)	(a)

(a) Not available.

3. **Other Forest Products.**—(i) *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 Victoria. Oversea exports amounted in 1934-35 to £50,699; in 1935-36 to £53,797; in 1936-37 to £82,457; in 1937-38 to £94,538; and in 1938-39 to £86,714; the bulk of the product is shipped from Victoria to the United Kingdom, the United States of America and Germany. Large quantities of the crude oil are used locally in flotation processes in connexion with the recovery of gold and other minerals.

(ii) *Sandalwood and Sandalwood Oil.* The distillation of oil from Western Australian sandalwood has been characterized by improvement both in quality and in quantity within recent years. It is claimed that the Western Australian oil is at least as valuable medicinally as the well-known Mysore oil, besides having an extensive use in the manufacture of perfumes. Exports of essential oils from Western Australia amounted in 1934-35 to £35,363; in 1935-36 to £27,526; in 1936-37 to £38,185; in 1937-38 to £35,128; and in 1938-39 to £25,550. The bulk of the product consisted of sandalwood oil which was shipped principally to the United Kingdom, Eastern States of Australia and Germany. In addition to its distillation, quantities of sandalwood are gathered for export each year. Western Australia is the chief source of supply, followed by South Australia, while Queensland and New South Wales also produce small quantities. In 1938-39, 1,648 tons valued at £42,330 were exported, the whole of which was shipped to the East; Hong Kong 805 tons and China 686 tons were the principal countries of destination. A table giving these details is included in § 8 hereinafter.

(iii) *Grass Tree or Yacca Gum*. South Australia is the chief State producing this gum which is used in the preparation of varnishes and lacquers. Quantities are also obtained in New South Wales and Western Australia but these are small. The production in South Australia during 1938-39 amounted to 1,961 tons, whilst the exports from Australia amounted to 1,884 tons valued at £12,155 during the same period.

(iv) *Tan Barks*. The forests of Australia are capable of yielding a wealth of tanning materials; many species of eucalyptus and other genera contain varying proportions of tannin, chiefly in the bark, but also in the wood and twigs. Although many of these species contain higher percentages of tannin than are found in the barks of oak, chestnut and hemlock, formerly the chief source of tannin material in the northern hemisphere, scattered distribution has resulted in the richest tan-bearing species only being used in Australia. These are:—Golden wattle (*Acacia pycnantha*), black or green wattle (*Acacia decurrens* or *mollissima*), and mallet (*Eucalyptus astringens*).

Up to 1913 the production of wattle bark was more than sufficient for local requirements, and an export trade was built up. The supply diminished during the six years ending 1926-27, and Australia imported on the average about 2,900 tons each year from Natal, where the plantations were originally started from Australian seed. Since 1927-28, however, exports exceeded imports in every year except 1936-37, the annual excess value averaging £8,126 during the past five years. The chief exporting States are Western Australia, South Australia and Tasmania. This matter is referred to in tables appearing in § 8 hereinafter. The other valuable tan bark, mallet (*Eucalyptus astringens*) of Western Australia, is not extensively used in Australian tanneries, but it is exported to Europe and other countries, where it is used for producing a tannin extract. A brief account of the work done by the Council for Scientific and Industrial Research in connexion with tanning materials will be found in Official Year Book No. 22, p. 743. The production of extract from the bark of karri (*Eucalyptus 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 marri (*Eucalyptus calophylla*) bark is not yet complete. The production of tan bark in Australia is estimated to exceed 25,000 tons per annum.

4. *Value of Production*.—As the outcome of a series of conferences of Australian Statisticians it is now possible to present the value of forestry production on a more satisfactory basis than was possible hitherto, but the relative proportions of marketing costs to gross production suggest that complete uniformity in method has not yet been obtained. Provision is made for the inclusion of all phases of forestry output, including forest sawmills, the production of logs, poles, sleepers and other hewn timber, firewood, sandalwood and gums and resins. All of these items are not yet collected in all the States, but the omissions are not serious.

GROSS, LOCAL AND NET VALUE OF FORESTRY PRODUCTION, 1938-39.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.	Value of Other Materials Used in Process of Production.	Net Value of Production.(a)	
	£	£	£	£	£	
New South Wales ..	2,408,000	147,000	2,261,000	..	2,261,000	
Victoria ..	1,241,143	173,411	1,067,732	..	1,067,732	
Queensland ..	2,612,000	250,000	2,362,000	..	2,362,000	
South Australia ..	590,040	47,575	542,465	..	542,465	
Western Australia ..	1,449,716	285,041	1,164,675	17,340	1,147,335	
Tasmania ..	454,500	55,000	399,500	..	399,500	
Total	1938-39	8,755,399	958,027	7,797,372	17,340	7,780,032
	1937-38	8,910,413	893,284	8,017,129	20,849	7,996,280
	1936-37	8,380,565	876,878	7,503,687	197,766	7,305,921
	1935-36	7,641,162	806,524	6,834,638	27,042	6,807,596
	1934-35	7,331,603	867,464	6,464,139	26,701	6,437,348

(a) No account has been taken of maintenance costs and depreciation.

5. **Employment.**—(i) *Census Returns.* The number of persons employed in forestry operations as revealed by the Census of the Commonwealth of Australia at the 30th June, 1933, is shown in the following table.

EMPLOYMENT IN FORESTRY, 30th JUNE, 1933.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total. (a)
	No.	No.	No.	No.	No.	No.	No.
Males ..	6,446	7,225	4,054	1,549	4,189	2,376	25,839
Females ..	38	29	27	8	7	5	114
Total ..	6,484	7,254	4,081	1,557	4,196	2,381	25,953

(a) Excluding Northern Territory, 11, and Australian Capital Territory, 152.

(ii) *Logging Operations: Forest Sawmills.* Particulars of employment and costs of logging operations in the forests are given for each State in the following table. These data have been compiled from the details furnished by those establishments which come within the definition of a Forest Sawmill as distinct from those defined as Town Sawmills.

FOREST SAWMILLS: LOGGING OPERATIONS, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
Number of men employed		1,027	698	57	962	980	
Value of wages paid		£ 155,335	£ 106,063	£ 4,634	£ 241,574	£ 113,753	
Other costs	(a)	£ 79,261	£ 119,886	£ 16,346	£ 96,570	£ 76,771	(a)
Value of Royalties, etc., paid		£ 102,839	£ 146,115	£ 24,270	£ 126,079	£ 24,942	
Period worked by men above .. months		(a)	8.57	6.61	9.63	8.03	

(a) Not available.

(iii) *Mill Workers: Forest Sawmills.* Details of the numbers employed in the milling operations of these Forest Sawmills are given in the next table. Further details regarding the operations of these mills are given in Chapter XVIII. "Manufacturing Industry."

FOREST SAWMILLS: MILL WORKERS, 1938-39.

Sex.	N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tasmania.	Total.
	No.	No.	No.	No.	No.	No.	No.
Males ..	2,134	1,788	4,254	215	1,882	1,306	11,579
Females ..	34	9	97	2	8	8	158
Total ..	2,168	1,797	4,351	217	1,890	1,314	11,737

(a) Including town sawmills.

§ 7. Commercial Uses of Principal Australian Timbers.

1. **General.**—The uses of the more important Australian timbers are many and various, and are indicated in previous issues of this work. (See Official Year Book No. 6, pp. 454-6; and Official Year Book No. 10, Section III., §§ 7 and 8.)

A list of Australian timbers best known on the local markets appeared in Official Year Book No. 20, p. 713. [Further references are made in "Timber and Forest Products of Queensland" (E. H. F. Swain), published in 1928.]

2. **Lack of Uniformity in Nomenclature.**—Unfortunately the vernacular names applied to the gums, ironbarks, etc., in the various States, and even in different parts of the same State, do not always refer to identical timbers. The resulting confusion has not only been productive of loss, but it has, to some extent, prejudicially affected the timber trade. This subject is referred to at some length in the special article "Australian Eucalyptus Timbers" in Section III., §§ 7 and 8, of Official Year Book No. 10. At the Forestry Conferences previously mentioned, the matter came up for special consideration, and steps were taken to establish a uniform nomenclature.

§ 8. Oversea Trade.

1. **Imports.**—(i) *Dressed Timber.* The quantities and values of timber imported into Australia during the four years 1935-36 to 1938-39 inclusive are shown according to countries of origin in the following tables:—

DRESSED TIMBER : IMPORTS INTO AUSTRALIA.

Country of Origin.	Quantity.				Australian Currency Values.			
	1935-36.	1936-37.	1937-38.	1938-39.	1935-36.	1936-37.	1937-38.	1938-39.
	Sup. ft.	Sup. ft.	Sup. ft.	Sup. ft.	£	£	£	£
United Kingdom ..	369	2,609	235	551	34	238	76	48
Canada ..	4,301,411	6,772,408	12,286,173	8,926,950	44,625	66,826	165,371	99,797
Other British Countries ..	208,443	98,106	91,387	2,576	2,910	883	2,095	23
Norway ..	5,972,177	5,312,467	5,492,273	4,209,070	53,670	51,318	73,570	47,570
Sweden ..	2,041,848	2,304,871	5,362,982	1,977,921	18,206	28,514	81,694	26,687
U.S. of America ..	1,637,157	2,326,882	1,921,944	2,242,023	13,801	18,523	25,042	24,203
Other Foreign Countries ..	1,967,025	220,576	776,892	418,430	18,371	5,283	14,491	6,771
Total ..	16,128,430	17,238,010	25,931,886	17,777,521	151,801	171,585	362,351	205,099

The figures in the table above are exclusive of items such as architraves, veneers, etc., quantities for which are either not shown, or are expressed in dissimilar units in the Customs entries. The total value of the items so excluded amounted to £67,198 in 1938-39 including plywood, veneered or otherwise, £24,463.

The bulk of the imports of dressed timber comes from Canada, Norway, Sweden and the United States of America. Practically the whole of this timber consists of softwoods—deal and pine—used for lining, weatherboards, flooring, shelving, doors, box-making, etc.

(ii) *Undressed Timber.* Australian imports of undressed timber for the years 1935-36 to 1938-39 are given hereunder:—

UNDRESSED TIMBER, INCLUDING LOGS(a) : IMPORTS INTO AUSTRALIA.

Country of Origin.	Quantity.				Australian Currency Values.			
	1935-36.	1936-37.	1937-38.	1938-39.	1935-36.	1936-37.	1937-38.	1938-39.
	1,000. sup. ft.	1,000. sup. ft.	1,000. sup. ft.	1,000 sup. ft.	£	£	£	£
United Kingdom ..	202	75	170	104	15,696	8,513	13,577	10,959
Canada ..	265,016	261,223	334,177	296,958	825,777	959,801	1,692,500	1,225,664
India ..	101	127	190	1	4,299	5,859	2,596	35
Malaya (British) ..	104	127	368	156	730	894	2,930	1,279
New Zealand ..	36,697	17,095	14,574	11,193	452,167	247,935	221,333	173,555
Other British Countries ..	3,600	4,274	9,689	11,006	34,212	28,064	73,790	80,912
Japan ..	1,186	786	666	374	14,166	10,411	13,558	8,439
Netherlands East Indies ..	41	..	..	..	185	..	..	..
Norway ..	33	..	124	21	237	90	1,668	329
New Caledonia ..	..	..	..	1,671	..	..	..	6,368
Philippine Islands ..	3,949	3,390	4,359	6,878	37,138	31,566	42,375	72,911
Sweden ..	2,251	2,549	2,409	4,618	16,778	20,116	28,066	53,256
United States of America ..	39,863	23,485	31,695	12,245	341,432	218,937	342,674	197,131
Other Foreign Countries ..	5,015	5,042	8,362	2,873	31,307	33,990	79,393	24,098
Total ..	358,148	318,173	406,783	348,098	1,774,124	1,566,266	2,514,460	1,854,936

(a) Exclusive of timber not measured in super. feet.

By far the larger proportion of the undressed timber imports consists of softwoods such as oregon, redwood, hemlock, western red cedar and yellow pine from Canada and the United States of America; and kauri, rimu and white pine from New Zealand. Amongst the hardwoods imported the principal are oak from the United States of America and Japan, and furniture woods from the Pacific Islands.

2. Exports.—(i) *Undressed Timber*. The quantity and value of undressed timber exported from 1935-36 to 1938-39 are given below, the countries of destination being also shown :—

UNDRESSED TIMBER, INCLUDING LOGS. (a) : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.				Value.(b)			
	1935-36.	1936-37.	1937-38.	1938-39.	1935-36.	1936-37.	1937-38.	1938-39.
	1,000 sup. ft.	1,000 sup. ft.	1,000 sup. ft.	1,000 sup. ft.	£	£	£	£
United Kingdom	13,133	16,159	17,500	11,760	148,682	186,253	216,323	138,294
Canada	140	131	341	223	2,565	2,483	7,715	4,723
Ceylon	635	760	567	535	6,353	7,941	5,893	5,593
Hong Kong .. ..	..	69	443	50	..	621	3,740	616
India	438	1	..	..	4,514	3	..	..
Mauritius	432	403	311	354	4,738	5,014	5,846	4,520
New Zealand	12,842	15,066	15,835	17,149	160,398	209,648	237,098	245,450
Pacific Islands—								
Fiji	727	744	896	841	10,832	11,745	14,788	15,637
Gilbert and Ellice Islands Colony	149	156	212	210	1,337	4,413	2,272	2,292
Nauru	153	243	282	293	1,020	4,858	4,218	3,013
Papua	262	267	424	241	3,932	4,074	6,980	3,670
Solomon Islands	160	246	236	161	2,383	4,160	4,809	2,527
Territory of New Guinea	241	207	289	141	3,158	3,595	4,741	2,188
Other Islands	26	74	125	169	391	1,360	2,372	4,172
Union of South Africa	5,399	5,999	7,358	7,164	64,957	57,788	83,055	80,668
Other British Countries	22	127	92	161	269	2,252	1,579	1,769
Africa, Portuguese East	574	382	346	415	7,271	4,370	4,981	5,023
Belgium	1,078	518	1,612	1,286	11,181	7,117	24,241	19,347
China	1,153	748	128	271	11,504	7,161	1,010	2,324
Egypt	392	132	228	719	3,919	1,317	2,280	7,186
Germany	236	298	81	648	2,625	4,661	1,066	9,989
Netherlands	73	196	685	224	974	2,169	8,541	2,777
Pacific Islands—								
New Caledonia	219	60	94	72	3,492	1,075	1,880	1,117
New Hebrides	64	150	128	51	725	1,733	2,306	836
Other Islands	18	36	44	33	378	862	995	780
United States of America	2,475	2,834	1,150	955	63,241	85,101	32,850	27,857
Other Foreign Countries	(c) 78	84	35	212	(c) 1,352	929	438	2,487
Australian Produce	40,307	44,056	48,882	43,798	516,022	606,702	674,187	588,746
Other Produce	812	1,134	560	540	6,169	16,001	7,823	6,079
Total	41,119	45,190	49,442	44,338	522,191	622,703	682,010	594,825

(a) Exclusive of Timber not measured in super. feet.

(b) Australian currency values.

(c) Includes Iraq, 19,127 super. feet, £207, in 1935-36.

The bulk of the exports of undressed timber was consigned to New Zealand, the United Kingdom, South Africa and the United States of America, and consisted largely of the Western Australian hardwoods, jarrah and karri, which have earned an excellent reputation for such purposes as railway sleepers, harbour works, wood paving, etc. Considerable quantities of pole, pile and girder timber are also exported from New South Wales to New Zealand.

(ii) *Sleepers.* Prior to the year 1933-34 particulars of the quantities and values of sleepers exported were included in the table relating to Undressed Timber, including Logs. These details have been separated in the export returns and are now shown in the following table :—

RAILWAY SLEEPERS : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.		Value.(a)	
	1937-38.	1938-39.	1937-38.	1938-39.
	Sup. ft.	Sup. ft.	£	£
United Kingdom	1,184,784	1,438,303	16,722	14,467
Ceylon	3,750,156	5,333,820	37,499	53,339
Hong Kong	1,396,604	..	14,888	..
Mauritius	964,987	562,500	10,217	6,216
New Zealand	7,628,809	16,895,691	78,636	165,303
Pacific Islands	216,038	201,036	2,180	2,341
Union of South Africa	6,299,076	4,941,144	62,990	49,412
Other British Countries	30,024	..	300	..
China	7,852,981	..	80,312	..
Egypt	8,148,120	4,198,210	81,481	41,986
Iran (Persia)	155,604	271,038	1,556	2,707
Iraq	14,479,697	164,769	141,034	1,696
Other Foreign Countries	44,556	29,160	445	291
Total	(b)52,151,436	(c)34,035,671	528,260	337,758

(a) Australian currency values.
1,267,894.

(b) Number of sleepers, 1,803,793.

(c) Number of sleepers,

3. Classification of Imports and Exports.—(i) *General.* The quantities of timber classified according to varieties imported and exported during the year 1938-39 are given in the next table :—

TIMBER : VARIETIES IMPORTED AND EXPORTED FROM AUSTRALIA,
QUANTITIES, 1938-39.

Description.	Unit of Quantity.	Imports.	Exports.	Excess of Imports over Exports.
Dressed	Sup. ft.	17,777,521	881,055	16,896,466
Undressed, including logs	"	348,098,462	44,338,109	303,760,353
Sleepers	"	(a)	34,035,671	-34,035,671
Architraves, mouldings, etc.	Lin. ft.	18,810	72,960	-54,150
Plywood, veneered or otherwise	Sq. ft.	2,890,388	3,015,669	125,281
Palings	No.	5,665	125,420	-119,755
Shingles	"	157,280	..	157,280
Staves—				
Dressed, etc.	"	807,085	200	806,885
Undressed	"	1,004,795	..	1,004,795
Laths—				
For blinds .. ..	"	..	..	..
Other	"	640,115	..	640,115
Doors	"	1,069	(b)	(b)
Wood pulp	Ton	37,550	(a)	37,550
Veneers	Sq. ft.	4,493,339	4,358,479	134,860
Spokes, rims, felloes, etc.	No.	500	(b)	(b)
Other	"	(b)	(b)	(b)

(a) Not recorded separately. (b) Quantity not available.

NOTE.—The minus sign (-) denotes an excess of exports.

Similar particulars relative to the values of imports and exports during the year 1938-39 are shown hereunder :—

TIMBER : VARIETIES IMPORTED AND EXPORTED FROM AUSTRALIA.
VALUES(a), 1938-39.

Description.	Imports.	Exports.	Excess of Imports over Exports.
	£	£	£
Dressed	205,099	20,130	184,969
Undressed, including logs	1,854,936	594,825	1,260,111
Sleepers	(b)	337,758	-337,758
Architraves, mouldings, etc.	132	567	-435
Plywood, veneered or otherwise	24,463	41,254	-16,791
Palings	65	1,265	-1,200
Shingles	342	..	342
Staves—			
Dressed, etc.	45,337	25	45,312
Undressed	25,913	..	25,913
Laths—			
For blinds .. .. .	..	..	..
Other	712	..	712
Doors	74	1,405	-1,331
Wood pulp	399,187	(b)	399,187
Veneers	37,714	27,148	10,566
Spokes, rims, felloes, etc.	12	503	-491
Other.. .. .	3,809	38	3,771
Total	2,597,795	1,024,918	1,572,877

(a) Australian currency values.

(b) Not recorded separately.

NOTE.—The minus sign (—) denotes an excess of exports.

(ii) *Sandalwood*. A considerable quantity of sandalwood is exported, principally from Western Australia to Hong Kong and China, where it is highly prized and largely used for artistic and ceremonial purposes. Particulars for the last four years are as follows :—

SANDALWOOD : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.				Value.(a)			
	1935-36.	1936-37.	1937-38.	1938-39.	1935-36.	1936-37.	1937-38.	1938-39.
	Ton.	Ton.	Ton.	Ton.	£	£	£	£
Hong Kong	1,209	2,120	729	805	32,842	63,344	21,242	18,709
India	75	105	40	26	2,339	3,279	1,280	842
Malaya (British)	99	140	116	97	2,997	4,283	3,578	3,149
Other British Countries	11	20	13	17	351	620	415	545
China	932	1,154	312	686	27,513	34,426	9,357	18,511
Other Foreign Countries	26	16	31	17	803	496	959	574
Total	2,352	3,555	1,241	1,648	66,845	106,448	36,831	42,330

(a) Australian currency values.

(iii) *Tan Bark.* Tan bark figures both as an export and an import in the Australian trade returns. The table hereunder refers to exports :—

TAN BARK : EXPORTS FROM AUSTRALIA.

Country to which Exported.	Quantity.				Value.(a)			
	1935-36.	1936-37.	1937-38.	1938-39.	1935-36.	1936-37.	1937-38.	1938-39.
	Cwt.	Cwt.	Cwt.	Cwt.	£	£	£	£
United Kingdom ..	305	..	100	..	162	..	20	..
New Zealand ..	20,001	10,808	5,779	7,620	9,482	6,024	3,118	3,897
Other British Possessions ..	..	..	30	40	..	..	21	27
Germany ..	1,517	515	3,193	8,251	1,101	228	1,313	3,582
Other Foreign Countries ..	1,941	1,514	6,253	2,309	914	2,155	3,100	1,124
Total	23,764	12,837	15,355	18,220	11,659	8,407	7,572	8,630

(a) Australian currency values.

For a number of years prior to 1927-28 Australia had to import large quantities of tanning bark, but thereafter imports dropped to negligible quantities and exports rose annually to 89,061 cwt. in 1931-32. After 1931-32 exports declined each year and are now less than 20,000 cwt. Excepting 1936-37, when 18,000 cwt. of wattle bark were imported chiefly from South Africa, the quantities imported were not very great.

A comparison of the imports and exports of tan bark during the last five years is given in the next table :—

TAN BARK : IMPORTS AND EXPORTS, AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.
QUANTITIES—					
Imports	2,556	4,362	18,216	7,361	6,199
Exports	39,897	23,764	12,837	15,355	18,220
Excess of exports over imports	37,341	19,402	-5,379	7,994	12,021
VALUES (a)—	£	£	£	£	£
Imports	827	1,395	6,660	3,145	2,548
Exports	18,936	11,659	8,407	7,572	8,630
Excess of exports over imports	18,109	10,264	1,747	4,427	6,082

(a) Australian currency values.

NOTE.—The minus sign (—) denotes an excess of imports.

The imports consist almost exclusively of wattle bark from the plantations in South Africa. One variety of Australian wattle is found to flourish in the sandy belts near the coast, but it is the *Acacia decurrens*, var. *mollis*, which is chiefly relied upon for the production of wattle bark in the South African plantations. Seed has been tried from New South Wales, Tasmania and Victoria, but it is stated that most of the seed is 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) It is found that the treeless, grassy highlands of Natal are specially suitable for wattle culture, and the trees can therefore be grown in rows and economically attended to, while the necessary bark sheds and other appurtenances can be placed in the most advantageous positions; and (b) there is an abundance of cheap and efficient native labour.

(iv) *Other Tanning Substances.* Considerable quantities of tanning substances other than bark are annually imported into Australia. The total value in Australian currency of the importations in 1938-39 was £81,478, and was composed as follows :—Wattle bark extract, £9,410; quebracho extract, £22,776; other extract, £26,394; and valonia, myroblans, cutch, etc., £22,898.

CHAPTER XVII.

FISHERIES.*

§ 1. General.

1. **Fish Stocks.**—Australia possesses an abundant and varied fish fauna, which embraces both tropical and temperate varieties and includes destructive as well as valuable species. In rivers and lakes both indigenous and imported varieties thrive. The latter have been introduced and acclimatized for industrial and sporting purposes by Governments and angling societies. Exploitation of the fishing areas is controlled by governmental authority. In some cases the minimum size of the fish to be taken is fixed, and in other cases the taking of some kinds is prohibited during periods prescribed according to the necessity.

2. **Progress of Industry.**—(i) *Transport and Marketing.* Despite the abundance of edible fish, the progress of the fishery industry in Australia has been slow, the difficulties of transport and marketing of the proved supplies presenting the chief obstacles.

In New South Wales, as shown in § 5 herein and § 6 of this Chapter in Official Year Book No. 17, the matter of exploiting trawlable fish was undertaken by the State Government, which also took steps to improve the conditions under which ordinary coastal fishing is carried on. In Queensland, State trawling was undertaken in 1919, and good trawling areas have been located and charted between Cape Moreton and Caloundra.

(ii) *Economic Investigations.* Although valuable work has been carried out by the State Governments in the way of experiment and culture, much yet remains to be done before the industry is at all commensurate in extent with the industrial progress or consuming capacities of Australia. All live fish imported into Australia are examined on shipboard in order to prevent the importation of undesirable fish. With the object of ascertaining the movements of oceanic fishes, and of estuarine fishes which make periodical oceanic migrations, reports are furnished regarding the various kinds of fishes, etc., and their movements along the coast. Details regarding the activities of the States in fish-culture are given in Official Year Book No. 6, pp. 471–2. By arrangement with the Commonwealth Fisheries Department members of the staff of the Australian Museum, Sydney, accompanied the F.I.S. *Endeavour* on various cruises. As pointed out in § 4, however, this vessel was lost with all hands in 1914. Specimens were collected, mounted for scientific purposes, and distributed to other Australian Museums, a considerable number being put aside for the Commonwealth Fishery Museum.

With the object of reviewing the potentialities of the fishing industry of Australia the Development and Migration Commission convened a meeting of State and Commonwealth representatives. The Conference, which was held in Melbourne during September, 1927, affirmed:—

- (1) The importance of establishing a Marine Biological Institution to study the scientific problems connected with Australian fisheries, and to collect and disseminate authoritative information and give advice on matters concerning the fisheries:
- (2) The desirability of establishing an experimental trawling unit to explore the fisheries resources of Australia.

Committees were formed to deal with important problems concerning the preservation, transportation, marketing and distribution of fish, the canning and curing of fish, the production of fish by-products, the factors of destruction in fisheries, the development of the oyster industry, etc. The reports prepared by these Committees were submitted to a further conference held in July, 1929, at which the Commonwealth Government and all State Governments were represented; it was then unanimously recommended that investigation work should be undertaken by the Commonwealth Government. The Commonwealth Government entrusted this task to the Council for Scientific and Industrial Research and is providing a sum of £80,000, spread over a period of five

* A specially contributed article dealing with the Marine and Fresh Water Fisheries of Australia appeared as § 6 of this Chapter in Official Year Book No. 17 (see pp. 752–67 therein).

years, for the following purposes :—(i) to procure a vessel specially designed for the exploration of pelagic or surface-swimming fish, but which could also carry out certain investigations of demersal or bottom-dwelling species, (ii) to undertake experiments in the canning of fish and the determination of the chemical composition of fish thought to be suitable for the manufacture of fish by-products, (iii) to determine, by tests, the best methods of curing and preserving fish, especially the more common varieties, and (iv) in co-operation with the State authorities, to undertake a study of the systems of distribution of fish in each State with a view to improving existing transport and marketing facilities. A trawler constructed at a cost of £17,000 was commissioned in 1938 and a programme of work was laid down extending over a period of five years. During the first three years, the investigation will be confined to the south-eastern portion of the Australian coast; later it will be extended, within limits, to the south-western portion of the Continent. Experimental cruises completed so far have revealed the presence of four kinds of tuna (bonito, little tunney, skipjack and yellow-fin) and other commercial species. A Fisheries Laboratory and Research Station has been erected at Port Hacking in New South Wales.

The building of a second fishing survey vessel has been ordered. This vessel, which is expected to cost about £7,000, is to be used in Western Australian waters where salmon and tuna suitable for canning are known to abound. Large quantities of fish are now canned in New South Wales and Tasmania, and the industry is being extended to other States. In addition, valuable by-products, such as fish meal and oil, are also produced.

A Commonwealth Director of Fisheries, entrusted with the task of carrying out these investigations, has been appointed for a period of five years. Other steps have been taken to initiate action according to the programme outlined above, including the building up of a staff of trained investigators. It is hoped that, as a result of the knowledge gained from this investigation, the fishery industry of Australia will develop more in keeping with the advancement made by other branches of production.

3. Consumption of Fish.—It has been said that the Australians are not fish-eating people, in view of the fact that the annual consumption of fish per head of population in Great Britain is set down at 42 lb., while in Australia it has been estimated at only 13 lb. There are frequent complaints that the distribution service does not give the public adequate opportunity to satisfy its appetite for a fish diet.

4. Oyster Fisheries.—Natural oyster beds exist on the foreshores in the shallow waters of inlets and estuaries in several parts of Australia. By husbanding the natural crop, and by judicious transplanting, the output has been very materially augmented. The areas are leased by the Government to private persons, lengths of foreshore being taken up under oyster leases. In New South Wales and Queensland the industry has thriven, and small yields are obtained in South Australia, Victoria and Tasmania.

5. Pearl-shell, Pearls, Bêche-de-mer, etc.—(i) *General*. Pearl-shelling is carried on in the tropical waters of Queensland, the Northern Territory and Western Australia. The pearl oyster inhabits the northern and western coastal waters from Cape York to Shark Bay, a length of shore of over 2,000 miles. The shells are marketed in considerable quantities, and pearls are obtained in Queensland, Western Australia and the Northern Territory. The fishing is generally conducted with the aid of diving apparatus in water varying from 4 to 20 fathoms in depth. In Queensland and the Northern Territory the bêche-de-mer industry is carried on, and tortoise-shell is obtained on the coasts. Experiments have been made in cultivating the pearl oyster on suitable banks. In October, 1911, a pearl weighing 178 grains, and valued at £3,000, was obtained at Broome. Further details regarding pearl-shelling are given in Official Year Book No. 6, p. 463. The value of trochus-shell of Australian origin exported during 1938–39 was £34,166.

(ii) *Royal Commission on Pearl-shelling Industry*. In accordance with the “White Australia” policy it was originally determined that the employment of Asiatic labour in the pearl-shelling industry should be restricted, and ultimately cease, and it was proposed that after 31st December, 1913, permits to bring in Asiatics for the pearling-fleet should no longer be issued. In view, however, of the disorganization of the industry occasioned by the War of 1914–19, the time was extended to the 30th June, 1918, after which

date permits to introduce Asiatic labour were to be granted only in cases where the diver and tender of a boat were Europeans. The Royal Commission appointed in March, 1912, presented its final report in 1916. The Commissioners stated that, though it might be practicable, they did not consider it advisable or profitable to attempt to transfer the industry from Asiatics to Europeans. They further stated that, while the labour employed is almost entirely Asiatic, they did not consider that the "White Australia" policy would be weakened or imperilled by allowing the industry to continue as then conducted.

(iii) *Tariff Board Inquiry.* Arising out of an application for the payment of a bounty on pearl-shell gathered by fishing vessels registered in Australia, the industry was the subject of an inquiry by the Tariff Board which presented its report in 1935. The Board did not approve the granting of a bounty but recommended some relief to the industry in the form of the remission of primage and customs duty.

§ 2. The Fishing Industry.

1. *Boats and Men Engaged, and Take.*—(i) *General Fisheries.* The returns have been compiled from particulars supplied by the State Departments, and while the data do not generally lend themselves to presentation on a uniform basis, the principal facts have been incorporated in the tables hereunder:—

GENERAL FISHERIES, 1938-39.

State or Territory.	No. of Boats Engaged.	Value of Boats and Equipment.	No. of Men Employed.	Total Take of—		Gross Value of Take—	
				Fish.	Spiny Lobster (Crayfish).	Fish.	Spiny Lobster (Crayfish).
	No.	£	No.	Cwt.	Doz.	£	£
New South Wales(a)	1,822	175,624	(b)2,762	262,343	13,467	546,000	(c)46,100
Victoria ..	893	107,629	1,572	114,641	6,436	222,621	7,210
Queensland ..	983	91,995	2,079	(d)81,980	(e)14,428	(d)171,718	f 6,296
South Australia(a)	1,200	151,000	1,650	80,000	22,000	240,000	17,000
Western Australia(a)	336	53,978	674	52,153	56,202	164,282	(g)22,151
Tasmania(a)(h) ..	226	68,400	337	21,370	65,652	39,740	36,109
Northern Territory	2	400	7	248	..	920	..
Total ..	5,462	649,026	9,081	612,735	178,185	1,385,281	134,866

(a) Year ended December, 1938. (b) Fishermen's licences issued. (c) Including £32,500, the value of 9,545 cwt. of prawns and 6,435 dozen crabs. (d) Includes prawns. (e) Crabs. (f) Including 127 turtles valued at £129. (g) Including prawns, £5,475, and crabs, £2,626. (h) Includes oyster fisheries.

Returns for Australia for the last five years are given in the table below:—

GENERAL FISHERIES : AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
No. of boats engaged ..	4,272	4,589	4,555	5,002	5,462
No. of men employed ..	8,151	7,963	8,237	8,342	9,081
Fish obtained—					
Quantity ..	cwt. 557,214	540,167	556,645	574,115	612,735
Gross value ..	£ 1,159,808	1,180,885	1,369,332	1,334,095	1,385,281
Lobsters obtained—Gross value £	a123,296	a117,058	142,943	136,683	134,866

(a) Exclusive of South Australia.

(ii) *Edible Oyster Fisheries.* Edible oyster fisheries are of small dimensions outside New South Wales and Queensland. During 1938-39 the available returns show the following takes:—New South Wales, 76,912 cwt., value £101,700; Queensland, 11,687 cwt., value £15,408. In Tasmania the scallop is far more important than the oyster. In 1938 the scallops taken in Tasmania were valued at £14,500.

Returns for Australia for the last five years are given in the appended table :—

EDIBLE OYSTER FISHERIES : AUSTRALIA.

Particulars.	1934-35. (a)	1935-36.	1936-37.	1937-38.	1938-39.
No. of boats engaged	665	699	711	757	754
No. of men employed	675	687	712	677	850
Oysters obtained—					
Quantity cwt.	58,678	63,501	74,283	83,666	89,145
Gross value (b) £	78,287	89,989	102,683	124,169	132,201

(a) Exclusive of South Australia. (b) Including scallops in Tasmania valued at £5,500 in 1934; £6,650 in 1935; £7,800 in 1936; £9,500 in 1937; and £14,500 in 1938.

(iii) *Pearls, Pearl-shell and Bêche-de-mer.* Details regarding the production, trade, etc., for these items, so far as they are ascertainable, are given hereunder. For obvious reasons no correct estimate can be obtained of the value of pearls. Pearl-shell (*Margaritifera*) is widely distributed in North Australian waters over an area facing some thousands of miles of coastline, though not intensively over the whole distance. The north-west beds are the most prolific, but those around and to the north of Cape York are also of importance. There is need for further investigation into the occurrence of this valuable shell, as well as of trochus, green snail, window-pane shell (*Placuna*), the various types of trepang or bêche-de-mer (*Holothuria*), both in tropical Australian waters and those of Papua and the mandated area of New Guinea. Particulars returned for the year 1938-39 are as follows :—

PEARL, PEARL-SHELL AND BÊCHE-DE-MER FISHERIES,(a) 1938-39.

State or Territory.	Number of Boats Engaged.	Value of Boats and Equipment.	Number of Men Employed.	Quantity of Pearl-shell obtained.	Gross Value of Pearl-shell obtained.	Gross Value of Pearls obtained (b)	Gross Value of Bêche-de-mer obtained.	Gross Value of Tortoise-shell obtained.
	No.	£	No.	Tons.	£	£	£	£
Queensland (c)	89	92,475	990	1,118	104,626	58	7,725	18
Western Australia (d)								
(e)	79	62,058	652	1,015	90,415	3,174	168	49
Northern Territory	13	13,600	108	410	27,240	165	252	..
Australia	181	168,133	1,750	2,543	222,281	3,397	8,145	67

(a) No pearl-shelling industry in New South Wales, Victoria, South Australia and Tasmania. (b) Incomplete; as returned. (c) Also trochus-shell to the value of £23,823. (d) Year ended December, 1938. (e) Also 20 cwt. trochus-shell valued at £62.

The figures for tortoise-shell and trochus-shell as returned are incomplete, as the necessary information is not collected in full detail. In the following summary of production during the last five years export figures of Australian origin are inserted for both of these items :—

PEARL, PEARL-SHELL AND BÊCHE-DE-MER FISHERIES : AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
No. of boats engaged	230	215	221	204	181
No. of men employed	2,599	1,991	2,241	1,941	1,750
Pearl-shell obtained—					
Quantity tons	2,107	2,275	2,780	2,854	2,543
Value £	201,243	239,952	340,244	310,655	222,281
Pearls obtained (a)—					
Value £	9,439	6,031	5,495	4,111	3,397
Bêche-de-mer obtained—					
Value £	14,392	15,082	6,495	14,237	8,145
Tortoise-shell exported—					
Value £	747	402	367	380	151
Trochus-shell exported—					
Value £	44,694	41,590	51,209	32,147	34,166

(a) Incomplete; as returned.

2. Value of Production.—As the outcome of a series of conferences by Australian Statisticians it is now possible to present the value of production of the fishing industry on a more satisfactory basis than was possible hitherto. It should be remembered, however, that the actual collection of statistics of the quantity of fish taken presents many difficulties and the gross values are not complete in some of the States. Particulars of the value of other materials used in the process of production are not available for all States, and consequently 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 FISHERIES PRODUCTION, 1938-39.

State.	Gross Production Valued at Principal Markets.	Marketing Costs.	Gross Production Valued at Place of Production.	Value of other Materials used in process of Production.	Net Value of Production.(a)	
	£	£	£	£	£	
New South Wales ..	784,000	164,000	620,000	56,000	564,000	
Victoria	229,906	52,987	176,919	(b)	(b)	
Queensland	330,000	53,000	277,000	63,000	214,000	
South Australia ..	257,518	37,117	220,401	(b)	(b)	
Western Australia ..	280,301	10,407	269,894	27,170	242,724	
Tasmania	90,350	..	90,350	(b)	(b)	
Total	{ 1938-39..	(c)1,972,075	317,511	1,654,564	(b)	(b)
	{ 1937-38..	(c)1,884,562	289,603	1,594,959	(b)	(b)
	{ 1936-37..	(c)1,916,059	278,059	1,638,000	(b)	(b)
	{ 1935-36..	(c)1,707,019	287,828	1,419,191	(b)	(b)
	{ 1934-35..	(c)1,595,127	252,111	1,343,016	(b)	(b)

(a) No account has been taken of maintenance costs and depreciation. (b) Not available.
(c) Not including production in the Northern Territory of a gross value of £23,577 in 1938-39; £68,900 in 1937-38; £89,446 in 1936-37; £73,109 in 1935-36; and £41,526 in 1934-35.

3. Fish Preserving.—To encourage the industry the Federal Parliament provided a bounty of $\frac{1}{4}$ d. per lb. for fish preserved as prescribed during the ten years 1907-8 to 1916-17, but the bounty failed to develop the industry, and was not renewed on its expiration in 1916-17. The amount of bounty paid during the ten years was only £3,005. A further attempt to develop this branch of the fishing industry is now receiving the attention of the Commonwealth Government. Details of the proposals are shown in § 1 hereinbefore.

4. State Revenue from Fisheries.—The revenue from fisheries in each State during the year 1938-39 is given hereunder:—

FISHERIES : REVENUE, 1938-39.

State or Territory.	Licences.	Leases.	Fines and Forfeitures.	Other Sources.	Total.
	£	£	£	£	£
New South Wales (a) ..	4,127	10,218	541	643	15,529
Victoria	(b)1,350	58	524	36	1,968
Queensland	3,253	1,943	263	151	5,610
South Australia (a) ..	1,750	..	..	..	1,750
Western Australia (a) ..	4,414	227	69	3,890	8,600
Tasmania (a)	576	..	..	147	723
Northern Territory ..	93	..	..	..	93
Total	15,563	12,446	1,397	4,867	34,273

(a) Year ended December, 1938.

(b) Excluding £3,240 received from sporting licences.

Similar particulars for Australia for the last five years are given in the following table :—

FISHERIES : REVENUE, AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Licences	8,976	8,445	10,120	12,706	15,563
Leases	12,265	12,517	11,552	11,988	12,446
Fines and Forfeitures	903	1,224	1,617	1,512	1,397
Other Sources	842	960	1,270	4,888	4,867
Total	22,986	23,146	24,559	31,094	34,273

§ 3. Oversea Trade in Fishery Products.

1. Imports of Fish.—The development of the local fishing industry leaves much to be desired, as is evident from the large imports. For the last five years the imports were as follows :—

FISH : IMPORTS INTO AUSTRALIA.

Australian Currency Values.

Classification.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Fresh (oysters) ..	cwt.	4,609	4,982	2,349	893	635
	£	2,702	4,044	1,468	881	704
Fresh, or preserved by cold process	cwt.	70,585	85,777	75,910	79,411	83,393
	£	204,746	257,870	272,559	288,796	273,288
Potted	cwt.	5,794	7,426	8,419	7,733	9,435
	£	96,451	109,943	118,271	109,685	122,250
Preserved in tins ..	cwt.	209,640	246,525	262,360	247,247	251,229
	£	817,398	929,344	987,235	1,044,287	1,114,883
Smoked, dried, and n.e.i.	cwt.	13,340	11,102	14,891	14,172	16,109
	£	25,744	29,932	40,944	39,422	34,551
Crustaceans	cwt.	4,393	4,008	4,300	5,793	6,829
	£	42,561	38,864	39,369	57,451	70,328
Total	cwt.	308,361	359,820	368,229	355,249	367,630
	£	1,189,602	1,369,997	1,459,846	1,540,522	1,616,004

Tinned fish constitutes by far the largest proportion of the imports; salmon from Canada, herrings from the United Kingdom and sardines from Norway were the chief varieties imported. The potted fish comes chiefly from the United Kingdom, which also supplied a considerable proportion of the fresh fish imported in 1938-39; the bulk of the remainder came from New Zealand and the Union of South Africa. The small import of oysters is supplied by New Zealand, while Japan furnished 5,812 cwt. of the crustaceans imported.

2. **Exports of Fish.**—The exports of fish are comparatively insignificant. During the year 1938-39 they were as follows :—Fresh or preserved by cold process, 53,000 lb., £1,741 ; oysters, fresh, 212 cwt., £437 ; potted or concentrated, £825 ; preserved in tins, 594,883 lb., £24,472 ; smoked or dried, 38,482 lb., £1,306 ; other including salted, 662 cwt., £6,349.

3. **Exports of Pearl and Other Shell.**—The exports of pearl, tortoise and trochus-shell of Australian origin are given hereunder for the five years 1934-35 to 1938-39 :—

PEARL, TORTOISE AND TROCHUS-SHELL : EXPORTS FROM AUSTRALIA.

Article.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Pearl-shell	cwt.	43,467	56,306	52,058	53,289	52,532
	£	218,463	302,491	319,631	345,580	244,266
Tortoise-shell	lb.	2,229	663	674	1,129	410
	£	752	402	367	380	151
Trochus-shell	cwt.	10,111	9,260	8,847	6,370	9,108
	£	44,694	41,590	51,209	32,147	34,166

The bulk of the pearl-shell exported during 1938-39 was consigned to the United States of America and the United Kingdom, the respective values of the shipments amounting to £139,921 and £90,777, while trochus-shell to the value of £31,755 was dispatched to Japan.

§ 4. The Development of Fisheries in Australia.

In 1907 the Commonwealth Government decided to demonstrate what might be attained commercially by the application of modern methods in fishery. A Federal Investigation Ship, the *Endeavour*, was constructed specially for the work, and a Director of Fisheries was appointed. Experimental cruises were undertaken, which showed that Australia possesses an asset of considerable value in her sea fisheries. The *Endeavour* was unfortunately lost at sea with all on board at the end of 1914. A description of the trawling grounds discovered, data regarding oceanography to the east of Australia, and a list of the publications of the Department will be found on pp. 333-5 of the Official Year Book No. 14.

In accordance with the recommendations of the Australian Fisheries Conference of 1927-29 the Commonwealth Government decided to continue investigations, and the Council for Scientific and Industrial Research was entrusted with the carrying out of the programme. This has been referred to in § 1 par. 2 above.

§ 5. Trawling in Australian Waters.

The State Trawling Industry was established in New South Wales in 1915, and fishing operations were conducted with seven steel steam trawlers. The catches were landed at Sydney and Newcastle, and the fish distributed through retail shops, of which there were fourteen in the metropolitan area, one in Newcastle, and five in country towns. Early in the year 1923 the Government discontinued trawling operations, as the venture was not a commercial success. The operations of the trawlers, however, revealed some of the richest trawling areas in the world, and these localities are being successfully exploited by private enterprise. There were fourteen trawlers in commission in New South Wales during 1937, compared with eighteen in 1929. Approximately one-half of the total take of fish in that State is trawled.

CHAPTER XVIII.

MANUFACTURING INDUSTRY.

NOTE.—Working proprietors are included in all cases in the "Number of Persons Engaged."

§ 1. Number of Factories.

1. Number of Factories in each State.—The following table gives the number of factories in each State for the last five years:—

FACTORIES : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1934-35 ..	8,254	9,100	2,470	1,803	1,658	926	24,211
1935-36 ..	8,486	9,160	2,482	1,805	1,946	925	24,894
1936-37 ..	8,726	9,165	2,883	1,916	2,032	946	25,668
1937-38 ..	9,097	9,241	3,063	1,980	2,066	948	26,395
1938-39 ..	9,404	9,250	3,087	2,067	2,129	944	26,941

2. Number of Factories in Industrial Classes.—(i) *Australia.* The next table shows the number of factories in Australia during the last five years, classified in the industrial groups agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during the year 1930-31, superseded the grouping which had been in use since 1902. The definition of a factory adopted at the Conference of Statisticians in 1902 is, however, still used, namely, "Any factory, workshop or mill where four or more persons are employed or power is used." Details in regard to some of the principal industries included in the table will be found in § 9 hereinafter.

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
I. Treatment of Non-metalliferous Mine and Quarry Products	433	462	517	548	564
II. Bricks, Pottery, Glass, etc.	431	450	436	459	471
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	596	630	655	652	666
IV. Industrial Metals, Machines, Implements and Conveyances	6,100	6,303	6,788	7,102	7,255
V. Precious Metals, Jewellery and Plate	270	277	282	290	290
VI. Textiles and Textile Goods	588	589	577	591	611
VII. Skins and Leather	518	525	537	536	533
VIII. Clothing	4,229	4,260	4,259	4,334	4,314
IX. Food, Drink and Tobacco	4,657	4,721	4,842	4,982	5,202
X. Woodworking and Basketware	2,446	2,541	2,715	2,771	2,822
XI. Furniture, Bedding, etc.	1,020	1,057	1,092	1,113	1,149
XII. Paper, Stationery, Printing, Bookbinding, etc.	1,750	1,781	1,771	1,790	1,816
XIII. Rubber	292	290	289	302	299
XIV. Musical Instruments	29	31	34	34	34
XV. Miscellaneous Products	319	371	390	398	413
Total, Classes I to XV.	23,708	24,378	25,187	25,902	26,439
XVI. Heat, Light and Power	503	516	481	493	502
Grand Total	24,211	24,894	25,668	26,395	26,941

The number of factories in operation declined each year from 1928-29 to 1931-32 as the result of the economic depression, but the returns since the last-mentioned year reveal substantial annual increases, the number in 1938-39 being the highest yet recorded.

(ii) *States, 1938-39.* The following table shows the number of factories in each State in 1938-39, classified according to the nature of the industry:—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, STATES, 1938-39.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W.Aust.	Tas.	Aust.
	No.	No.	No.	No.	No.	No.	No.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	204	178	53	52	61	16	564
II. Bricks, Pottery, Glass, etc. ..	220	113	44	43	36	15	471
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	290	234	41	48	35	18	666
IV. Industrial Metals, Machines, Implements and Conveyances ..	2,634	2,528	746	529	628	190	7,255
V. Precious Metals, Jewellery and Plate ..	86	137	23	22	16	6	290
VI. Textiles and Textile Goods ..	159	371	22	37	13	9	611
VII. Skins and Leather ..	212	207	49	28	29	8	533
VIII. Clothing ..	1,623	1,813	302	291	234	51	4,314
IX. Food, Drink and Tobacco ..	1,715	1,458	766	552	460	251	5,202
X. Woodworking and Basketware ..	860	720	572	168	225	277	2,822
XI. Furniture, Bedding, etc. ..	351	412	145	89	99	53	1,149
XII. Paper, Stationery, Printing, Book-binding, etc. ..	685	675	178	115	134	29	1,816
XIII. Rubber ..	96	105	36	27	24	11	299
XIV. Musical Instruments ..	13	13	3	2	3	..	34
XV. Miscellaneous Products ..	167	168	37	19	19	3	413
Total, Classes I to XV...	9,315	9,132	3,017	2,022	2,016	937	26,439
XVI. Heat, Light and Power ..	149	118	70	45	113	7	502
Grand Total ..	9,464	9,250	3,087	2,067	2,129	944	26,941

§ 2. Classification of Factories according to Number of Persons Engaged.

1. *States, 1938-39.*—The following table shows, for each State, the number of factories classified according to the number of persons engaged in 1938-39:—

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF EMPLOYEES, 1938-39.

No. of Persons Employed in each Factory.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
NUMBER OF FACTORIES.							
Under 4 ..	2,720	3,208	1,087	526	1,047	256	8,844
4.. ..	976	784	286	215	99	114	2,474
5 to 10 ..	2,534	2,178	804	648	516	362	7,042
11 to 20 ..	1,316	1,278	410	296	212	110	3,622
21 to 50 ..	1,101	1,021	284	246	173	71	2,896
51 to 100 ..	438	415	110	80	57	17	1,117
Over 100 ..	379	366	106	56	25	14	946
Total ..	9,464	9,250	3,087	2,067	2,129	944	26,941

Some marked changes have taken place during the past decade in the distribution of factories according to the number of persons engaged. In 1926-27 of a total of 21,579 factories reported, 7,644, or 35.42 per cent., had less than five persons engaged whereas in 1938-39 the number of such factories had increased to 11,318, representing 42.01 per cent. of the total of 26,941 factories. The increase in the number of small factories was probably due to the multiplication of small repair establishments (boots and shoes, cycles and motors, etc.) which are technically accounted as factories by the installation of some power machine.

CLASSIFICATION OF FACTORIES ACCORDING TO NUMBER OF EMPLOYEES. 459

In the other groups, the effect of the economic depression during the middle years of the decade is clearly noticeable, but since 1931-32 the improvement has been very steady. Factories with more than 100 persons engaged advanced from 733 in 1926-27 to a new high level of 960 in 1937-38, the persons engaged in these factories increasing from 204,363 or 43.74 per cent. of the total number to 273,502 or 48.3 per cent. during the same period. In 1938-39 the number of such factories decreased slightly from the previous year to 946, employing 272,022 persons or 47.5 per cent. of the total number employed.

The relative importance of large and small factories is more conclusively illustrated by a classification of the average number of persons engaged according to the size of factory in which they work :—

FACTORIES : CLASSIFICATION OF PERSONS ENGAGED ACCORDING TO SIZE OF FACTORY, 1938-39.

No. of Persons Employed in Group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER ENGAGED DURING PERIOD WORKED.							
Under 4 ..	5,708	6,140	2,309	1,167	2,001	585	17,910
4 ..	3,904	3,136	1,144	860	396	456	9,896
5 to 10 ..	17,553	15,213	5,468	4,489	3,335	2,422	48,480
11 to 20 ..	19,272	19,013	5,971	4,274	3,120	1,569	53,219
21 to 50 ..	35,234	32,838	8,672	7,718	5,412	2,252	92,126
51 to 100 ..	31,223	28,813	8,102	5,549	4,003	1,155	78,845
Over 100 ..	118,906	98,312	23,207	19,897	5,472	6,228	272,022
Total ..	231,800	203,465	54,873	43,954	23,739	14,667	572,498
Av. per P'cty	24.49	22.00	17.78	21.26	11.15	15.54	21.25

2. Australia, 1934-35 to 1938-39.—In the following table factories in Australia during each of the last five years are classified according to the number of persons engaged.

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS ENGAGED, AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tablsh- ments.	Persons en- gaged.	Es- tablsh- ments.	Persons en- gaged.	Es- tablsh- ments.	Persons en- gaged.	Es- tablsh- ments.	Persons en- gaged.
1934-35—								
Number ..	20,012	112,708	3,457	143,157	742	204,502	24,211	460,367
Average per establishment ..	5.63	41.41	42.13	41.41	276.51	275.61	20.16	19.01
Percentage on total ..	82.66	24.48	14.28	31.10	3.06	44.42	100.00	100.00
1935-36—								
Number ..	20,413	117,443	3,646	153,603	835	230,889	24,894	501,935
Average per establishment ..	5.75	42.13	42.13	42.13	276.51	280.18	20.69	20.16
Percentage on total ..	82.00	23.40	14.65	30.60	3.35	46.00	100.00	100.00
1936-37—								
Number ..	21,017	122,179	3,756	158,007	895	250,764	25,668	530,950
Average per establishment ..	5.81	42.07	42.07	42.07	284.90	280.18	20.69	20.69
Percentage on total ..	81.88	23.01	14.63	29.76	3.49	47.23	100.00	100.00
1937-38—								
Number ..	21,514	126,585	3,921	166,064	960	273,502	26,395	566,151
Average per establishment ..	5.88	42.35	42.35	42.35	284.90	284.90	21.45	21.45
Percentage on total ..	81.50	22.36	14.86	29.33	3.64	48.31	100.00	100.00
1938-39—								
Number ..	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average per establishment ..	5.89	42.60	42.60	42.60	287.55	287.55	21.25	21.25
Percentage on total ..	81.59	22.62	14.90	29.86	3.51	47.52	100.00	100.00

§ 3. Power Equipment in Factories.

1. **General.**—Statistics of power equipment in factories are now collected on a different basis to that used prior to 1936-37. Previously the statistics represented the "average horse-power used" in all factories, including Central Electric Stations, but in 1936-37 information was obtained in respect of the "rated horse-power" of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition the power equipment of Central Electric Stations was collected in greater detail. If duplication is to be avoided 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.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories using steam, gas, oil, electricity, or water power, and the rated horse-power of engines ordinarily in use and in reserve or idle during 1938-39 :—

FACTORIES(a) : RATED HORSE-POWER OF ENGINES, 1938-39.

State.	Number of Establishments.			Rated Horse-power of Engines.	
	Using Power.	Others.	Total.	Ordinarily in use.	In Reserve or Idle (omitting obsolete).
	No.	No.	No.	H.P.	H.P.
New South Wales ..	8,915	443	9,358	678,421	74,726
Victoria ..	8,681	490	9,171	384,973	96,055
Queensland ..	2,848	185	3,033	193,436	16,047
South Australia ..	1,837	188	2,025	101,919	9,668
Western Australia ..	1,846	174	2,020	65,157	7,352
Tasmania ..	888	51	939	54,863	9,715
Australia ..	25,015	1,531	26,546	1,478,769	213,563

(a) Excluding Central Electric Stations.

3. **Rated Horse-power of Engines Ordinarily in Use.**—(i) *According to Type in States.* Particulars of the types of engines ordinarily in use in each State and their rated horse-power are given in the next table :—

FACTORIES(a) : TYPES AND RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1938-39.

State.	Rated Horse-power of Engines ordinarily in use.								Total. (b)
	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
N.S.W. ..	129,197	49,721	4,912	3,267	15,420	398	475,506	85,180	678,421
Victoria ..	38,468	30,698	5,704	3,700	11,200	1,025	294,178	36,378	384,973
Queensland ..	81,143	3,588	14,656	4,112	14,434	..	75,503	39,342	193,436
S. Australia ..	7,738	..	4,395	2,229	7,415	1	79,641	6,929	101,919
W. Australia ..	7,974	72	2,744	2,387	7,085	..	44,898	4,380	65,160
Tasmania ..	3,889	70	5	2,276	245	192	48,186	7,681	54,863
Australia ..	268,409	84,149	32,916	17,971	55,799	1,616	1,017,912	179,890	1,478,772

(a) Excluding Central Electric Stations.

(b) Excluding particulars in column (c).

(ii) *Australia, 1936-37 to 1938-39.*—Corresponding details are given for Australia since 1936-37 in the following table:—

FACTORIES(a) : TYPES AND RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, AUSTRALIA.

Year.	Rated Horse-power of Engines ordinarily in use.								Total. (b)
	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		
	Recipro- cating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Pur- chased.	Own Genera- tion. (c)	
1936-37 ..	244,963	63,311	27,030	15,447	46,593	1,024	798,944	147,919	1,197,312
1937-38 ..	266,939	83,542	28,372	15,026	51,053	1,510	888,919	172,130	1,336,261
1938-39 ..	268,409	84,149	32,916	17,971	55,799	1,616	1,017,912	179,890	1,478,772

(a) Excluding Central Electric Stations.

(b) Excluding particulars in column (c).

(iii) *In Classes of Industry, 1938-39.* The next table shows the rated horse-power of engines ordinarily in use in the various classes of industry in each State during 1938-39:—

FACTORIES(a) : RATED HORSE-POWER OF ENGINES ORDINARILY IN USE, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.	H.P.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	42,771	26,012	6,368	4,293	4,622	8,848	92,914
II. Bricks, Pottery, Glass, etc. ..	24,866	18,840	3,630	3,858	2,983	740	54,917
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	23,409	24,637	2,374	7,517	5,412	432	63,781
IV. Industrial Metals, Machines, Implements and Conveyances ..	328,501	77,300	35,586	39,376	13,366	14,901	509,030
V. Precious Metals, Jewellery and Plate ..	1,031	2,503	117	343	57	21	4,072
VI. Textiles and Textile Goods ..	19,574	41,644	2,474	3,133	759	2,986	70,570
VII. Skins and Leather ..	8,782	8,492	2,032	372	765	332	20,775
VIII. Clothing ..	8,590	11,539	1,188	888	739	154	23,098
IX. Food, Drink and Tobacco ..	107,306	80,352	99,989	24,017	19,741	6,739	338,144
X. Woodworking and Basket-ware ..	41,176	28,782	29,917	9,009	11,593	7,639	128,116
XI. Furniture, Bedding, etc. ..	7,982	7,752	2,900	2,459	1,698	745	23,536
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	27,589	30,192	4,930	3,483	2,895	11,026	80,115
XIII. Rubber ..	21,034	19,215	1,051	322	89	42	41,753
XIV. Musical Instruments ..	793	65	13	..	23	..	894
XV. Miscellaneous Products ..	4,939	3,376	118	353	207	159	9,152
Total, Classes I to XV. ..	668,343	380,701	192,687	99,423	64,949	54,764	1,460,867
XVI. Gas Works ..	10,078	4,272	749	2,496	211	99	17,905
Grand Total ..	678,421	384,973	193,436	101,919	65,160	54,863	1,478,772

(a) Excluding Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—
 (i) According to Type in Australia. Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1938-39 are given below :—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA.

Particulars.	Capacity of Engines and Generators.						Total.
	Steam.		Internal Combustion.			Water.	
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		
Engines installed—							
Total installed Rated H.P.	35,531	1,769,449	20,226	1,733	138,540	239,140	2,204,619
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	17,986	1,323,383	12,347	921	92,070	173,589	1,620,296
Effective capacity .. K.W.	15,555	1,100,744	11,406	867	85,251	150,589	1,364,412
Maximum load .. K.W.	12,910	947,216	8,876	860	61,930	128,644	1,160,436
Horse-power equivalent—							
Total installed .. H.P.	24,111	1,774,061	16,551	1,235	123,424	232,704	2,172,086
Effective capacity .. H.P.	20,853	1,475,601	15,201	1,162	114,287	201,872	1,829,062
Maximum load .. H.P.	17,306	1,269,790	11,898	1,153	83,071	172,454	1,555,622

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State are given in the next table for 1938-39.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT IN STATES, 1938-39.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Engines installed Rated H.P.	953,497	540,746	225,094	176,335	150,052	158,895	2,204,619
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	748,684	375,195	150,188	119,731	107,412	119,086	1,620,296
Effective capacity .. K.W.	620,468	313,027	114,414	119,171	100,625	96,707	1,364,412
Maximum load .. K.W.	521,571	292,713	82,486	111,459	64,942	87,265	1,160,436
Horse-power equivalent—							
Total installed .. H.P.	1,003,648	502,968	201,334	160,505	143,991	159,640	2,172,086
Effective capacity .. H.P.	831,769	419,627	153,378	159,755	134,893	129,640	1,829,062
Maximum load .. H.P.	699,191	392,396	110,577	149,417	87,058	116,983	1,555,622

§ 4. Employment in Factories.

1. **Number Engaged.**—All persons engaged in the manufacturing activities of a factory, including proprietors who work in their own business and "outworkers" (see par. 4 (ii) hereinafter) are counted as factory employees, while all those are excluded who are engaged in selling and distributing, such as salesmen, travellers, collectors, carters engaged solely on outward delivery of manufactured goods and retailing storemen. Employment has been classified as follows :—(i) Working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) engine-drivers and firemen; (v) skilled and unskilled workers in the factories, mills, or workshops; (vi) carters and messengers; and (vii) others.

Prior to the year 1928-29 employment in factories was computed by dividing the sum of the number engaged each week by the number of weeks worked. The figures, therefore, represented the average number engaged over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29 the figure represents the equivalent average number engaged over a full year of fifty-two weeks. The classification of factories according to the number of persons engaged (see § 2 *ante*), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

The following table shows, for each year from 1934-35 to 1938-39 inclusive (a) the average number of persons (including both sexes of all ages) engaged in manufacturing industries in each State; (b) the percentage of the number engaged in each State on the total number engaged in Australia; and (c) the number engaged per ten thousand of the mean population in each State and Australia.

The number of persons engaged in factories in Australia reached its highest point before the depression during the years 1926-27 to 1928-29 when the average for those years was slightly in excess of 450,000. The downward trend in manufacturing operations which began early in 1930 continued with increasing force until the number engaged had fallen to 336,658 in 1931-32, a decline of 25 per cent. on the average already quoted. In 1932-33 employment began to increase and gains were recorded in each year thereafter until a new high level of 565,106 was reached in 1938-39. Stated in relation to population, the number engaged in 1938-39 was 47,300 in excess of the previous maximum in 1926-27.

FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
AVERAGE NUMBER ENGAGED DURING FULL YEAR (52 WEEKS).							
1934-35 ..	175,033	169,691	43,048	33,497	17,774	10,555	449,598
1935-36 ..	193,200	183,390	45,128	38,471	20,993	11,589	492,771
1936-37 ..	208,497	191,383	48,216	40,710	22,711	12,431	523,948
1937-38 ..	224,861	201,793	52,119	44,084	23,133	13,170	559,160
1938-39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106

PERCENTAGE ON AUSTRALIAN TOTAL.

	%	%	%	%	%	%	%
1934-35 ..	38.93	37.74	9.58	7.45	3.95	2.35	100.00
1935-36 ..	39.21	37.21	9.16	7.81	4.26	2.35	100.00
1936-37 ..	39.79	36.53	9.20	7.77	4.34	2.37	100.00
1937-38 ..	40.21	36.09	9.32	7.88	4.14	2.36	100.00
1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00

PER 10,000 OF POPULATION.

1934-35 ..	664	924	448	573	401	461	671
1935-36 ..	727	995	464	656	469	503	730
1936-37 ..	778	1,033	490	692	503	535	770
1937-38 ..	830	1,084	524	746	506	553	815
1938-39 ..	837	1,076	537	730	502	583	816

2. Rates of Increase, 1934-35 to 1938-39.—The percentage of increase on the average number of persons engaged in the preceding year is shown below for each State from 1934-35 onwards:—

FACTORIES : ANNUAL PERCENTAGE INCREASE OF PERSONS ENGAGED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	%	%	%	%	%	%	%
1934-35 ..	13.61	8.54	7.40	13.60	9.97	7.90	10.76
1935-36 ..	10.38	8.07	4.83	14.85	18.11	9.80	9.60
1936-37 ..	7.92	4.36	6.84	5.82	8.18	7.27	6.33
1937-38 ..	7.85	5.44	8.09	8.29	1.86	5.94	6.72
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06

NOTE.—Minus sign (—) indicates decrease.

3. Persons Engaged in Classes of Industry.—(i) *Australia*. The table hereunder gives the average number of persons engaged in factories under each industrial group in Australia for the years 1934-35 to 1938-39 inclusive:—

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
I. Treatment of Non-ferrous Mine and Quarry Products	6,550	7,571	8,736	9,952	10,343
II. Bricks, Pottery, Glass, etc. ..	11,483	13,088	14,262	15,142	15,709
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	14,846	16,217	17,614	18,835	19,816
IV. Industrial Metals, Machines, Implements and Conveyances	125,640	145,481	161,512	178,019	177,677
V. Precious Metals, Jewellery and Plate	2,737	3,210	3,782	3,761	3,726
VI. Textiles and Textile Goods	38,042	42,031	43,370	45,224	46,082
VII. Skins and Leather	9,779	10,440	10,872	10,437	10,767
VIII. Clothing	78,074	81,400	82,138	85,371	86,092
IX. Food, Drink and Tobacco	70,517	73,265	77,498	81,785	83,846
X. Woodworking and Basketware	24,192	27,478	29,311	31,117	30,739
XI. Furniture, Bedding, etc.	11,306	13,443	14,707	15,612	15,287
XII. Paper, Stationery, Printing, Book-binding, etc.	34,018	35,952	37,309	39,062	39,913
XIII. Rubber	7,369	6,797	6,455	7,534	7,502
XIV. Musical Instruments	460	451	422	441	451
XV. Miscellaneous Products	5,786	6,591	7,370	7,798	7,727
Total, Classes I to XV.	440,799	483,415	515,058	550,090	555,677
XVI. Heat, Light and Power	8,799	9,356	8,890	9,070	9,429
Grand Total	449,598	492,771	523,948	559,160	565,106

In comparison with the employment levels reached in the pre-depression year of 1928-29 all classes of industries have shown considerable gains with the exception of "Musical Instruments" and "Heat, Light and Power." In these classes reductions of 76 per cent. and 9 per cent. respectively were recorded. The greatest actual gain was 47,000 persons in "Industrial Metals, Etc.," while the greatest relative gain was in "Miscellaneous Products" where the numbers engaged rose by 165 per cent. The lowest relative gains occurred in "Clothing" and "Rubber."

(ii) *States*. Particulars of the numbers engaged in each industrial class are shown below for each State:—

FACTORIES : PERSONS ENGAGED IN INDUSTRIAL CLASSES, STATES, 1938-39.

Class of Industry.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
I. Treatment of Non-ferrous Mine and Quarry Products	4,529	3,221	813	642	764	374	10,343
II. Bricks, Pottery, Glass, etc. ..	8,312	4,552	880	1,133	616	216	15,709
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease	8,187	8,554	593	1,541	818	123	19,816
IV. Industrial Metals, Machines, Implements and Conveyances	82,452	51,872	13,647	18,681	7,003	4,022	177,677
V. Precious Metals, Jewellery and Plate	979	2,315	157	181	73	21	3,726
VI. Textiles and Textile Goods ..	15,089	26,780	976	1,256	382	1,599	46,082
VII. Skins and Leather	4,306	4,599	932	494	334	102	10,767
VIII. Clothing	32,019	38,973	6,758	4,664	3,176	502	86,092
IX. Food, Drink and Tobacco	28,514	26,949	15,319	6,366	3,706	2,992	83,846
X. Woodworking and Basketware ..	9,995	7,386	6,748	2,025	2,682	1,903	30,739
XI. Furniture, Bedding, etc.	6,140	4,871	1,865	1,199	825	387	15,287
XII. Paper, Stationery, Printing, Bookbinding, etc.	17,290	13,819	3,611	2,294	1,723	1,176	39,913
XIII. Rubber	3,538	2,948	704	178	78	56	7,502
XIV. Musical Instruments	286	89	36	16	24	..	451
XV. Miscellaneous Products	3,981	2,699	303	360	206	178	7,727
Total, Classes I to XV.	225,617	199,627	53,342	41,030	22,410	13,651	555,677
XVI. Heat, Light and Power	3,164	2,204	768	2,341	801	151	9,429
Grand Total	228,781	201,831	54,110	43,371	23,211	13,802	565,106

4. Persons Engaged According to Nature of Employment.—(i) *General*. In the following table the average number of persons engaged in the States during 1938–39 are classified according to the nature of their employment :—

PERSONS ENGAGED : NATURE OF EMPLOYMENT, 1938–39.

State.	Average Number of Persons Engaged.						
	Working Proprietors.	Managers and Overseers.	Accountants and Clerks.	Engine-drivers and Firemen.	Workers, Skilled & Unskilled. (a)	Carters, Messengers and Others.	Total.
New South Wales ..	7,704	7,822	15,460	2,863	192,434	2,498	228,781
Victoria	7,760	6,867	11,008	1,814	172,203	2,179	201,831
Queensland ..	2,458	2,036	3,659	1,882	42,900	1,175	54,110
South Australia ..	1,598	1,643	3,356	427	35,751	596	43,371
Western Australia ..	1,212	1,028	1,382	518	18,708	363	23,211
Tasmania ..	633	623	899	282	11,230	135	13,802
Australia ..	21,365	20,019	35,764	7,786	473,226	6,946	565,106

(a) Including outworkers.

(ii) *Outworkers*. The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and technically embraces only those to whom work is given out by factory owners to be done in the employees' own homes. Individuals working for themselves are not included. The following table gives particulars of the average number of outworkers connected with factories in each State during the last five years :—

FACTORIES : OUTWORKERS.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1934–35	296	143	11	12	3	10	475
1935–36	235	142	10	6	..	29	422
1936–37	264	176	14	17	3	17	491
1937–38	234	152	8	23	6	12	435
1938–39	201	120	6	11	7	11	350

(a) In all tables relating to number of hands employed in factories, outworkers are included.

The Factories Acts in each State contain provisions regulating the employment of outworkers. Records of outwork, specifying the names and remuneration of workers, and stating the places where the work is done, must be kept by factory proprietors. Fuller information regarding the operation of the Factories Acts will be found in Official Year Book No. 16, pp. 540–66.

5. Distribution of Employees According to Age.—(i) *States*. The extension of statistics of employment in factories, which arose from the decisions of the Conference of Australian Statisticians held in March, 1937, now permits of a distribution of

employees (excluding working proprietors) into three age-groups. The particulars are collected in June of each year and details showing the numbers actually employed in each age-group in June, 1939 are given below :—

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1939.

(Excluding Working Proprietors.)

State.	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	%	No.	%	No.	%	No.	%
New South Wales ..	12,843	5.85	56,212	25.59	150,570	68.56	219,625	100
Victoria ..	11,172	5.81	48,302	25.10	132,921	69.09	192,395	100
Queensland ..	3,124	6.01	11,478	22.10	37,345	71.89	51,947	100
South Australia ..	2,349	5.78	8,937	22.01	29,329	72.21	40,615	100
Western Australia ..	1,226	5.61	5,273	24.15	15,336	70.24	21,835	100
Tasmania ..	892	6.78	2,489	18.92	9,776	74.30	13,157	100
Australia ..	31,606	5.86	132,691	24.59	375,277	69.55	539,574	100

(ii) *Australia.* The following table shows the same age distribution in sexes for Australia since 1937 :—

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, AUSTRALIA.

(Excluding Working Proprietors.)

During June.	Under 16 Years.		16 and under 21 Years.		Adults.		Total.	
	No.	%	No.	%	No.	%	No.	%

MALES.

1937	16,343	4.38	72,772	19.49	284,301	76.13	373,416	100
1938	16,480	4.21	77,309	19.74	297,830	76.05	391,619	100
1939	16,109	4.12	76,418	19.55	298,446	76.33	390,973	100

FEMALES.

1937	15,762	11.27	53,206	38.03	70,946	50.70	139,914	100
1938	15,975	10.76	56,721	38.20	75,793	51.04	148,489	100
1939	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100

PERSONS.

1937	32,105	6.25	125,978	24.54	355,247	69.21	513,330	100
1938	32,455	6.01	134,030	24.81	373,623	69.18	540,108	100
1939	31,606	5.86	132,691	24.59	375,277	69.55	539,574	100

§ 5. Sex Distribution in Factories.

1. **Employment of Females.**—In all the States the employment of female labour in factories is regulated by Acts of Parliament. More extended reference to this matter will be found in Official Year Book No. 16, pp. 540-66.

2. **Distribution of Persons Engaged According to Sex.**—(i) *General.* In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and is now more than one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and is now almost one to two. In the remaining States the ratio is roughly one female engaged to every four males, while for Australia as a whole it is more than one to three. The employment of women is, however, mainly confined to a few trades.

(ii) *Average Number of Males and Females Engaged, 1934-35 to 1938-39.* The next table shows the average number of males and females engaged in factories in each State during the last five years:—

FACTORIES: MALES AND FEMALES ENGAGED.

State.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
MALES.					
New South Wales	127,114	140,896	152,064	164,391	167,172
Victoria	110,910	121,734	128,457	136,160	136,218
Queensland	34,596	36,411	38,970	42,337	43,941
South Australia	27,271	31,391	33,400	36,274	35,406
Western Australia	14,253	16,911	18,466	18,760	18,704
Tasmania	8,321	9,211	10,055	10,680	11,150
Australia	322,465	356,554	381,412	408,602	412,591
FEMALES.					
New South Wales	47,919	52,304	56,433	60,470	61,609
Victoria	58,781	61,656	62,926	65,633	65,613
Queensland	8,452	8,717	9,246	9,782	10,169
South Australia	6,226	7,080	7,310	7,810	7,965
Western Australia	3,521	4,082	4,245	4,373	4,507
Tasmania	2,234	2,378	2,376	2,490	2,652
Australia	127,133	136,217	142,536	150,558	152,515

3. Rate of Variation for each Sex.—The percentages of increase or decrease on the average numbers of males and females engaged in the preceding year are shown below for the years indicated :—

ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES ENGAGED.

State.	1933-34— 1934-35.	1934-35— 1935-36.	1935-36— 1936-37.	1936-37— 1937-38.	1937-38— 1938-39.
MALES.					
	%	%	%	%	%
New South Wales ..	13.85	10.84	7.93	8.11	1.69
Victoria ..	9.86	8.98	5.52	5.98	0.04
Queensland ..	7.28	5.25	6.98	8.64	3.79
South Australia ..	14.86	15.11	6.40	8.60	— 2.39
Western Australia ..	10.23	18.65	9.20	1.59	— 0.30
Tasmania ..	7.84	10.70	9.16	6.22	4.40
Total ..	11.48	10.57	6.97	7.13	0.98
FEMALES.					
	%	%	%	%	%
New South Wales ..	13.00	9.15	7.89	7.15	1.88
Victoria ..	6.15	4.90	2.05	4.30	— 0.03
Queensland ..	7.87	3.14	6.07	5.80	3.96
South Australia ..	8.41	13.72	3.25	6.84	1.98
Western Australia ..	8.90	15.93	3.99	3.02	3.06
Tasmania ..	8.13	6.45	— 0.08	4.80	6.51
Total ..	8.98	7.15	4.64	5.63	1.30

NOTE.—The minus sign (—) indicates decrease.

4. Masculinity of Persons Engaged in Factories.—The extent to which females are engaged in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons engaged for each State for a series of years. The following table furnishes particulars for the years 1934-35 to 1938-39 :—

FACTORIES : MASCULINITY(a) OF PERSONS ENGAGED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1934-35 ..	275	189	409	438	405	372	254
1935-36 ..	269	197	418	443	414	387	262
1936-37 ..	269	204	421	457	435	423	268
1937-38 ..	272	207	433	464	429	429	271
1938-39 ..	271	208	433	445	415	420	271

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 100 females engaged in factories for every 300 males, but in that year, the proportion of females began to rise with increasing activity in the clothing and textile industries in which the number of females to males is relatively high. As these trades were not as seriously affected by the depression as the heavier industries the proportion continued to rise until in 1932-33 there were only 239 males engaged to every 100 females. With the recovery of employment in the heavier industries subsequent to that year, the proportion had declined to 271 males in 1938-39.

5. Employment of Females in Particular Industries.—The greater number of females in manufacturing industries is engaged in four classes, namely :—VI., Textiles ; VIII., Clothing ; IX., Food, Drink and Tobacco ; and XII., Paper, Stationery, etc. In 1938-39 these industries accounted for 81.12 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 146 females to every 100 males and in Class VIII., Clothing, with 285 females per 100 males. The following tables show the average number of males and females engaged in each of these classes in 1938-39:—

MALES AND FEMALES ENGAGED IN PARTICULAR INDUSTRIES, 1938-39.

Class.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
VI. Textiles and Textile Goods ..	5,736	11,052	422	809	130	597	18,746
VIII. Clothing ..	8,158	10,704	1,474	1,032	783	187	22,338
IX. Food, Drink and Tobacco ..	18,857	19,298	13,575	5,150	2,951	2,170	62,001
XII. Paper, Stationery, etc. ..	11,872	9,750	2,619	1,641	1,277	913	28,072
All Other Classes ..	122,549	85,414	25,851	26,774	13,503	7,283	281,434
Total ..	167,172	156,218	43,941	35,406	18,704	11,150	412,591
FEMALES.							
VI. Textiles and Textile Goods ..	9,353	15,728	554	447	252	1,002	27,336
VIII. Clothing ..	23,861	28,269	5,284	3,632	2,393	315	63,754
IX. Food, Drink and Tobacco ..	9,657	7,651	1,744	1,216	755	822	21,845
XII. Paper, Stationery, etc. ..	5,418	4,069	992	653	446	263	11,841
All Other Classes ..	13,320	9,896	1,595	2,017	661	250	27,739
Total ..	61,609	65,613	10,169	7,965	4,507	2,652	152,515

The employment of females in the several industries of Class VIII., Clothing, which is the most important group, and the relation of their number to that of the males so engaged are shown in the following table:—

FEMALES ENGAGED IN EACH INDUSTRY IN CLASS VIII., 1938-39.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)	Males.	Females.	Femini- nity. (a)
Tailoring and Slop	2,112	9,939	471	1,953	6,287	322	1,328	4,880	367
Clothing									
Waterproof and Oil- skin Clothing ..	8	37	462	83	272	327	(b)	(b)	(b)
Dressmaking ..	33	1,580	4,788	639	7,729	1,210	77	2,417	3,139
Millinery ..	166	1,598	963	99	1,169	1,181	49	842	1,780
Shirts, Collars and Underclothing ..	354	4,127	1,165	420	4,135	985	153	1,892	1,237
Stays and Corsets ..	47	678	1,443	189	1,056	559	(b)	(b)	(b)
Handkerchiefs, Ties and Scarves ..	117	872	745	42	443	1,055	(b)	(b)	(b)
Hats and Caps ..	654	939	144	687	831	121	35	164	469
Gloves ..	7	13	186	15	41	273	..	..	..
Boots and Shoes ..	2,673	3,068	115	4,615	4,994	108	1,053	860	82
Boot Repairing (in- cluding Bespoke Work) ..	1,062	29	3	683	14	2	469	26	6
Boot Accessories ..	170	101	59	527	251	48	(b)	(b)	(b)
Umbrellas and Walk- ing Sticks ..	37	87	235	16	31	194	11	22	200
Liyeworks and Clean- ing (Including Repair- ing) ..	635	550	87	655	620	95	278	400	144
Other ..	83	243	293	81	396	480	23	121	526
Total ..	8,158	23,861	292	10,704	28,269	264	3,476	11,624	334

(a) Number of females per 100 males.

(b) Included with "Other".

§ 6. 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. Reference to the legislation regarding the employment of child labour in factories will be found in Official Year Book No. 16, pp. 540-66. 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 toil shall not exhaust the worker before the attainment of full growth.

2. Average Number of Children Engaged, 1934-35 to 1938-39.—In the returns for the various States, the term "child" denotes any person under sixteen years of age. Juvenile employment in factories reached its maximum in 1937-38. The number of children engaged in 1938-39 declined in all States except Western Australia and Tasmania. The following table shows the average number of children of each sex employed in manufacturing industries in the years 1934-35 to 1938-39:—

FACTORIES : CHILDREN ENGAGED.

State.	1934-35. (a)	1935-36. (a)	1936-37. (b)	1937-38. (b)	1938-39. (b)
MALES.					
New South Wales	3,990	4,887	5,888	6,032	5,759
Victoria	5,194	6,118	6,213	6,017	6,167
Queensland	1,146	1,543	1,680	1,835	1,790
South Australia	1,025	1,352	1,422	1,424	1,296
Western Australia	574	777	776	731	705
Tasmania	255	330	364	441	392
Australia	12,184	15,007	16,343	16,480	16,109
FEMALES.					
New South Wales	5,571	6,485	7,539	7,499	7,084
Victoria	6,015	6,002	5,298	5,279	5,005
Queensland	1,048	1,281	1,224	1,338	1,334
South Australia	738	876	988	1,050	1,053
Western Australia	426	473	424	450	521
Tasmania	294	310	289	359	500
Australia	14,092	15,427	15,762	15,975	15,497
TOTAL.					
New South Wales	9,561	11,372	13,427	13,531	12,843
Victoria	11,209	12,120	11,511	11,296	11,172
Queensland	2,194	2,824	2,904	3,173	3,124
South Australia	1,763	2,228	2,410	2,474	2,349
Western Australia	1,000	1,250	1,200	1,181	1,226
Tasmania	549	640	653	800	892
Australia	26,276	30,434	32,105	32,455	31,606

(a) Average during year.

(b) As at June of year stated.

3. Percentage of Children on Total Number of Persons Engaged.—The following table shows the percentage of children on the total number of persons engaged in the various States for each of the five years 1934-35 to 1938-39. In 1938-39 the percentage was highest in Tasmania and lowest in Western Australia.

PERCENTAGE OF CHILDREN ON TOTAL NUMBER OF PERSONS ENGAGED.
(Excluding Working Proprietors.)

State.	1934-35. (a)	1935-36. (a)	1936-37. (b)	1937-38. (b)	1938-39. (b)
	%	%	%	%	%
New South Wales	5.68	6.10	6.52	6.16	5.85
Victoria	6.93	6.91	6.24	5.83	5.81
Queensland	5.35	6.55	6.06	6.27	6.01
South Australia	5.49	6.02	5.76	5.96	5.78
Western Australia	5.95	6.31	5.62	5.35	5.61
Tasmania	5.50	5.81	5.51	6.40	6.78
Australia	6.11	6.44	6.25	6.01	5.86

(a) Average during year.

(b) As at June of year stated.

4. Industries Employing Child Labour.—The employment of children is practically confined to a limited number of industries, the most important of which are specified in the next table, which shows the number engaged in June, 1939.

CHILDREN EMPLOYED IN VARIOUS INDUSTRIES, JUNE, 1939.

Class.	Industry.	N.S.W.		Victoria.		Q'land.		S. Aust.		W.Aust.		Tas.		Australia.	
		M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.	M.	F.
II.	Bricks and Tiles, Firebricks and Fireclay Goods ..	132	..	42	12	23	..	29	..	2	..	4	..	232	12
	Glass Bottles ..	143	52	13	3	..	..	16	2	5	..	2	..	179	57
III.	Chemicals, Drugs and Medicines ..	56	128	12	36	2	11	14	21	6	3	..	..	90	199
IV.	Smelting, Converting Refining and Rolling of Iron and Steel ..	290	9	570	12	..	..	160	36	..	..	..	..	1020	57
	Engineering (not Marine or Electrical) ..	310	14	367	12	106	4	100	16	50	1	8	..	941	47
	Electrical Installations, Cables and Apparatus ..	212	55	191	38	5	..	39	18	12	..	2	..	461	111
	Motor Vehicles and Cycles—Repairs ..	290	28	197	7	124	11	94	10	52	5	37	2	794	63
	Motor Bodies ..	27	3	103	4	30	1	46	7	7	1	6	..	219	16
	Brass and Copper ..	91	2	162	6	31	1	18	2	16	1	5	..	323	12
	Galvanized Ironworking and Tinsmithing ..	330	45	202	59	39	5	52	9	78	2	7	..	708	120
	Wireless Apparatus ..	299	87	193	13	13	2	..	..	..	..	..	..	505	102
VI.	Cotton ..	78	192	68	118	..	2	..	..	..	..	..	..	146	312
	Wool, Worsted and Shoddy ..	245	502	416	474	16	65	34	57	2	13	49	297	762	1408
	Hosiery and Other Knitted Goods ..	75	451	236	784	1	4	..	9	2	14	..	11	314	1273
	Rope and Cordage ..	22	22	65	16	6	..	13	1	9	..	..	..	115	39
VII.	Tanning, Currying and Leather Dressing ..	56	3	69	1	22	..	2	..	4	..	..	..	153	4
	Bags, Trunks and Other Leather Goods ..	62	107	40	46	10	17	15	44	4	6	..	..	131	220
VIII.	Tailoring and Slop Clothing ..	87	1090	79	393	49	326	16	134	12	45	3	29	246	2017
	Dressmaking ..	2	212	22	803	6	130	1	150	..	108	..	2	31	1405
	Millinery ..	17	247	2	109	5	76	2	50	..	9	..	..	26	491
	Shirts, Collars and Underclothing ..	20	656	10	265	8	188	1	113	3	90	..	..	42	1312
	Stays and Corsets ..	1	91	12	97	..	11	..	..	..	..	..	..	13	199
	Hats and Caps ..	32	108	27	57	..	3	..	7	2	6	..	..	61	181
	Boots and Shoes ..	195	487	183	357	26	81	21	54	30	27	5	4	460	1010
IX.	Bakeries (including Cakes and Pastry) ..	79	32	109	22	14	14	35	8	6	4	60	70	303	150
	Biscuits ..	150	307	86	77	5	11	8	38	19	19	9	14	277	466
	Sugar Confectionery (including Chocolates) ..	88	458	48	104	18	65	9	45	4	21	(a)	(a)	167	693
	Condiments, Coffee and Spices ..	37	72	24	40	4	21	16	30	25	3	1	1	107	167
XI.	Billiard Tables, Cabinet and Furniture making and Upholstery ..	134	22	234	6	85	8	66	11	35	2	19	..	573	49
XII.	Manufactured Stationery ..	35	101	25	56	..	11	1	9	1	3	..	..	62	180
	Cardboard Boxes, Cartons, etc. ..	66	221	43	87	1	7	4	5	..	3	..	..	114	323
	Paper Bags ..	3	67	10	17	10	11	3	5	6	18	..	..	32	118
	Papermaking ..	5	12	8	..	..	..	..	..	..	..	7	32	20	44
	Newspapers (including Weekly Publications) ..	126	16	43	10	59	3	11	..	21	3	5	1	265	33
	General Printing and Bookbinding (not including Government)	198	224	262	151	65	44	30	21	36	10	9	13	600	463

(a) Not available for publication.

5. 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.

§ 7. Salaries and Wages Paid and Value of Production.

NOTE.—In all tables relating to Salaries and Wages paid in Factories the amounts given are exclusive of sums drawn by working proprietors.

1. General.—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1938–39 was £500,419,977, of which amount the sum of £281,303,446 represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £15,699,921 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, namely, £203,416,610 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 1938–39 was £106,743,062. This figure, which is exclusive of amounts drawn by working proprietors, shows an increase of £4,664,512 or 4.6 per cent., as compared with the total for the previous year.

2. Salaries and Wages Paid.—(i) *In Classes of Industry, 1938–39.* 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, 1938–39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,107,173	676,561	187,343	133,284	152,890	80,858	2,338,109
II. Bricks, Pottery, Glass etc. ..	1,801,062	914,728	174,310	206,219	132,036	39,767	3,268,122
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,693,693	1,735,264	122,533	303,021	194,449	22,221	4,071,181
IV. Industrial Metals, Machines, Implements and Conveyances ..	18,494,585	10,712,603	2,981,379	3,933,488	1,434,981	895,880	38,502,916
V. Precious Metals, Jewellery and Plate ..	166,401	376,804	25,571	27,208	13,971	3,296	613,251
VI. Textiles and Textile Goods ..	2,006,758	3,703,715	136,412	180,015	50,337	223,470	6,390,707
VII. Skins and Leather ..	819,630	809,158	174,746	66,334	55,568	16,382	1,941,818
VIII. Clothing ..	3,913,910	5,029,886	715,308	444,900	351,722	54,158	10,509,884
IX. Food, Drink and Tobacco ..	5,512,953	5,416,877	3,725,839	1,170,360	791,799	477,801	17,095,629
X. Woodworking and Basketware ..	1,966,856	1,477,276	1,202,148	362,327	559,850	299,059	5,867,516
XI. Furniture, Bedding, etc. ..	1,169,731	768,100	346,368	182,742	143,087	55,579	2,665,607
XII. Paper, Stationery, Printing, Book-binding, etc. ..	3,529,582	2,758,385	720,340	450,403	372,082	242,577	8,073,369
XIII. Rubber ..	735,830	604,219	99,493	24,873	10,158	6,107	1,480,680
XIV. Musical Instruments ..	56,383	17,108	7,085	1,906	5,710	..	88,192
XV. Miscellaneous Products ..	618,763	413,662	42,577	51,295	24,328	22,983	1,173,608
Total, Classes I to XV.	43,683,310	35,414,346	10,661,452	7,533,375	4,342,968	2,440,138	104,080,589
XVI. Heat, Light and Power ..	923,187	612,196	225,777	630,975	230,590	39,748	2,662,473
Grand Total ..	44,606,497	36,026,542	10,887,229	8,160,350	4,573,558	2,479,886	106,743,062

(ii) *Totals and Averages, 1934–35 to 1938–39.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years 1934–35 to 1938–39. The average wage paid is not comparable with that shown in similar tables in issues of the Official Year Book prior to

No. 23, 1930, on account of the change in the method of computing the average number of hands employed, as explained earlier. The figures are exclusive of working proprietors and of the amounts drawn by them :—

FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.

Year.	Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
		£	£	£	£	£	£	£
1934-35	Total amount paid ..	29,514,013	25,275,014	7,889,535	5,433,531	3,111,230	1,601,217	72,824,549
	Average per employee ..	175.22	156.33	192.38	169.22	185.05	160.36	169.34
1935-36	Total amount paid ..	33,314,534	28,456,028	8,394,909	6,375,354	3,703,995	1,853,468	82,098,288
	Average per employee ..	178.66	162.28	194.66	172.21	187.09	168.33	173.65
1936-37	Total amount paid ..	36,642,444	30,986,895	9,088,637	7,172,638	4,157,733	2,074,785	90,123,132
	Average per employee ..	181.93	169.00	198.02	182.78	193.46	175.72	179.10
1937-38	Total amount paid ..	42,209,875	34,960,911	10,170,800	8,043,160	4,401,443	2,292,361	102,078,550
	Average per employee ..	194.24	180.33	204.73	189.10	200.92	183.33	189.80
1938-39	Total amount paid ..	44,606,497	36,026,542	10,887,229	8,169,350	4,573,558	2,479,886	106,743,062
	Average per employee ..	201.77	185.64	210.78	195.57	207.90	188.31	196.31

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, there is a large number of hands employed in Class VIII., comprising a high percentage of women and children. The highest average wages per employee in 1938-39 were paid in Queensland, Western Australia and New South Wales in that order.

Earnings per employee reached their highest level in 1927-28 with an average of £212.12. After that year there was an almost continuous decline to 1933-34 when the average rate dropped to £166.36. Thereafter the average rose each year to £196.31 in 1938-39 but this amount is still 7.5 per cent. below that attained in 1927-28.

(iii) *Earnings of Males and Females, 1938-39.* The following table shows the approximate amount of salaries and wages paid to males and females in each class of industry in each State during the year 1938-39 :—

SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,098,508	666,391	184,425	130,803	150,431	80,002	2,310,560
II. Bricks, Pottery, Glass, etc. ..	1,767,399	882,801	169,253	202,293	130,488	39,327	3,191,561
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,405,865	1,457,904	107,099	280,783	185,517	21,096	3,458,264
IV. Industrial Metals, Machines, Implements and Conveyances ..	17,960,358	10,385,802	2,933,730	3,848,067	1,461,387	884,321	37,473,665
V. Precious Metals, Jewellery and Plate ..	149,393	342,421	24,127	26,442	13,484	3,262	559,129
VI. Textiles and Textile Goods ..	1,161,149	2,111,633	81,661	142,904	27,308	121,655	3,646,310
VII. Skins and Leather ..	727,146	705,089	161,399	45,766	46,434	15,951	1,701,785
VIII. Clothing ..	1,545,648	1,984,259	252,709	151,331	122,243	25,404	4,081,594
IX. Food, Drink and Tobacco ..	4,449,141	4,547,679	3,548,248	1,067,162	718,665	406,594	14,737,489
X. Woodworking and Basketware ..	1,929,797	1,452,774	1,177,477	355,600	557,578	295,397	5,768,623
XI. Furniture, Bedding, etc. ..	1,040,915	667,569	325,129	167,398	131,476	53,879	2,386,366
XII. Paper, Stationery, Printing, Book-binding, etc. ..	2,979,776	2,320,763	614,471	390,544	323,320	220,171	6,849,045
XIII. Rubber ..	587,414	518,289	69,140	22,579	9,880	5,886	1,213,188
XIV. Musical Instruments ..	48,436	16,952	7,085	1,742	5,710	..	79,925
XV. Miscellaneous Products ..	501,495	334,196	38,355	43,062	16,491	22,240	955,839
Total, Classes I to XV.	37,352,440	28,394,522	9,604,308	6,876,476	3,000,412	2,195,185	68,413,343
XVI. Rent, Light and Power ..	919,427	611,224	225,693	611,352	228,412	39,228	2,635,336
Grand Total ..	38,271,867	29,005,746	9,920,001	7,487,828	4,128,824	2,234,413	91,048,679

SALARIES AND WAGES : MALE AND FEMALE FACTORY EMPLOYEES,
1938-39—continued.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	8,665	10,170	2,918	2,481	2,459	856	27,549
II. Bricks, Pottery, Glass, etc. ..	33,663	31,927	5,057	3,926	1,548	440	76,561
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	287,828	277,360	15,434	22,238	8,932	1,125	612,917
IV. Industrial Metals, Machines, Implements and Conveyances ..	534,227	326,801	47,649	85,421	23,594	11,559	1,029,251
V. Precious Metals, Jewellery and Plate ..	17,008	34,383	1,444	766	487	34	54,122
VI. Textiles and Textile Goods ..	935,609	1,592,082	54,751	37,111	23,029	101,815	2,744,397
VII. Skins and Leather ..	92,484	104,069	13,347	20,568	9,134	431	240,033
VIII. Clothing ..	2,368,262	3,045,627	462,599	293,569	229,479	28,754	6,428,290
IX. Food, Drink and Tobacco ..	1,063,812	869,198	177,591	103,198	73,134	71,207	2,358,140
X. Woodworking and Basketware ..	37,059	24,502	24,671	6,727	2,272	3,662	98,893
XI. Furniture, Bedding, etc. ..	128,816	100,531	21,239	15,344	11,611	1,700	279,241
XII. Paper, Stationery, Printing, Book-binding, etc. ..	549,806	437,622	105,869	59,859	48,762	22,406	1,224,324
XIII. Rubber ..	148,416	85,930	30,353	2,294	278	221	267,492
XIV. Musical Instruments ..	7,947	156	..	164	..	..	8,267
XV. Miscellaneous Products ..	117,268	79,466	4,222	8,233	7,837	743	217,769
Total, Classes I to XV.	6,330,870	7,019,824	967,144	661,899	442,556	244,953	15,667,246
XVI. Heat, Light and Power ..	3,760	972	84	19,623	2,178	520	27,137
Total ..	6,334,630	7,020,796	967,228	681,522	444,734	245,473	15,694,383

(iv) *Total and Average Earnings of Males and Females, 1934-35 to 1938-39.* Particulars for the last five years are given in the table hereunder:—

TOTAL AND AVERAGE SALARIES AND WAGES : MALES AND FEMALES.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MALES.							
1934-35. Amount paid .. £	25,215,937	20,036,314	7,184,443	4,937,285	2,806,476	1,429,620	61,610,075
Per cent. on total ..	85.44	79.27	91.06	90.87	90.20	89.28	84.60
Average per employee £	208.57	193.31	219.93	190.22	210.66	183.68	202.48
1935-36. Amount paid .. £	28,576,202	22,755,111	7,654,082	5,810,399	3,353,526	1,652,851	69,802,171
Per cent. on total ..	85.78	79.97	91.18	91.14	90.54	89.18	85.02
Average per employee £	212.35	198.85	221.90	193.56	212.76	190.86	206.55
1936-37. Amount paid .. £	31,450,699	24,963,887	8,296,211	6,570,225	3,777,064	1,872,019	76,930,108
Per cent. on total ..	85.83	80.56	91.28	91.60	90.84	90.23	85.36
Average per employee £	216.29	205.93	225.78	205.31	218.47	198.06	212.44
1937-38. Amount paid .. £	36,247,087	28,241,058	9,287,319	7,381,141	3,997,197	2,067,231	87,221,033
Per cent. on total ..	85.87	80.78	91.31	91.77	90.82	90.18	85.45
Average per employee £	230.39	218.89	232.20	212.08	227.42	205.96	224.35
1938-39. Amount paid .. £	38,271,867	29,005,746	9,920,001	7,487,828	4,128,824	2,234,413	91,048,679
Per cent. on total ..	85.80	80.51	91.12	91.66	90.28	90.10	85.30
Average per employee £	239.24	224.47	238.59	220.95	235.49	212.09	231.84

TOTAL AND AVERAGE SALARIES AND WAGES: MALES AND FEMALES

—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
FEMALES.							
1934-35. Amount paid .. £	4,298,076	5,238,700	705,092	496,246	304,763	171,597	11,214,474
Per cent. on total ..	14.56	20.73	8.94	9.13	9.80	10.72	15.40
Average per employee .. £	90.40	90.27	84.51	80.64	87.30	77.93	89.17
1935-36. Amount paid .. £	4,738,332	5,700,917	740,827	564,955	350,469	200,617	12,296,117
Per cent. on total ..	14.22	20.03	8.82	8.86	9.46	10.82	14.98
Average per employee .. £	91.30	93.58	85.80	80.70	86.84	85.33	91.19
1936-37. Amount paid .. £	5,191,745	6,023,008	792,423	602,413	380,669	202,766	13,193,224
Per cent. on total ..	14.17	19.44	8.72	8.40	9.16	9.77	14.64
Average per employee .. £	92.71	96.95	86.58	83.21	90.59	86.10	93.52
1937-38. Amount paid .. £	5,962,788	6,710,853	883,481	662,019	404,246	225,130	14,857,517
Per cent. on total ..	14.13	19.22	8.69	8.23	9.18	9.82	14.55
Average per employee .. £	99.41	103.62	91.25	85.65	93.36	91.26	99.69
1938-39. Amount paid .. £	6,334,630	7,020,796	967,228	681,522	444,734	245,473	15,694,383
Per cent. on total ..	14.20	19.49	8.88	8.34	9.72	9.90	14.70
Average per employee .. £	103.66	108.25	96.00	86.44	99.58	93.19	103.92

(v) *Managers, Overseers and Other Employees.* A further analysis of salaries and wages paid is given in the following table, the amounts paid to managers, overseers, etc., being differentiated from those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

SALARIES AND WAGES: MANAGERS, OVERSEERS, ETC., AND OTHER EMPLOYEES, 1938-39.

Class of Industry.	Salaries and Wages Paid to—						
	Managers, Overseers, Accountants and Clerks.		All Other Employees.		All Employees.		
	Males.	Females.	Males.	Females.	Males.	Females.	Total.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	£ 315,210	£ 23,517	£ 1,995,350	£ 4,032	£ 2,310,560	£ 27,549	£ 2,338,109
II. Bricks, Pottery, Glass, etc. ..	350,532	36,535	2,841,029	40,026	3,191,561	76,561	3,268,122
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	763,768	157,013	2,694,496	455,904	3,458,264	612,917	4,071,181
IV. Industrial Metals, Machines, Implements* and Conveyances ..	4,824,290	563,012	32,649,375	466,239	37,473,665	1,029,251	38,502,916
V. Precious Metals, Jewellery and Plate ..	57,295	15,534	501,834	38,588	559,129	54,122	613,251
VI. Textiles and Textile Goods ..	674,018	161,885	2,072,292	2,582,512	3,646,310	2,744,397	6,390,707
VII. Skins and Leather ..	221,426	30,153	1,480,359	209,880	1,701,785	240,033	1,941,818
VIII. Clothing ..	584,133	350,027	3,497,461	6,078,263	4,081,594	6,428,290	10,509,884
IX. Food, Drink and Tobacco ..	2,823,440	454,716	11,914,049	1,903,424	14,737,489	2,358,140	17,095,629
X. Woodworking and Basketware ..	612,530	73,795	5,156,093	25,098	5,768,623	98,893	5,867,516
XI. Furniture, Bedding etc. ..	199,598	53,634	2,186,768	225,607	2,386,366	279,241	2,665,607
XII. Paper, Stationery, Printing, Book-binding, etc. ..	1,157,645	281,230	5,691,400	943,085	6,819,045	1,224,324	8,073,369
XIII. Rubber ..	260,644	40,009	952,544	227,483	1,213,188	267,402	1,480,680
XIV. Musical Instruments ..	13,943	3,256	65,982	5,011	79,925	8,267	88,192
XV. Miscellaneous Products ..	173,034	47,532	782,805	170,237	955,839	217,769	1,173,608
Total, Classes I to XV.	13,031,500	2,291,857	75,381,837	13,375,389	88,413,343	15,667,246	104,080,589
XVI. Heat, Light and Power ..	563,552	23,867	2,071,784	3,270	2,635,336	27,137	2,662,473
Grand Total ..	13,595,058	2,315,724	77,453,621	13,378,659	91,048,679	15,694,383	106,743,062
Average paid per employee	353.14	133.97	218.66	100.04	231.84	103.92	196.31

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1938-39.* The expenditure by factories on power, fuel and light is of considerable importance; in 1938-39 it amounted to £15,699,921, an increase of £652,216 as compared with the previous year. The following table shows the value of power, fuel and light used in the different classes of industry in 1938-39:—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED (a), 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	349,494	233,559	69,161	47,906	91,534	69,701	861,355
II. Bricks, Pottery, Glass, etc. ..	515,793	310,052	49,024	74,096	55,664	12,338	1,016,967
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	228,703	244,814	13,948	49,793	45,697	3,680	586,635
IV. Industrial Metals, Machines, Implements and Conveyances ..	3,195,816	612,140	203,104	263,753	99,839	212,155	4,586,807
V. Precious Metals, Jewellery and Plate ..	7,579	17,904	914	2,309	568	119	29,393
VI. Textiles and Textile Goods ..	201,161	365,310	11,908	25,773	5,736	21,021	630,909
VII. Skins and Leather ..	71,599	69,171	18,845	2,002	7,490	1,465	170,572
VIII. Clothing ..	109,957	147,019	17,669	14,896	9,090	1,460	300,691
IX. Food, Drink and Tobacco ..	955,913	859,677	524,963	220,540	172,132	55,549	2,788,774
X. Woodworking and Basketware ..	99,697	87,561	67,221	19,324	42,040	18,157	334,000
XI. Furniture, Bedding, etc. ..	31,693	27,626	10,143	8,101	4,198	1,834	83,595
XII. Paper, Stationery, Printing, Book-binding, etc. ..	177,764	211,022	33,339	18,714	19,454	39,158	499,451
XIII. Rubber ..	94,862	136,568	9,457	3,333	1,471	728	246,419
XIV. Musical Instruments ..	4,200	239	34	2	40	..	4,515
XV. Miscellaneous Products ..	35,897	29,176	1,051	2,176	883	641	69,824
Total, Classes I to XV.	6,080,128	3,352,438	1,030,781	752,718	555,836	438,006	12,209,907
XVI. Heat, Light and Power ..	1,571,409	647,496	392,768	264,819	613,432	..	3,490,014
Grand Total ..	7,651,627	3,999,934	1,423,549	1,017,537	1,169,268	438,006	15,699,921

(a) Including lubricants and water.

(ii) *Values of Items, 1938-39.* The following table shows the values of the various items of power, fuel and light used in factories in each State during the year 1938-39:—

FACTORIES : VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
Coal ..	2,379,290	1,492,493	653,045	327,077	313,587	74,546	5,240,038
Coke ..	1,436,379	164,965	34,785	36,538	27,813	3,902	1,704,382
Wood ..	140,739	191,728	150,472	75,772	194,824	48,109	801,644
Other (Charcoal, etc.) ..	90,190	69,544	13,699	34,918	11,274	168	219,793
Fuel Oil ..	528,221	293,642	104,964	97,229	281,854	28,549	1,334,459
Gas ..	635,782	113,145	24,609	24,129	12,478	3,678	813,821
Electricity ..	1,867,889	1,269,611	275,581	336,426	225,255	255,080	4,229,842
Water and Lubricating Oil ..	573,137	404,806	166,394	85,448	102,183	23,974	1,355,942
Total ..	7,651,627	3,999,934	1,423,549	1,017,537	1,169,268	438,006	15,699,921

(iii) *Quantities, 1938-39.* The following table shows the quantities of certain items of power, fuel and light used in factories in each State during the year 1938-39:—

FACTORIES : QUANTITY OF POWER, FUEL AND LIGHT USED, 1938-39.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal ..	Ton	2,509,664	3,490,632	462,733	222,756	254,209	58,756	6,998,750
Coke ..	Ton	1,344,208	94,644	20,965	19,042	11,843	1,723	1,492,425
Wood ..	Ton	172,963	424,478	263,855	112,653	343,053	85,333	1,402,335
Fuel Oil ..	Gal.	24,215,828	12,548,001	2,394,311	3,019,803	9,099,939	1,633,144	58,811,026

(iv) *Total Value, 1934-35 to 1938-39.* The next table gives the sums expended on power, fuel and light during the last five years :—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
1934-35 ..	5,906,307	3,323,892	1,051,474	866,567	702,375	487,592	12,338,207
1935-36 ..	6,273,485	3,505,321	1,080,525	972,636	852,327	592,001	13,276,295
1936-37 ..	6,464,942	3,677,488	1,225,255	856,808	939,166	402,071	13,565,730
1937-38 ..	7,123,961	4,032,190	1,440,750	949,858	1,095,225	495,721	15,047,705
1938-39 ..	7,651,627	3,999,934	1,423,549	1,017,537	1,169,268	438,006	15,699,921

4. *Value of Materials Used.—(i) In Classes of Industry, 1938-39.* 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 1938-39 was £281,303,446, representing 56.21 per cent. of the value of the final output (see par. 5). The table hereunder shows the value of the materials used in various classes of industry in each State :—

FACTORIES : VALUE OF MATERIALS USED, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metallic Minerals and Quarry Products ..	2,792,101	1,183,735	363,487	153,146	255,490	153,889	4,901,848
II. Bricks, Pottery, Glass, etc. ..	1,079,212	454,355	72,096	179,352	76,966	30,291	1,892,272
III. Chemicals, Dyes, Explosives, Paint, Oil and Grease ..	7,178,556	5,408,944	579,685	1,241,047	1,055,798	124,488	15,588,318
IV. Industrial Metals, Machines, Implements and Conveyances ..	44,976,430	13,647,425	4,358,282	8,132,031	1,551,044	1,465,209	74,130,421
V. Precious Metals, Jewellery and Plate ..	163,970	44,612	11,332	25,487	9,739	500	657,140
VI. Textiles and Textile Goods ..	5,310,587	7,834,072	439,244	1,090,787	141,201	516,546	15,332,437
VII. Skins and Leather ..	2,850,228	2,280,086	1,221,351	134,509	144,829	115,596	6,746,599
VIII. Clothing ..	6,159,356	9,162,439	973,426	528,055	435,565	60,748	17,319,589
IX. Food, Drink and Tobacco ..	34,011,450	30,639,719	30,329,778	6,717,378	4,210,211	2,056,371	107,964,907
X. Woodworking and Basketware ..	4,700,885	2,841,261	2,589,733	1,004,539	897,965	463,846	12,498,229
XI. Furniture, Bedding, etc. ..	2,154,014	1,615,969	547,188	319,762	249,693	63,288	4,949,914
XII. Paper, Stationery, Printing, Book-binding, etc. ..	5,220,679	3,929,648	685,938	503,722	364,689	161,855	10,866,331
XIII. Rubber ..	1,882,261	1,968,368	182,812	37,838	20,200	9,051	4,100,530
XIV. Musical Instruments ..	42,936	5,751	1,287	344	574	..	50,892
XV. Miscellaneous Products ..	993,023	744,577	40,542	74,704	29,515	19,256	1,901,617
Total, Classes I to XV ..	119,515,688	82,162,461	42,396,181	20,142,701	9,443,479	5,240,934	278,901,444
XVI. Heat, Light and Power ..	986,107	809,147	199,868	166,096	160,178	80,606	2,402,002
Grand Total ..	120,501,795	82,971,608	42,596,049	20,308,797	9,603,657	5,321,540	281,303,446

(ii) *Total Amount, 1934-35 to 1938-39.* The following table gives the values of materials used in factories for the last five years :—

FACTORIES : VALUE OF MATERIALS USED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1934-35 ..	87,096,873	65,096,374	30,346,510	15,275,492	7,654,382	3,577,386	209,047,017
1935-36 ..	98,950,321	76,494,159	30,901,341	19,261,750	9,172,205	4,195,021	238,974,797
1936-37 ..	109,593,494	80,302,423	34,612,231	21,399,805	9,427,259	5,243,691	260,578,903
1937-38 ..	122,591,463	88,129,145	39,595,695	21,469,924	9,986,441	5,470,744	287,243,412
1938-39 ..	120,501,795	82,971,608	42,596,049	20,308,797	9,603,657	5,321,540	281,303,446

5. Value of Output.—(i) *In Classes of Industry, 1938-39.* The value of the output of new goods manufactured and of repairs effected in factories of various classes in each State in 1938-39 is shown in the following table. The figures given represent not only the increase in value due to the process of manufacture, but include also the values of the raw materials and the power, fuel and light used. The difference between the sum of the values of the materials and the power fuel and light used, and the output is the real value of factory production (see par. 6).

FACTORIES : VALUE OF OUTPUT, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mines and Quarry Products ..	5,556,373	2,993,612	790,261	431,503	643,257	494,348	10,909,354
II. Bricks, Pottery, Glass, etc.	4,656,592	2,294,715	405,095	654,144	363,547	106,903	8,480,996
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	13,800,743	10,115,983	956,061	1,945,567	1,623,097	190,072	28,631,523
IV. Industrial Metals, Machines, Implements and Conveyances ..	79,863,002	30,718,898	9,317,056	13,913,575	3,983,161	3,356,509	141,152,201
V. Precious Metals, Jewellery and Plate ..	444,085	1,010,767	54,377	70,421	32,984	4,984	1,617,618
VI. Textiles and Textile Goods ..	9,064,994	14,523,484	684,840	1,410,407	238,879	958,507	26,881,111
VII. Skins and Leather ..	4,198,798	3,721,705	1,534,957	233,940	257,451	153,201	10,100,052
VIII. Clothing ..	12,496,105	17,174,627	2,139,655	1,213,980	999,288	147,656	34,171,311
IX. Food, Drink and Tobacco ..	51,073,347	44,109,455	38,025,959	9,463,656	6,568,047	3,114,324	152,354,788
X. Woodworking and Basketware ..	8,047,575	5,320,115	4,598,839	1,602,590	1,765,514	958,338	22,292,971
XI. Furniture, Bedding etc.	3,996,822	2,924,892	1,082,006	607,567	474,239	148,018	9,233,544
XII. Paper, Stationery, Printing, Book-binding, etc. ..	11,936,026	9,070,629	1,947,901	1,263,532	1,055,704	651,263	25,925,055
XIII. Rubber ..	2,935,592	3,677,837	332,785	90,194	49,622	21,994	7,108,024
XIV. Musical Instruments ..	139,073	30,282	10,349	2,983	9,152	..	191,839
XV. Miscellaneous Products ..	2,163,307	1,496,017	109,336	170,366	66,813	63,600	4,060,439
Total, Classes I. to XV. ..	210,372,434	149,183,018	61,089,177	33,074,125	18,130,755	10,360,717	483,119,826
XVI. Heat, Light and Power ..	8,046,879	3,784,593	1,331,596	1,930,830	1,417,756	788,488	17,300,151
Grand Total ..	218,419,313	152,967,611	63,321,073	35,005,264	19,548,511	11,158,205	500,419,977

(ii) *Total, 1934-35 to 1938-39.* The following statement shows the value of output in each State during the five years ended 1938-39 :—

FACTORIES : VALUE OF OUTPUT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1934-35 ..	154,433,248	117,182,857	46,021,303	25,699,172	14,641,680	7,223,124	365,201,384
1935-36 ..	174,693,761	134,043,170	47,664,810	31,904,091	17,528,741	8,853,882	414,688,455
1936-37 ..	192,812,414	142,692,192	53,022,008	34,528,176	18,313,122	10,461,366	451,829,278
1937-38 ..	214,883,557	157,050,725	59,639,403	36,239,937	19,643,960	11,321,559	498,779,141
1938-39 ..	218,419,313	152,967,611	63,321,073	35,005,264	19,548,511	11,158,205	500,419,977

6. Value of Production.—(i) *In Classes of Industry, 1938-39.* The value of production for any industry was defined by 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 subsequently agreed that the particulars obtained should be published but that no deduction should be made on this account for the present. The value of production as given in the following tables is obtained, therefore, by deducting “value of materials used” and “value of fuel used” from the “value of the output.”

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 8, par. 4, was estimated at £10,646,658 for 1938-39. Many miscellaneous expenses, also, such as insurance and advertising, have not been taken into account. Hence, 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.

The following table shows the value of production in 1938-39 in each State for the various classes of factories:—

FACTORIES : VALUE OF PRODUCTION, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,474,778	1,576,318	357,613	230,451	296,233	270,758	5,146,151
II. Bricks, Pottery, Glass, etc. ..	3,061,587	1,530,308	283,975	400,696	230,917	64,274	5,571,757
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	6,393,484	4,462,225	362,428	654,727	521,602	61,904	12,456,370
IV. Industrial Metals, Machines, Implements and Conveyances ..	31,690,756	16,459,333	4,755,670	5,517,791	2,332,278	1,679,145	62,434,973
V. Precious Metals, Jewellery and Plate ..	272,536	546,751	42,131	42,625	22,677	4,365	931,085
VI. Textiles and Textile Goods ..	3,553,246	6,324,102	233,688	293,847	91,942	420,940	10,917,765
VII. Skins and Leather ..	1,276,971	1,372,448	294,761	97,429	105,132	36,140	3,182,881
VIII. Clothing ..	6,226,792	7,864,569	1,148,560	671,029	554,633	85,448	16,551,031
IX. Food, Drink and Tobacco ..	16,105,984	12,610,059	7,171,218	2,525,738	2,185,704	1,002,404	41,601,107
X. Woodworking and Basketware ..	3,246,993	2,391,293	1,941,885	578,727	825,509	476,335	9,460,742
XI. Furniture, Bedding, etc. ..	1,811,115	1,281,297	524,675	279,704	220,348	82,896	4,200,035
XII. Paper, Stationery, Printing, Book-binding, etc. ..	6,537,583	4,929,959	1,228,624	741,096	671,561	450,250	14,559,073
XIII. Rubber ..	958,469	1,572,901	140,516	49,023	27,951	12,215	2,761,075
XIV. Musical Instruments ..	91,937	24,292	9,028	2,637	8,538	..	136,432
XV. Miscellaneous Products ..	1,134,387	722,264	67,743	93,486	36,415	43,703	2,097,998
Total, Classes I to XV	84,776,618	63,668,119	18,562,515	12,179,006	8,131,440	4,690,777	192,008,475
XVI. Heat, Light and Power ..	5,489,273	2,327,950	738,960	1,499,924	644,146	707,882	11,408,135
Grand Total ..	90,265,891	65,996,069	19,301,475	13,678,930	8,775,586	5,398,659	203,416,610

(ii) *Total and Averages, 1934-35 to 1938-39.* The value of production and the amount per person engaged and per head of population are shown in the following table for the years specified:—

FACTORIES: VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE.							
	£	£	£	£	£	£	£
1934-35 ..	61,430,068	48,762,591	14,623,319	9,557,113	6,284,923	3,158,146	143,816,160
1935-36 ..	69,469,955	54,043,690	15,682,944	11,669,705	7,504,209	4,066,860	162,437,363
1936-37 ..	76,753,978	58,712,281	17,184,522	12,271,563	7,946,697	4,815,604	177,684,645
1937-38 ..	85,168,133	64,889,390	18,602,958	13,820,155	8,562,294	5,445,094	196,488,024
1938-39 ..	90,265,891	65,996,069	19,301,475	13,678,930	8,775,586	5,398,659	203,416,610

PER PERSON ENGAGED.

	£	£	£	£	£	£	£
1934-35 ..	351	287	340	285	354	299	320
1935-36 ..	360	295	348	303	357	351	330
1936-37 ..	368	307	356	301	350	387	339
1937-38 ..	379	322	357	313	370	413	351
1938-39 ..	395	327	357	315	378	391	360

PER HEAD OF POPULATION.

	£	£	£	£	£	£	£
1934-35 ..	23.32	26.55	15.22	16.36	14.18	13.78	21.46
1935-36 ..	26.15	29.32	16.13	19.91	16.76	17.66	24.06
1936-37 ..	28.63	31.70	17.46	20.86	17.59	20.74	26.11
1937-38 ..	31.44	34.87	18.69	23.49	18.73	23.17	28.62
1938-39 ..	33.02	35.20	19.17	23.01	18.97	22.79	29.36

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1938-39 was estimated at £500,419,977, there remained, after payment of £281,303,446, the value of the materials used, of £106,743,062 for salaries and wages, and of £15,699,921 for power, fuel and light, the sum of £96,673,548 to provide for all other expenditure, depreciation, interest and profits. The following table gives corresponding particulars for each State expressed absolutely and as percentages on the total value of the output for the year 1938-39:—

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1938-39.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
VALUE AND COST, ETC.					
	£	£	£	£	£
New South Wales ..	120,501,795	7,651,627	44,606,497	45,059,394	218,419,313
Victoria ..	82,971,608	3,999,934	36,026,542	29,969,527	152,967,611
Queensland ..	42,596,049	1,423,549	10,887,229	8,414,246	63,321,073
South Australia ..	20,308,797	1,017,537	8,169,350	5,509,580	35,005,264
Western Australia ..	9,603,657	1,169,268	4,573,558	4,202,028	19,548,511
Tasmania ..	5,321,540	438,006	2,479,886	2,918,773	11,158,205
Australia ..	281,303,446	15,699,921	106,743,062	96,673,548	500,419,977

(a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.

(b) Including lubricants and water.

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1938-39—
continued.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	All other Expenditure, Interest, Profits, etc.	Total Value of Output.
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PERCENTAGE OF COSTS, ETC., ON TOTAL VALUE.

	%	%	%	%	%
New South Wales ..	55.17	3.50	20.42	20.91	100.00
Victoria ..	54.24	2.62	23.55	19.59	100.00
Queensland ..	67.27	2.25	17.19	13.29	100.00
South Australia ..	58.01	2.91	23.34	15.74	100.00
Western Australia ..	49.13	5.98	23.40	21.49	100.00
Tasmania ..	47.69	3.93	22.22	26.16	100.00
Australia ..	56.21	3.14	21.33	19.32	100.00

(a) Including the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
(b) Including lubricants and water.

§ 8. 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 1938-39:—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY, 1938-39.

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
Land and buildings	57,353,625	42,026,245	12,299,089	8,710,700	6,813,653	3,717,102	130,920,414
Plant and machinery	62,692,956	38,626,743	18,095,415	9,749,679	8,095,064	6,402,270	143,662,127
Total ..	120,046,581	80,652,988	30,394,504	18,460,379	14,908,717	10,119,372	274,582,541

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. 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, 1934-35 to 1938-39.* The appended table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries from 1934-35 to 1938-39 inclusive:—

FACTORIES : VALUE OF LAND AND BUILDINGS, AUSTRALIA.

Class of Industry.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,409,200	2,412,145	2,617,765	2,728,772	2,778,746
II. Bricks, Pottery, Glass, etc.	2,558,791	2,706,575	2,686,930	2,799,201	2,953,557
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	6,129,529	6,398,332	6,596,554	6,843,335	7,377,551
IV. Industrial Metals, Machines, Implements and Conveyances ..	26,718,722	27,873,261	30,061,037	32,420,428	34,841,028
V. Precious Metals, Jewellery and Plate ..	536,745	561,735	602,685	616,934	633,009
VI. Textiles and Textile Goods ..	3,169,116	5,447,503	5,558,420	5,754,347	5,999,671
VII. Skins and Leather ..	1,790,607	1,833,335	2,008,167	1,990,451	2,095,886
VIII. Clothing ..	9,571,442	9,750,733	10,282,902	10,359,944	10,623,619
IX. Food, Drink and Tobacco ..	27,949,389	28,928,977	30,166,301	31,953,396	33,273,248
X. Woodworking and Basketware ..	3,694,166	3,769,305	3,838,701	3,904,773	4,106,963
XI. Furniture, Bedding, etc.	2,056,019	2,196,782	2,370,393	2,440,997	2,533,254
XII. Paper, Stationery, Printing, Bookbinding, etc.	9,221,909	9,564,871	9,668,602	9,956,433	10,639,315
XIII. Rubber ..	1,849,493	1,842,048	1,751,707	1,790,590	1,676,043
XIV. Musical Instruments ..	122,887	115,948	109,531	98,947	104,838
XV. Miscellaneous Products ..	1,114,681	1,213,697	1,323,085	1,396,371	1,432,857
Total, Classes I to XV.	100,892,696	104,615,247	109,642,780	115,036,919	121,069,585
XVI. Heat, Light and Power ..	9,907,283	9,994,655	9,883,357	9,597,095	9,850,829
Grand Total ..	110,799,979	114,609,902	119,526,137	124,634,014	130,920,414

(ii) *In Classes of Industry in States, 1938-39.* The following table gives particulars for the various classes of industry in each State.

FACTORIES : VALUE OF LAND AND BUILDINGS, STATES, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	1,333,040	813,982	210,434	162,599	106,964	151,727	2,778,746
II. Bricks, Pottery, Glass, etc.	1,787,016	736,454	139,062	159,713	108,406	22,906	2,953,557
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	2,851,872	3,103,873	169,951	499,859	667,372	84,624	7,377,551
IV. Industrial Metals, Machines, Implements and Conveyances ..	17,456,592	9,683,860	2,391,169	2,623,398	1,740,632	945,377	34,841,028
V. Precious Metals, Jewellery and Plate ..	193,200	343,889	30,158	35,657	21,675	8,430	633,009
VI. Textiles and Textile Goods ..	2,030,036	3,380,469	115,502	179,166	66,418	228,080	5,999,671
VII. Skins and Leather ..	801,740	956,936	120,578	62,480	126,246	27,906	2,095,886
VIII. Clothing ..	4,404,387	4,502,971	622,882	527,842	472,327	93,210	10,623,619
IX. Food, Drink and Tobacco ..	12,252,494	9,774,451	5,779,154	2,565,268	1,904,584	997,297	33,273,248
X. Woodworking and Basketware ..	1,768,024	1,039,245	538,896	310,180	292,938	157,680	4,106,963
XI. Furniture, Bedding, etc.	1,000,293	913,903	286,850	147,736	141,798	42,674	2,533,254
XII. Paper, Stationery, Printing, Bookbinding, etc.	4,475,207	3,446,880	1,007,136	683,265	556,791	470,036	10,639,315
XIII. Rubber ..	814,659	621,191	120,680	61,019	35,443	22,151	1,676,043
XIV. Musical Instruments ..	64,297	25,096	7,460	1,275	6,710	..	104,838
XV. Miscellaneous Products ..	794,371	1,426,638	56,125	76,136	44,203	9,384	1,432,857
Total, Classes I to XV.	52,027,228	39,795,838	11,596,037	8,096,493	6,292,507	3,261,482	121,069,585
XVI. Heat, Light and Power ..	5,326,397	2,230,407	703,052	614,207	521,146	455,620	9,850,829
Grand Total ..	57,353,625	42,026,245	12,299,089	8,710,700	6,813,653	3,717,102	130,920,414

(iii) *Totals in each State.* The total value of land and buildings in each State from 1934-35 to 1938-39 is given hereunder:—

FACTORIES : VALUE OF LAND AND BUILDINGS.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1934-35 ..	47,937,192	36,644,621	9,902,125	7,947,825	5,673,461	2,594,755	110,799,979
1935-36 ..	49,494,222	37,678,298	10,514,513	8,268,807	5,978,111	2,675,951	114,609,902
1936-37 ..	51,629,598	38,948,268	11,483,161	8,133,147	6,279,305	3,052,658	119,526,137
1937-38 ..	54,471,643	40,339,541	11,932,620	8,379,334	6,471,367	2,989,509	124,634,014
1938-39 ..	57,353,625	42,026,245	12,299,089	8,710,700	6,813,653	3,171,102	130,920,414

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, a growth of £95 million in 27 years. During the three years ending 1932-33, however, there was a decline of £12 million to £105.8 million, but since that year the value has risen to £130.9 million.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1934-35 to 1938-39.* The following table shows for Australia the approximate value of plant and machinery used in factories in each of the years specified:—

FACTORIES : VALUE OF PLANT AND MACHINERY, AUSTRALIA.

Class of Industry.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	5,279,528	5,249,528	4,881,743	6,504,872	7,028,382
II. Bricks, Pottery, Glass, etc. ..	2,649,482	2,865,499	2,858,777	3,019,476	3,144,586
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	5,638,866	5,722,327	5,923,776	6,251,926	6,754,248
IV. Industrial Metals, Machines, Implements and Conveyances ..	24,976,454	25,604,490	26,040,963	29,285,995	33,037,801
V. Precious Metals, Jewellery and Plate ..	162,129	175,884	187,373	196,652	197,059
VI. Textiles and Textile Goods ..	5,799,227	6,052,307	6,505,668	6,463,604	6,657,416
VII. Skins and Leather ..	802,370	898,598	902,107	900,239	973,181
VIII. Clothing ..	2,180,610	2,256,669	2,326,915	2,431,475	2,557,388
IX. Food, Drink and Tobacco ..	29,207,778	30,041,612	30,244,206	31,198,129	32,100,675
X. Woodworking and Basketware ..	3,490,416	3,629,550	3,597,835	3,749,553	3,907,551
XI. Furniture, Bedding, etc. ..	661,980	678,710	704,708	725,420	727,857
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	7,108,001	7,532,292	7,773,218	8,436,942	9,188,227
XIII. Rubber ..	1,039,724	1,464,225	1,401,645	1,470,300	1,367,859
XIV. Musical Instruments ..	24,209	18,157	14,800	10,750	11,702
XV. Miscellaneous Products ..	580,623	570,848	671,173	719,309	758,273
Total, Classes I to XV.	90,291,397	92,769,706	94,934,997	101,374,642	108,412,205
XVI. Heat, Light and Power	31,754,017	32,461,385	31,742,048	31,989,944	35,249,922
Grand Total ..	122,045,414	125,231,091	126,677,045	133,364,586	143,662,127

The pre-depression maximum amount invested in plant and machinery was £127.6 million in 1929-30. The amount declined to £120.2 million during the next four years, but has since risen to the record figure of £143.7 million for 1938-39. The increase of £10 million recorded during the latter year was due to the development in the heavy industries included in Class IV. and in the Heat, Light and Power group in Class XVI.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the last five years. It will be noted that the chief increases during the year 1938-39 were recorded in New South Wales, Victoria and Tasmania :—

FACTORIES : VALUE OF PLANT AND MACHINERY.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	£	£	£	£	£	£	£
1934-35 ..	50,453,590	33,947,056	16,518,876	9,293,448	5,763,428	6,069,016	122,045,414
1935-36 ..	51,964,982	34,194,608	17,736,543	9,280,335	6,063,901	5,990,722	125,231,091
1936-37 ..	51,979,614	36,213,626	17,460,253	9,130,748	7,142,368	4,750,486	126,677,095
1937-38 ..	57,222,693	36,868,289	17,734,600	9,402,792	7,459,525	4,676,687	133,364,586
1938-39 ..	62,692,956	38,626,743	18,095,415	9,749,679	8,095,064	6,402,270	143,662,127

(iii) *Value according to Industry, 1938-39.* The following table shows the value of plant and machinery used in factories in each State during 1938-39, classified according to industry :—

FACTORIES : VALUE OF PLANT AND MACHINERY, 1938-39.

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	4,518,777	1,632,442	304,909	235,160	179,462	157,632	7,028,382
II. Bricks, Pottery, Glass, etc. ..	1,701,487	941,024	148,808	173,132	146,425	33,710	3,144,586
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	1,858,894	2,994,053	109,249	876,100	868,114	47,838	6,754,248
IV. Industrial Metals, Machines, Implements and Conveyances ..	19,820,867	6,527,516	2,113,881	2,244,539	1,078,052	1,252,946	33,037,801
V. Precious Metals, Jewellery and Plate ..	49,723	127,226	4,945	9,967	3,687	1,511	197,059
VI. Textiles and Textile Goods ..	2,104,445	3,991,301	138,249	220,559	73,459	219,403	6,657,416
VII. Skins and Leather ..	402,649	363,019	98,771	19,430	59,421	29,891	973,181
VIII. Clothing ..	905,776	1,269,017	159,385	111,656	96,396	15,158	2,557,388
IX. Food, Drink and Tobacco ..	9,898,819	7,179,642	10,993,488	1,799,939	1,705,552	523,235	32,100,675
X. Woodworking and Basketware ..	1,229,198	878,796	829,749	208,919	478,892	281,997	3,907,551
XI. Furniture, Bedding, etc. ..	279,639	209,423	89,045	83,667	47,467	18,616	727,857
XII. Paper, Stationery, Printing, Book-binding, etc. ..	4,034,379	2,796,094	692,386	557,419	354,822	753,127	9,188,227
XIII. Rubber ..	537,440	740,698	54,985	18,623	9,335	6,778	1,367,859
XIV. Musical Instruments ..	8,088	2,751	233	185	445	..	11,702
XV. Miscellaneous Products ..	427,412	278,347	14,759	19,201	11,754	6,800	758,273
Total, Classes I to XV.	47,777,593	29,841,349	15,752,842	6,578,496	5,113,283	3,348,642	108,412,205
XVI. Heat, Light and Power ..	14,915,363	8,785,394	2,342,573	3,171,183	2,981,781	3,053,628	35,249,922
Grand Total	62,692,956	38,626,743	18,095,415	9,749,679	8,095,064	6,402,270	143,662,127

4. Depreciation of Land and Buildings and Plant and Machinery.—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 during the year 1938–39.

ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS AND PLANT AND MACHINERY, 1938–39.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
	£	£	£	£	£	£	£
I. Treatment of Non-metalliferous Mine and Quarry Products ..	339,119	149,231	29,335	5,531	35,449	36,726	595,391
II. Bricks, Pottery, Glass, etc. ..	120,761	57,600	12,626	19,107	11,820	1,328	223,242
III. Chemicals, Dyes, Explosives, Paint, Oils and Grease ..	247,142	419,964	17,166	32,293	67,318	4,737	788,620
IV. Industrial Metals, Machines, Implements and Conveyances ..	1,560,875	538,952	179,198	237,330	57,864	93,833	2,668,052
V. Precious Metals, Jewellery and Plate ..	6,344	10,127	513	813	253	90	18,140
VI. Textiles and Textile Goods ..	187,543	425,125	6,566	18,999	5,041	29,235	672,509
VII. Skins and Leather ..	37,121	31,644	6,689	1,087	3,515	1,644	81,700
VIII. Clothing ..	87,029	113,792	9,921	7,287	6,746	1,079	225,854
IX. Food, Drink and Tobacco ..	745,073	642,932	675,638	173,364	123,732	51,199	2,411,938
X. Woodworking and Basketware ..	118,058	73,917	74,262	23,693	45,260	20,526	355,716
XI. Furniture, Bedding, etc. ..	28,538	20,184	11,234	5,601	3,775	1,442	70,774
XII. Paper, Stationery, Printing, Book-binding, etc. ..	366,764	280,819	67,732	45,831	35,322	52,554	849,022
XIII. Rubber ..	101,473	80,381	5,684	1,728	1,017	739	191,022
XIV. Musical Instruments ..	4,118	185	10	..	35	..	4,348
XV. Miscellaneous Products ..	64,431	31,663	1,621	2,344	1,612	693	102,364
Total, Classes I to XV.	4,014,389	2,876,516	1,098,195	575,008	398,759	295,825	9,258,692
XVI. Heat, Light and Power ..	836,956	163,639	181,196	25,945	106,279	73,951	1,387,966
Grand Total	4,851,345	3,040,155	1,279,391	600,953	505,038	369,776	10,646,658

§ 9. Individual Industries.

1. *General.*—The preceding pages 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 in respect of all industries, particular industries are dealt with hereunder which are of special importance by reason of the employment which they provide for labour and capital or other features of special interest. Where there are only one or two establishments of a particular class in any State, returns of output are not published but are combined with some other factory group so that the operations of individual concerns will not be disclosed.

2. Chemicals, Drugs and Medicines.—(i) *Details for each State, 1938–39.* This industry is the most important in Class III. and details for each State during the year 1938–39 are shown in the following table:—

CHEMICALS, DRUGS AND MEDICINES, 1938–39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	132	66	13	12	11	4	238
Number of persons engaged ..	2,820	1,818	195	303	177	33	5,346
Value of land and buildings ..	£ 1,044,646	572,560	70,481	65,198	44,507	20,335	1,817,727
Value of plant and machinery ..	£ 613,642	386,703	35,315	77,837	129,104	10,976	1,253,577
Wages paid ..	£ 534,983	353,138	36,091	44,756	37,147	5,791	1,011,906
Value of fuel used ..	£ 66,628	32,172	4,100	7,766	10,483	354	121,503
Value of materials used ..	£ 1,982,714	1,013,928	109,366	205,861	78,769	13,042	3,403,680
Total value of output ..	£ 4,424,219	2,180,185	215,879	316,411	191,988	23,063	7,351,745
Value of production ..	£ 2,374,377	1,134,085	102,413	102,784	102,736	9,667	3,826,562

(ii) *Total for Australia, 1934–35 to 1938–39.* In the returns for Australia shown in the following table it will be seen that the industry has made consistent progress during each of the last five years:—

CHEMICALS, DRUGS AND MEDICINES : AUSTRALIA.

Items.	1934–35.	1935–36.	1936–37.	1937–38.	1938–39.
Number of factories ..	203	214	225	228	238
Number of persons engaged ..	4,251	4,619	4,928	5,210	5,346
Value of land and buildings ..	£ 1,435,705	1,556,254	1,627,073	1,677,485	1,817,727
Value of plant and machinery ..	£ 929,216	986,700	1,080,969	1,119,602	1,253,577
Wages paid ..	£ 713,018	786,211	849,254	955,677	1,011,906
Value of fuel used ..	£ 90,732	99,376	107,240	119,880	121,503
Value of materials used ..	£ 2,441,380	2,751,056	2,948,550	3,219,896	3,403,680
Total value of output ..	£ 5,171,339	5,723,675	6,362,843	6,873,053	7,351,745
Value of production ..	£ 2,639,227	2,873,243	3,307,053	3,533,277	3,826,562

3. Soap and Candle Factories.—(i) *Details for each State, 1938–39.* The manufacture of these products is frequently carried on in the same factory, so that separate returns cannot be obtained; the manufacture of soap is, however, the more important. The following table gives particulars of soap and candle factories in each State for the year 1938–39:—

SOAP AND CANDLE FACTORIES, 1938–39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	27	18	10	4	4	2	65
Number of persons engaged ..	1,460	711	186	175	62	26	2,620
Value of land and buildings ..	£ 335,682	213,789	32,537	59,016	(a)	(a)	(b) 665,546
Value of plant and machinery ..	£ 224,237	260,361	24,851	46,307	(a)	(a)	(b) 576,732
Wages paid ..	£ 281,811	134,392	37,419	31,398	(a)	(a)	(b) 501,174
Value of fuel used ..	£ 30,078	37,434	3,506	2,905	(a)	(a)	(b) 76,283
Value of materials used ..	£ 796,759	533,358	91,200	76,874	(a)	(a)	b1,567,999
Total value of output ..	£ 1,825,877	1,237,505	194,166	154,280	(a)	(a)	b3,529,723
Value of production ..	£ 999,040	666,713	99,460	74,501	(a)	(a)	b1,885,441

(a) Particulars not available for publication.

(b) Including Western Australia and Tasmania.

(ii) *Total for Australia, 1934-35 to 1938-39.* The next table gives similar particulars for the last five years for Australia :—

SOAP AND CANDLE FACTORIES : AUSTRALIA.

Items	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	67	66	66	65	65
Number of persons engaged	2,044	2,183	2,379	2,534	2,620
Value of land and buildings	£ 626,281	£ 613,717	£ 624,162	£ 649,362	£ 665,546
Value of plant and machinery	£ 530,298	£ 514,845	£ 484,225	£ 556,427	£ 576,732
Wages paid	£ 354,011	£ 385,431	£ 441,857	£ 478,065	£ 501,174
Value of fuel used	£ 56,774	£ 76,340	£ 63,368	£ 72,670	£ 76,283
Value of materials used	£ 1,445,528	£ 1,689,835	£ 1,858,810	£ 1,787,068	£ 1,567,999
Total value of output	£ 2,917,802	£ 3,107,553	£ 3,551,887	£ 3,627,830	£ 3,529,723
Value of production	£ 1,415,500	£ 1,341,378	£ 1,629,709	£ 1,768,092	£ 1,885,441

(iii) *Raw Material Used and Production, 1934-35 to 1938-39.* The following statement shows the quantities of certain raw material used and the production in soap and candle factories in Australia for the last five years :—

SOAP AND CANDLE FACTORIES : RAW MATERIAL USED AND PRODUCTION. AUSTRALIA.

Particulars.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Tallow used cwt.	511,936	491,423	518,604	511,302	535,511
Alkali used "	264,147	288,401	227,028	218,171	229,881
Coco-nut oil used, refined and unrefined "	92,952	125,548	124,236	137,134	138,054
Soap made "	932,252	954,082	986,578	952,507	986,087
Candles made "	48,398	39,937	37,991	26,964	27,459

The output for the year 1938-39 comprised the following quantities of soap :— household, 730,189 cwt. ; toilet, 127,493 cwt. ; sand, 89,316 cwt. ; soft, 18,059 cwt. ; and other, 21,030 cwt.

4. **Chemical Fertilizers.**—(i) *Details for each State, 1938-39.* The following table gives particulars of the factories engaged in the manufacture of chemical fertilizers in each State during the year 1938-39. Details of the consumption, imports and exports of fertilizers will be found in Chapter XIV. "Agricultural Production."

CHEMICAL FERTILIZERS, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	5	7	6	6	5	7	36
Number of persons engaged	273	1,075	88	662	402	40	2,540
Value of land and buildings	£ 115,986	£ 537,993	£ 13,263	£ 233,692	£ 501,704	£ 46,519	£ 1,449,157
Value of plant and machinery	£ 141,816	£ 880,174	£ 15,503	£ 632,542	£ 656,000	£ 26,724	£ 2,352,819
Wages paid	£ 74,795	£ 237,571	£ 22,320	£ 147,717	£ 111,760	£ 7,314	£ 601,477
Value of fuel used	£ 16,595	£ 48,189	£ 1,439	£ 22,826	£ 24,006	£ 691	£ 113,749
Value of materials used	£ 415,921	£ 1,152,487	£ 259,009	£ 534,470	£ 781,977	£ 87,189	£ 3,231,053
Total value of output	£ 712,317	£ 1,842,955	£ 340,440	£ 813,915	£ 1,123,141	£ 112,032	£ 4,944,800
Value of production	£ 279,801	£ 642,279	£ 79,992	£ 256,619	£ 317,158	£ 24,140	£ 1,599,998

(ii) *Total for Australia, 1934-35 to 1938-39.* The development of this industry since 1934-35 is set out hereunder:—

CHEMICAL FERTILIZERS : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	33	33	34	32	36
Number of persons engaged	1,801	1,996	2,214	2,474	2,540
Value of land and buildings	£ 1,365,737	£ 1,378,636	£ 1,368,075	£ 1,424,055	£ 1,449,157
Value of plant and machinery	£ 2,120,628	£ 2,127,113	£ 2,145,237	£ 2,214,575	£ 2,352,819
Wages paid	£ 386,277	£ 442,052	£ 493,345	£ 599,947	£ 601,477
Value of fuel used	£ 84,028	£ 88,676	£ 94,340	£ 108,587	£ 113,749
Value of materials used	£ 2,376,798	£ 2,726,551	£ 2,873,015	£ 3,239,322	£ 3,231,053
Total value of output	£ 3,449,860	£ 3,906,041	£ 4,375,565	£ 4,994,383	£ 4,944,809
Value of production	£ 986,034	£ 1,090,814	£ 1,408,210	£ 1,556,474	£ 1,599,998

5. *Agricultural Implement Works.*—(i) *General.* The manufacture of agricultural implements is of particular interest, owing to the extensive agricultural activities and to the fact that it was one of the first to which it was sought to apply the so-called "New Protection." The articles manufactured include a wide range of agricultural implements for tillage, seeding and planting and the harvesting of crops. Other farm machinery made includes oil engines, windmills, chaff-cutters and machinery used in the dairying industry.

(ii) *Details for States, 1938-39.* The following table gives details respecting agricultural implement works in each State for the year 1938-39:—

AGRICULTURAL IMPLEMENT WORKS, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	27	79	9	37	9	..	161
Number of persons engaged	1,132	3,999	412	948	72	..	6,563
Value of land and buildings	£ 160,650	£ 600,327	£ 27,550	£ 156,669	£ 51,753	..	£ 996,949
Value of plant and machinery	£ 102,904	£ 562,705	£ 60,535	£ 182,091	£ 2,285	..	£ 910,520
Wages paid	£ 219,412	£ 870,295	£ 84,970	£ 172,885	£ 16,651	..	£ 1,373,213
Value of fuel used	£ 8,205	£ 55,327	£ 5,003	£ 12,510	£ 601	..	£ 81,736
Value of materials used	£ 224,029	£ 964,128	£ 71,006	£ 221,833	£ 4,022	..	£ 1,485,018
Total value of output	£ 532,225	£ 2,180,881	£ 194,465	£ 468,554	£ 26,966	..	£ 3,403,091
Value of production	£ 299,991	£ 1,161,426	£ 118,366	£ 234,211	£ 22,343	..	£ 1,836,337

(iii) *Total for Australia, 1934-35 to 1938-39.* The fall in world prices of agricultural products resulted in a considerable slackening in employment and output in Agricultural Implement Works during the years 1929-30 to 1934-35. With the subsequent improvement in prices the industry expanded considerably, but the decline of world prices was again reflected in the figures for this industry during 1938-39. Details for each of the last five years are as follows:—

AGRICULTURAL IMPLEMENT WORKS : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	139	143	148	160	161
Number of persons engaged	4,202	5,053	6,253	7,756	6,563
Value of land and buildings	£ 587,962	£ 608,679	£ 689,612	£ 804,116	£ 996,949
Value of plant and machinery	£ 562,345	£ 600,915	£ 683,642	£ 729,771	£ 910,520
Wages paid	£ 730,906	£ 936,350	£ 1,232,838	£ 1,629,771	£ 1,373,213
Value of fuel used	£ 59,001	£ 66,518	£ 85,229	£ 105,175	£ 81,736
Value of materials used	£ 875,754	£ 1,121,472	£ 1,457,599	£ 1,904,156	£ 1,485,018
Total value of output	£ 1,968,593	£ 2,528,088	£ 3,159,732	£ 4,225,658	£ 3,403,091
Value of production	£ 1,033,838	£ 1,340,092	£ 1,607,904	£ 2,216,327	£ 1,836,337

6. **Engineering Works.**—Formerly, it was impossible to show separate details for the engineering industry owing to the different classifications among the States, but since 1926-27 substantial uniformity has been attained.

The classification of establishments included in the Industrial Metal Group still presents some difficulty. This arises from the fact that some establishments are engaged in two or more distinct types of industrial activity. In such cases factory proprietors are asked to furnish separate returns for each activity, but this is not always practicable and consequently there is no alternative but to classify such factories according to their predominant activity. This difficulty is most acute in engineering works, but the following figures may be accepted as reasonably representative of the engineering industry, excluding the marine and electrical branches:—

ENGINEERING WORKS,(a) 1938-39.

Items.	N.S.W.	Victoria.	Q'land. (b)	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	361	385	121	76	137	19	1,099
Number of persons engaged ..	10,103	9,647	2,924	1,705	1,553	290	26,222
Value of land and buildings £	1,493,000	1,518,233	361,430	175,843	298,694	46,851	3,894,051
Value of plant and machinery ..	£ 1,398,648	1,475,567	325,259	172,965	239,949	34,106	3,646,494
Wages paid ..	£ 2,281,915	2,144,255	612,864	304,541	339,067	59,343	5,741,985
Value of fuel used ..	£ 101,452	102,782	41,289	18,781	24,005	3,100	291,409
Value of materials used ..	£ 2,877,035	3,002,509	725,741	330,352	362,904	41,023	7,339,564
Total value of output ..	£ 6,618,817	6,633,378	1,799,647	845,482	945,554	126,767	16,879,645
Value of production ..	£ 3,640,330	3,528,087	942,617	496,349	558,645	82,644	9,248,672

(a) Excluding marine and electrical. (b) Including establishments previously included with smelting, converting, refining and rolling iron and steel.

In addition to engineering works which supply ordinary requirements, many establishments manufacture special classes of machinery and implements. The manufacture of mining, smelting and textile machinery and apparatus forms an important section of this industry.

7. **Smelting, Converting, Refining and Rolling of Iron and Steel.**—The extension of the classification noted in the preceding paragraph has made possible the separate publication of details for the group of industries comprised herein. This grouping includes ironworks, foundries, the making of iron safes and doors, steel castings, iron bedsteads, sash weights, steel window frames and sashes, nuts and bolts, springs, horse-shoes, screws, lifts, tools, brickmakers' implements and oxy-acetylene welding. Particulars for the year 1938-39 are as follows:—

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL, 1938-39.

Items.	N.S.W.	Victoria.	Q'land. (a)	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	170	161	..	31	I	..	363
Number of persons engaged ..	13,253	4,366	..	1,622	III	..	19,352
Value of land and buildings ..	£ 2,777,705	622,355	..	(b)	(b)	..	c 3,532,471
Value of plant and machinery ..	£ 7,945,771	555,971	..	(b)	(b)	..	c 8,611,122
Wages paid ..	£ 3,553,180	878,739	..	(b)	(b)	..	c 4,740,444
Value of fuel used ..	£ 2,142,229	134,947	..	(b)	(b)	..	c 2,318,248
Value of materials used ..	£ 15,048,009	1,105,270	..	(b)	(b)	..	c16,502,532
Total value of output ..	£ 25,571,297	2,682,921	..	(b)	(b)	..	c29,075,039
Value of production ..	£ 8,381,059	1,442,704	..	(b)	(b)	..	c10,254,259

(a) Now included with Engineering. (b) Particulars not available for publication. (c) Including South Australia and Western Australia.

8. **Extracting and Refining of Non-ferrous Metals and Alloys.**—The following table gives particulars of metal extraction and ore reduction works, other than those connected with iron and steel. The returns do not include particulars of plants used on mines :—

EXTRACTING AND REFINING OF NON-FERROUS METALS AND ALLOYS, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A. (a)	Tas.	Australia.
Number of factories ..	10	7	18	2	1	4	42
Number of persons engaged ..	1,071	62	1,152	1,197	69	1,981	5,532
Value of land and buildings £	222,188	22,646	298,352	(b)	(b)	482,544	(c)1,177,348
Value of plant and machinery ..	£ 963,400	5,863	857,875	(b)	(b)	1,091,212	(c)3,525,659
Wages paid ..	£ 313,143	15,380	351,873	(b)	(b)	528,167	(c)1,613,107
Value of fuel used ..	£ 202,009	3,177	88,930	(b)	(b)	197,398	(c) 597,951
Value of materials used ..	£ 9,793,124	162,405	1,657,494	(b)	(b)	1,237,475	(c)16,844,310
Total value of output ..	£ 11,261,700	194,697	2,568,692	(b)	(b)	2,598,652	(c)21,333,872
Value of production ..	£ 1,266,567	29,115	822,268	(b)	(b)	1,163,170	(c)3,891,611

(a) In Western Australia the majority of the plants are worked on the mines, and are therefore not included. (b) Particulars not available for publication. (c) Including South Australia and Western Australia.

9. **Railway and Tramway Workshops.**—(i) *Details for each State, 1938-39.* The railway and tramway workshops which form an important item in Class IV. are chiefly State-owned institutions. The following table giving details concerning them includes, in addition, municipal establishments for manufacturing and repairing rolling stock. Private institutions numbering 9 in 1938-39 have, however, been excluded :—

TRAMCARS, RAILWAY ROLLING STOCK AND CARRIAGES, ETC.(a), 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	36	25	12	15	22	7	117
Number of persons engaged ..	11,744	5,811	3,767	3,319	2,174	495	27,310
Value of land and buildings £	3,179,532	1,496,306	556,236	919,455	496,403	94,992	6,736,924
Value of plant and machinery ..	£ 2,580,312	1,127,383	493,137	818,581	409,613	51,153	5,390,179
Wages paid ..	£ 2,891,839	1,441,800	970,941	784,611	509,138	119,661	6,720,990
Value of fuel used ..	£ 91,973	52,351	27,217	20,052	20,374	5,141	226,108
Value of materials used ..	£ 2,333,087	1,129,582	648,426	555,508	290,699	18,781	4,976,353
Total value of output ..	£ 5,851,996	2,886,456	1,827,007	1,505,515	994,199	157,941	13,223,114
Value of production ..	£ 3,426,936	1,204,523	1,151,364	920,955	682,856	134,019	8,020,653

(a) Government and Municipal only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars in regard to this establishment are not included in any of the tables in this chapter.

(ii) *Total for Australia, 1934-35 to 1938-39.* The following table shows the development of railway and tramway workshops in Australia since 1934-35 :—

**TRAMCARS, RAILWAY ROLLING STOCK AND CARRIAGES, ETC.(a) :
AUSTRALIA.**

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	111	115	117	116	117
Number of persons engaged ..	24,487	25,678	26,649	27,207	27,310
Value of land and buildings ..	£ 6,414,562	6,430,465	6,533,264	6,552,522	6,736,924
Value of plant and machinery ..	£ 5,012,877	5,041,663	5,058,723	5,109,599	5,390,179
Wages paid ..	£ 5,166,904	5,585,710	5,967,787	6,525,372	6,720,990
Value of fuel used ..	£ 222,611	236,560	233,560	226,493	226,108
Value of materials used ..	£ 4,052,214	4,444,903	4,717,251	5,032,992	4,976,353
Total value of output ..	£ 10,248,401	11,455,618	12,002,439	13,029,225	13,223,114
Value of production ..	£ 5,973,576	6,774,155	7,051,628	7,769,740	8,020,653

(a) Government and Municipal only.

The growth of the railway and tramway systems resulted in corresponding activity in workshops engaged in the manufacture or repair of rolling stock, etc. The economic depression practically restricted the industry to repair work during recent years, but there has been considerable expansion in the last five years.

10. Motor Vehicles and Cycles.—The industries catering for the motor trade are included in Class IV. "Industrial Metals, Machines, Implements and Conveyances." Returns in regard to assembling and repairing are shown hereunder for the year 1938-39:—

ASSEMBLING AND REPAIRING OF MOTOR VEHICLES AND CYCLES, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,217	1,018	355	189	337	116	3,232
Number of persons engaged ..	9,066	7,197	2,376	1,711	1,326	784	22,860
Value of land and buildings £	3,142,028	1,953,759	656,889	459,598	544,552	242,455	6,999,281
Value of plant and machinery £	607,415	483,216	169,503	106,879	118,664	48,701	1,534,478
Wages paid ..	1,629,895	1,414,276	464,990	286,753	276,494	111,918	4,184,236
Value of fuel used ..	77,440	66,023	21,122	12,867	16,047	4,042	197,541
Value of materials used £	1,356,005	1,104,391	471,582	264,931	349,118	106,149	3,652,176
Total value of output £	4,957,023	3,237,004	1,400,627	705,376	921,871	290,670	10,612,571
Value of production ..	£ 2,623,578	2,066,590	907,923	427,578	556,706	180,479	6,762,854

Particulars in regard to motor body building for the year 1938-39 are as follows:—

MOTOR BODY BUILDING, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	58	95	38	12	11	18	232
Number of persons engaged ..	1,606	3,270	572	5,926	218	150	11,742
Value of land and buildings £	314,507	604,557	75,612	312,054	42,897	44,033	1,393,660
Value of plant and machinery £	78,691	288,985	24,736	220,110	13,255	3,880	629,657
Wages paid ..	330,702	726,713	100,477	1,368,068	41,336	22,050	2,589,346
Value of fuel used ..	7,768	17,218	2,939	42,680	1,703	450	72,758
Value of materials used £	346,441	1,382,960	120,395	1,833,803	48,302	17,193	3,749,094
Total value of output £	872,257	2,563,900	273,953	3,702,268	102,677	54,228	7,569,283
Value of production ..	£ 518,048	1,163,722	150,619	1,825,785	52,672	36,585	3,747,431

(a) Includes horse-drawn vehicles.

The output of motor bodies together with the number imported into Australia is shown in the next table:—

MOTOR BODIES: PRODUCTION AND IMPORTS, AUSTRALIA.

Items.	1926-27.	1928-29.	1931-32.	1936-37.	1937-38.	1938-39.
Motor Bodies—						
Number made ..	No. 88,876	72,193	6,323	(a) 77,250	(a) 94,091	(a) 80,840
Value ..	£ 4,830,014	4,357,841	450,510	6,461,314	7,411,227	6,420,332
Number imported ..	No. 12,843	14,546	61	736	646	532
Value ..	£ 1,413,203	1,471,878	7,360	81,380	63,810	56,641

(a) Including Motor Bodies assembled.

11. **Electrical Installations, Cables and Apparatus.**—(i) *Details for each State, 1938-39.* The following table shows particulars of this industry for each State during the year 1938-39 :—

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	148	132	16	32	28	4	360
Number of persons engaged ..	6,439	3,266	168	606	164	23	10,666
Value of land and buildings £	953,440	490,182	31,447	82,629	62,075	7,410	1,627,183
Value of plant and machinery £	559,935	275,390	8,460	40,190	11,417	1,161	806,553
Wages paid ..	£ 1,254,190	615,522	32,498	97,086	28,577	3,225	2,031,098
Value of fuel used ..	£ 64,719	30,441	808	6,718	1,803	125	104,594
Value of materials used	£ 2,033,931	870,467	34,813	220,867	32,683	2,271	3,195,032
Total value of output	£ 4,345,213	1,005,566	82,554	429,936	83,871	7,358	6,954,498
Value of production	£ 2,246,563	1,104,658	46,933	202,351	49,385	4,982	3,654,872

(ii) *Total for Australia, 1934-35 to 1938-39.* The increased output of electrical energy in Australia during the past five years, referred to in par. 37 below, necessitated a corresponding demand for electrical equipment. As imports declined heavily during the depression years the local industry was called upon to furnish the bulk of the new supplies, and the result of its operations has been a remarkable development in the manufacture of electrical goods in Australia.

ELECTRICAL INSTALLATIONS, CABLES AND APPARATUS : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	280	294	318	354	360
Number of persons engaged ..	7,098	8,137	9,215	11,054	10,666
Value of land and buildings ..	£ 1,168,474	1,245,877	1,349,212	1,570,455	1,627,183
Value of plant and machinery ..	£ 659,005	600,504	687,740	799,283	806,553
Wages paid ..	£ 1,130,683	1,325,736	1,534,415	1,915,348	2,031,098
Value of fuel used ..	£ 67,565	73,780	85,782	101,926	104,594
Value of materials used ..	£ 1,716,974	2,059,502	2,385,154	3,101,308	3,195,032
Total value of output ..	£ 3,822,333	4,329,150	5,085,776	6,494,421	6,954,498
Value of production ..	£ 2,037,794	2,195,868	2,614,840	3,291,187	3,654,872

12. **Wireless 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, however, a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined, almost entirely, to New South Wales and Victoria. The number of broadcast listeners' licences has increased from 331,128 in 1930-31 to 1,129,786 in 1938-39, and this increase is reflected in the advancement of the industry during that period. The first check in development since separate details became available occurred in 1938-39.

WIRELESS APPARATUS : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	56	67	67	73	72
Number of persons engaged ..	3,366	3,943	4,643	5,519	4,828
Value of land and buildings ..	£ 292,594	378,103	468,104	549,254	557,953
Value of plant and machinery ..	£ 135,208	185,626	261,341	315,325	305,468
Wages paid ..	£ 400,789	493,314	610,291	791,907	754,302
Value of fuel used ..	£ 12,503	17,670	21,354	24,022	23,525
Value of materials used ..	£ 1,172,663	1,398,137	1,590,978	1,949,286	1,355,683
Total value of output ..	£ 1,859,050	2,243,159	2,640,206	3,247,472	2,502,338
Value of production ..	£ 673,884	827,352	1,027,874	1,274,164	1,123,130

The number of domestic receiving sets assembled in 1938-39 was 163,821.

13. **Woollen and Tweed Mills.**—(i) *Details for each State, 1938-39.* The manufacture of woollens and tweeds was established at an early period in Australian history and was under Government control, the first record in New South Wales dating back to 1801, when a few blankets were made by convicts, while manufacture in Victoria dates from 1867. The following table gives particulars for the year 1938-39:—

WOOLLEN AND TWEED (INCLUDING WOOLSCOURING) MILLS, 1938-39.

Items.	N.S.W. (a)	Victoria.	Q'land.	S. Aust. (b)	W.A.	Tas.	Australia.
Number of factories	22	53	3	8	1	3	90
Number of persons engaged ..	6,712	9,896	518	850	130	1,502	19,608
Value of land and buildings ..	£ 697,215	£ 1,298,132	(c)	£ 115,594	(c)	£ 208,150	£ 2,380,009
Value of plant and machinery ..	£ 1,051,096	£ 1,773,475	(c)	£ 191,934	(c)	£ 204,093	£ 3,369,517
Wages paid	£ 914,382	£ 1,473,515	(c)	£ 135,241	(c)	£ 214,222	£ 2,887,907
Value of fuel used	£ 131,481	£ 205,310	(c)	£ 22,743	(c)	£ 20,328	£ 392,537
Value of materials used	£ 2,511,519	£ 3,370,082	(c)	£ 821,792	(c)	£ 499,624	£ 7,331,117
Total value of output	£ 4,299,770	£ 5,956,106	(c)	£ 1,044,823	(c)	£ 924,223	£ 12,514,610
Value of production	£ 1,656,770	£ 2,380,714	(c)	£ 200,288	(c)	£ 404,271	£ 4,796,956

(a) Woolscouring not included. (b) Includes Fellmongery. (c) Particulars not available for publication. (d) Including Queensland and Western Australia.

(ii) *Total for Australia, 1934-35 to 1938-39.* The extent of the woollen and tweed milling industry in Australia during the last five years is shown in the following table:—

WOOLLEN AND TWEED MILLS (INCLUDING WOOLSCOURING): AUSTRALIA.(a)

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	103	94	90	87	90
Number of persons engaged ..	£ 17,486	£ 19,603	£ 19,239	£ 19,103	£ 19,608
Value of land and buildings ..	£ 2,335,913	£ 2,455,141	£ 2,412,499	£ 2,435,114	£ 2,380,000
Value of plant and machinery ..	£ 3,239,780	£ 3,343,968	£ 3,474,275	£ 3,416,233	£ 3,369,517
Wages paid	£ 2,234,513	£ 2,612,723	£ 2,514,293	£ 2,741,729	£ 2,887,907
Value of fuel used	£ 380,134	£ 393,775	£ 357,777	£ 379,380	£ 392,537
Value of materials used	£ 6,504,841	£ 7,548,122	£ 7,734,520	£ 8,046,352	£ 7,331,117
Total value of output	£ 10,712,076	£ 12,545,067	£ 12,283,298	£ 12,618,132	£ 12,514,610
Value of production	£ 3,827,101	£ 4,603,170	£ 4,191,001	£ 4,192,400	£ 4,790,956

(a) Excluding Woolscouring in New South Wales but including Fellmongery in South Australia.

(iii) *Quantity and Value of Production.* The production consists chiefly of tweed cloths, flannels, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability. Detailed particulars for the several States are not available for publication. The total quantity of tweed and cloth manufactured in Australia in 1938-39 was 26,379,786 square yards. In New South Wales 11,785,141 square yards and in Victoria 13,125,924 square yards of tweed and cloth were manufactured. The production of flannel amounted to 4,514,738 square yards, while blankets, shawls and rugs to the number of 1,277,642 were made.

14. **Cotton.**—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The quantity of unginned cotton produced during the decennium ended 1938 varied between 6 million lb. in 1932 and 27 million lb. in 1934, and averaged 15.6 million lb. per annum. Arising out of the development in the local manufacture of cotton materials and the further expansion consequent upon the war, plans have been completed for an extension of the area devoted to the cultivation of cotton, and it is hoped that the production in 1941 will double that of 1940. The growing of cotton is restricted to Queensland and is referred to in some detail in Chapter XIV. "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 this is supplemented by imports from overseas, chiefly from India and the United States of America.

(iii) *Spinning and Weaving.* The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been or are being established in addition to those already operating. When

these are in full production, Australia will be 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 treating cotton in Australia during 1938-39 was 35, the number of persons engaged 3,650, and the value of the output £2,528,198.

15. **Hosiery and Other Knitted Goods.**—(i) *Details for each State, 1938-39.* In addition to the woollen and tweed factories, there were 313 hosiery and knitting mills operating in Australia during the year 1938-39. The total number of persons engaged in these establishments was 18,159 of whom 12,752 were females. Details for each State are shown hereunder:—

HOSIERY AND OTHER KNITTED GOODS, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	78	221	1	7	3	3	313
Number of persons engaged ..	5,298	12,499	117	70	92	83	18,159
Value of land and buildings £	701,582	1,221,375	(a)	(a)	8,969	12,330	b1,962,336
Value of plant and machinery £	622,681	1,271,787	(a)	(a)	8,121	15,177	b1,930,564
Wages paid ..	£ 697,004	1,601,036	(a)	(a)	9,115	7,542	b2,331,536
Value of fuel used ..	£ 36,468	94,700	(a)	(a)	508	686	b 133,154
Value of materials used ..	£ 1,482,743	2,719,655	(a)	(a)	22,118	14,795	b4,284,216
Total value of output ..	£ 2,619,764	5,464,417	(a)	(a)	37,199	27,819	b8,226,468
Value of production ..	£ 1,100,553	2,650,062	(a)	(a)	14,573	12,338	b3,809,098

(a) Particulars not available for publication.

(b) Including Queensland and South Australia.

(ii) *Total for Australia, 1934-35 to 1938-39.* Comparative statistics for the five years are shown in the following table:—

HOSIERY AND OTHER KNITTED GOODS : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	310	314	297	306	313
Number of persons engaged ..	14,493	15,692	16,932	18,230	18,159
Value of land and buildings ..	£ 1,676,897	1,791,583	1,842,228	1,861,884	1,962,336
Value of plant and machinery ..	£ 1,654,979	1,711,536	1,901,624	1,926,882	1,930,564
Wages paid ..	£ 1,624,414	1,819,265	2,017,903	2,319,355	2,331,536
Value of fuel used ..	£ 107,812	113,773	110,334	126,949	133,154
Value of materials used ..	£ 3,506,659	3,768,336	3,978,863	4,508,691	4,284,216
Total value of output ..	£ 6,561,114	7,327,363	7,700,079	8,534,886	8,226,468
Value of production ..	£ 2,946,643	3,445,254	3,610,882	3,899,246	3,809,098

(iii) *Raw Material used and Production, 1938-39.* The main raw materials consumed in establishments manufacturing hosiery and other knitted goods during the year 1938-39 consisted of woollen yarn, 5,578,188 lb.; cotton yarn, 5,121,228 lb.; silk yarn, 1,143,184 lb.; and artificial silk yarn, 5,280,573 lb. Production comprised 31,804,920 garments, valued at £3,888,269; 2,136,178 dozen pairs of stockings, valued at £2,676,122; and 1,762,992 dozen pairs of socks, valued at £1,139,314.

16. **Tanning, Currying and Leather Dressing.**—(i) *Details for each State, 1938-39.* 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, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W.A.	Tas.	Aust.
Number of factories ..	60	41	14	9	7	1	132
Number of persons engaged ..	1,632	2,221	356	71	89	6	4,375
Value of land and buildings ..	£ 297,636	422,437	33,284	(a)	39,359	(a)	b 813,713
Value of plant and machinery ..	£ 208,702	243,067	34,204	(a)	26,229	(a)	b 523,538
Wages paid ..	£ 357,210	459,098	71,899	(a)	18,338	(a)	b 919,781
Value of fuel used ..	£ 31,668	47,370	5,879	(a)	1,678	(a)	b 87,670
Value of materials used ..	£ 1,303,529	1,295,391	275,642	(a)	73,732	(a)	b2,983,041
Total value of output ..	£ 1,910,085	2,113,299	396,664	(a)	122,405	(a)	b4,592,642
Value of production ..	£ 574,888	770,538	115,143	(a)	46,995	(a)	b1,521,931

(a) Particulars not available for publication.

(b) Including South Australia and Tasmania.

(ii) *Total for Australia, 1934-35 to 1938-39.* The development of the tanning industry during the years stated is shown in the following table :—

TANNING, CURRYING AND LEATHER DRESSING : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	143	135	132	131	132
Number of persons engaged	4,142	4,433	4,467	4,400	4,375
Value of land and buildings	£ 774,393	748,897	785,191	812,051	813,713
Value of plant and machinery	£ 506,190	513,872	504,296	524,125	523,538
Wages paid	£ 723,711	810,742	858,610	911,835	919,781
Value of fuel used	£ 82,244	84,682	85,330	89,699	87,670
Value of materials used	£ 2,764,343	3,099,679	3,478,457	3,502,252	2,983,041
Total value of output	£ 4,080,442	4,632,662	5,091,033	5,064,188	4,592,642
Value of production	£ 1,233,855	1,448,301	1,527,246	1,472,237	1,521,931

(iii) *Raw Material Used and Production, 1938-39.* The quantities of raw material used and leather produced in tanneries in each State are shown in the following table :—

TANNERIES : RAW MATERIAL USED AND PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Hides No.	562,591	819,977	165,151	(a)	52,047	(a)	b 1,629,592
Skins—							
Calf	693,055	377,126	134,548	1,758	(a)	(a)	b 1,207,061
Goat	989,286	279,328	(a)	637	(a)	(a)	b 1,273,293
Sheep	1,401,338	246,376	..	..	(a)	(a)	b 1,648,599
Marsupial	7,038	19,162	38,232	2,292	3,327	..	70,051
Reptile .. ..	..	..	..	..	..	..	..
Other pelts treated	1,608,478	424,844	(a)	..	(a)	..	b 2,250,710
Bark used—							
Wattle tons	7,965	7,927	2,024	334	(a)	(a)	b 18,607
Other	127	2,673	(a)	(a)	351	..	b 3,203
Tanning extract used .. lb.	3,877,805	2,372,745	1,151,290	(a)	823,377	(a)	b 8,257,857
Leather made—							
Sole	10,349,870	11,342,423	3,023,092	(a)	1,420,288	(a)	b 26,323,227
Harness	314,180	208,915	475,084	71,688	58,746	..	b 1,128,613
Upholstery sq. ft.	(a)	5,141,959	..	(a)	..	..	b 6,982,023
Dressed and Upper from Hides—							
Sold by Measurement—							
Patent sq. ft.	1,392,018	2,275,613	..	..	..	..	3,667,631
All Other	4,643,940	6,003,420	2,090,860	272,238	(a)	(a)	b 13,256,205
Sold by Weight—							
Waxed Kip lb.	(a)	44,035	56,620	42,874	14,928	(a)	b 210,165
All Other	(a)	70,704	27,789	134,562	17,257	(a)	b 643,480
Dressed from skins—							
Calf sq. ft.	5,812,393	3,038,564	1,282,374	8,989	(a)	(a)	b 10,144,963
Goat	4,136,808	1,122,362	(a)	3,654	(a)	..	b 5,278,245
Sheep	7,793,737	(a)	(a)	..	..	..	b 10,929,143
Marsupial	23,600	62,014	203,999	(a)	9,661	(a)	b 302,464

(a) Not available for publication.

(b) Including particulars for States marked (a).

17. *Boot Factories.*—(i) *Boot and Shoe Factories, 1938-39.* The boot and shoe industry holds an important place both in regard to employment afforded and extent of output. The operations of these factories have been rather obscured in recent years by the inclusion of a large number of repair establishments in the returns, but this difficulty has been overcome by the collection of separate statistics for each industry, and in the following table the details relate to boot and shoe factories as distinct from those devoted to repairing and bespoke work :—

BOOT AND SHOE FACTORIES, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	101	158	23	16	9	4	311
Number of persons engaged	5,741	9,609	882	611	363	57	17,263
Value of land and buildings	£ 425,428	618,245	37,685	59,967	41,971	9,200	1,192,496
Value of plant and machinery	£ 243,754	469,268	68,220	44,312	34,896	3,759	864,209
Wages paid	£ 848,733	1,516,985	124,042	84,043	50,731	8,105	2,632,639
Value of fuel used	£ 16,279	36,239	1,962	2,038	1,142	158	51,818
Value of materials used	£ 1,369,667	2,463,626	200,957	129,599	96,859	12,947	4,273,655
Total value of output	£ 2,610,578	4,600,365	376,464	240,531	169,812	23,603	8,021,353
Value of production	£ 1,224,632	2,106,500	173,545	108,894	71,811	10,498	3,695,880

(ii) *Boot Repairing, including Bespoke Work.* The introduction of small power plants in repairing shops has brought this class of establishment within the meaning of a factory for statistical purposes. Shops using small power plants have spread rapidly throughout Australia, and in 1938-39 the number amounted to 1,296 in which 2,283 persons were engaged in the industry. The sum of £161,579 was distributed in salaries and wages, and the output was valued at £826,811.

(iii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made at factories in each State are shown in the following table :—

BOOT AND SHOE FACTORIES : OUTPUT, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.	
QUANTITY.								
Boots and shoes	pairs	4,767,236	7,463,770	671,707	571,035	451,787	41,343	13,966,878
Slippers	..	3,107,106	4,218,245	377,236	(a)	(a)	..	68,021,795
Uppers (c)	..	17,133	7,970	114,093	(a)	(a)	380	145,370
VALUE.								
Boots and shoes	£	2,251,164	3,933,071	327,429	198,805	169,450	23,311	6,903,230
Slippers	..	£ 349,624	541,497	28,454	(a)	(a)	..	6 962,306
Uppers (c)	..	£ 6,129	6,408	14,774	(a)	(a)	180	6 29,453

(a) Not available for publication. (b) Including particulars for States marked (a). (c) Made for other than factory use.

18. *Tailoring and Slop Clothing Factories.*—(i) *Details for each State, 1938-39* The importance of this industry in the several States is shown in the following table :—

TAILORING AND SLOP CLOTHING FACTORIES, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	453	375	127	119	81	22	1,177
Number of persons engaged ..	12,051	8,240	3,026	1,829	1,017	336	26,499
Value of land and buildings	£ 1,548,516	877,038	292,627	238,033	162,582	56,952	3,175,748
Value of plant and machinery	£ 163,981	128,639	28,466	18,675	11,868	3,874	355,503
Wages paid ..	£ 1,447,259	1,047,622	326,522	186,294	124,700	36,075	3,168,472
Value of fuel used ..	£ 27,337	28,902	7,225	5,559	2,739	669	72,431
Value of materials used	£ 2,025,401	2,109,406	430,109	192,004	147,442	42,157	4,946,519
Total value of output	£ 4,238,547	3,700,708	968,560	476,971	347,778	98,082	9,830,646
Value of production ..	£ 2,185,809	1,562,400	531,226	279,408	197,597	55,256	4,811,666

(ii) *Total for Australia, 1934-35 to 1938-39.* Details for the last five years are as follows :—

TAILORING AND SLOP CLOTHING FACTORIES : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	1,115	1,157	1,163	1,172	1,177
Number of persons engaged ..	23,579	24,877	25,546	26,765	26,499
Value of land and buildings	£ 2,776,968	2,885,076	3,053,302	3,100,309	3,175,748
Value of plant and machinery	£ 316,908	327,333	317,812	332,814	355,503
Wages paid ..	£ 2,446,429	2,578,597	2,732,213	3,094,693	3,168,472
Value of fuel used ..	£ 56,857	58,556	61,097	66,834	72,431
Value of materials used ..	£ 4,573,477	4,826,010	4,796,324	5,123,268	4,946,519
Total value of output ..	£ 8,407,294	8,939,837	9,138,302	9,801,313	9,830,646
Value of production ..	£ 3,776,960	4,055,271	4,280,881	4,611,211	4,811,666

19. Dressmaking and Millinery Establishments.—(i) *Details for each State, 1938-39*
Particulars of dressmaking and millinery establishments are given separately in the following tables :—

DRESSMAKING ESTABLISHMENTS, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	112	472	39	46	39	6	714
Number of persons engaged ..	1,613	8,368	818	906	735	35	12,475
Value of land and buildings ..	£ 225,098	£ 1,179,055	£ 70,609	£ 63,749	£ 66,215	£ 3,580	£ 1,608,306
Value of plant and machinery ..	£ 11,828	£ 103,551	£ 10,635	£ 9,715	£ 5,928	£ 234	£ 141,891
Wages paid ..	£ 157,335	£ 900,427	£ 72,139	£ 62,792	£ 64,741	£ 2,966	£ 1,809,400
Value of fuel used ..	£ 2,137	£ 17,183	£ 1,267	£ 1,442	£ 1,039	£ 33	£ 23,101
Value of materials used ..	£ 116,335	£ 1,612,062	£ 96,903	£ 69,778	£ 72,954	£ 922	£ 1,968,954
Total value of output ..	£ 347,026	£ 2,994,581	£ 226,075	£ 163,494	£ 173,809	£ 4,067	£ 3,909,865
Value of production ..	£ 228,554	£ 1,365,336	£ 127,908	£ 92,184	£ 99,816	£ 4,012	£ 1,917,810

(a) Includes Millinery.

MILLINERY ESTABLISHMENTS, 1938-39.

Items	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	64	59	15	9	8	..	155
Number of persons engaged ..	1,764	1,268	515	310	66	..	3,923
Value of land and buildings ..	£ 247,117	£ 127,708	£ 38,560	£ 22,601	£ 7,310	..	£ 443,305
Value of plant and machinery ..	£ 18,651	£ 18,053	£ 7,235	£ 2,081	£ 1,352	..	£ 47,372
Wages paid ..	£ 177,904	£ 138,659	£ 44,427	£ 25,014	£ 6,404	..	£ 392,408
Value of fuel used ..	£ 5,133	£ 3,149	£ 828	£ 740	£ 116	..	£ 9,966
Value of materials used ..	£ 325,298	£ 195,299	£ 69,958	£ 40,720	£ 9,134	..	£ 640,409
Total value of output ..	£ 653,426	£ 432,628	£ 136,382	£ 84,406	£ 18,020	..	£ 1,324,862
Value of production ..	£ 322,995	£ 234,180	£ 65,596	£ 42,946	£ 8,770	..	£ 674,487

(a) Included in Dressmaking.

(ii) *Total for Australia, 1934-35 to 1938-39.* Particulars of dressmaking and millinery establishments in Australia for the last five years are shown in the following table :—

DRESSMAKING AND MILLINERY ESTABLISHMENTS: AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	854	863	830	871	869
Number of persons engaged ..	15,166	15,683	15,635	16,426	16,395
Value of land and buildings ..	£ 1,898,295	£ 1,897,903	£ 2,031,277	£ 2,023,371	£ 2,051,611
Value of plant and machinery ..	£ 177,241	£ 180,934	£ 179,699	£ 194,553	£ 189,263
Wages paid ..	£ 1,316,645	£ 1,391,348	£ 1,441,226	£ 1,588,231	£ 1,652,808
Value of fuel used ..	£ 28,225	£ 30,245	£ 30,178	£ 32,157	£ 33,067
Value of materials used ..	£ 2,439,034	£ 2,559,119	£ 2,557,612	£ 2,801,184	£ 2,609,363
Total value of output ..	£ 4,534,059	£ 4,869,311	£ 4,965,634	£ 5,302,983	£ 5,234,727
Value of production ..	£ 2,066,800	£ 2,279,947	£ 2,377,844	£ 2,469,642	£ 2,592,297

20. Shirts, Collars and Underclothing.—(i) *Details for each State, 1938-39.* Particulars of this industry are shown in the subjoined table :—

SHIRTS, COLLARS AND UNDERCLOTHING, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories	127	99	17	27	13	..	283
Number of persons engaged	4,481	4,555	908	578	559	..	11,081
Value of land and buildings	£ 375,023	448,682	51,994	37,498	32,775	..	945,972
Value of plant and machinery	77,787	117,681	11,664	11,069	12,378	..	230,579
Wages paid	444,916	521,281	77,255	44,610	54,793	..	1,142,855
Value of fuel used	7,862	12,214	1,466	1,264	833	..	23,639
Value of materials used	1,114,257	1,288,639	117,093	67,982	62,808	..	2,650,779
Total value of output	£ 1,793,077	2,156,124	224,861	130,305	130,842	..	4,435,209
Value of production	670,958	855,271	106,302	61,059	67,201	..	1,760,791

(ii) *Total for Australia, 1934-35 to 1938-39.* The following table shows the progress of the industry since 1934-35 :—

SHIRTS, COLLARS AND UNDERCLOTHING : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	314	308	298	289	283
Number of persons engaged	10,925	11,214	11,116	11,134	11,081
Value of land and buildings	£ 872,923	842,896	871,522	910,595	945,972
Value of plant and machinery	235,546	253,736	251,396	229,797	230,579
Wages paid	£ 929,192	1,001,615	1,029,221	1,096,013	1,142,855
Value of fuel used	22,947	22,844	23,692	23,845	23,639
Value of materials used	2,663,522	2,708,887	2,599,519	2,788,667	2,650,779
Total value of output	£ 4,174,304	4,311,566	4,252,677	4,522,879	4,435,209
Value of production	£ 1,487,835	1,579,835	1,629,466	1,710,367	1,760,791

21. Bacon-curing Factories.—(i) *Details for each State, 1938-39.* The table hereunder gives particulars of factories engaged in bacon-curing in each State for the year 1938-39 :—

BACON-CURING FACTORIES, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories	25	18	9	8	9	7	76
Number of persons engaged	383	532	751	240	94	47	2,047
Value of land and buildings	£ 148,386	226,933	230,272	93,678	26,403	24,726	759,398
Value of plant and machinery	59,301	121,273	123,776	30,191	14,159	7,978	356,678
Wages paid	£ 94,840	124,753	178,028	51,504	21,211	9,260	479,596
Value of fuel used	13,379	18,598	29,458	9,289	5,039	1,201	76,964
Value of materials used	958,460	829,555	1,335,620	340,945	223,720	83,197	3,768,497
Total value of output	£ 1,178,548	1,039,391	1,681,367	438,021	265,407	107,315	4,710,049
Value of production	206,709	191,238	316,289	87,787	39,648	22,917	864,588

(ii) *Quantity and Value of Production.* The number of pigs cured and the quantity and value of the production of bacon-curing factories in each State for the year 1938-39 are given hereafter:—

BACON-CURING FACTORIES: PIGS CURED AND PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PIGS CURED.							
Number	253,203	169,493	233,228	66,609	50,643	20,258	793,434
PRODUCTS.							
Bacon and ham .. '000 lb.	25,987	16,025	18,921	5,555	4,213	1,935	72,636
Lard "	662	798	1,121	245	195	92	3,113
VALUE.							
Bacon and ham (a)	£ 1,254,320	825,777	868,671	277,049	198,526	73,518	3,497,861
Lard	£ 15,678	22,485	26,350	5,866	5,503	2,339	78,221
Other products ..	£ 277,250	196,118	787,947	156,589	61,417	31,990	1,511,311

(a) Estimated.

Bacon and ham and other pig products are dealt with more fully in Chapter XV. "Farmyard, Dairy and Bee Products."

22. *Butter, Cheese and Condensed Milk Factories.*—(i) *Details for each State, 1938-39.* The subjoined table gives particulars of butter, cheese and condensed milk factories in each State during the year 1938-39:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W.A.	Tas.	Australia.
Number of factories ..	129	174	102	50	24	44	523
Number of persons engaged ..	1,533	2,926	1,350	572	211	259	6,851
Value of land and buildings	£ 675,691	1,192,828	645,223	200,845	84,280	81,456	2,880,323
Value of plant and machinery	£ 778,441	1,244,262	740,924	139,084	86,641	77,488	3,066,840
Wages paid ..	£ 368,250	698,022	299,035	118,079	45,080	41,065	1,569,531
Value of fuel used ..	£ 99,825	179,948	64,697	24,677	13,695	6,659	389,501
Value of materials used	£ 7,169,441	9,535,826	9,421,239	1,497,172	966,090	572,215	29,161,983
Total value of output	£ 8,014,923	11,453,619	10,047,754	1,749,374	1,145,631	692,552	33,094,851
Value of production ..	£ 745,657	1,737,845	561,818	218,523	165,846	113,678	3,543,367

(ii) *Total for Australia, 1934-35 to 1938-39.* The progress of industries included in this group during the last five years is set out hereunder:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES: AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	544	517	517	520	523
Number of persons engaged ..	6,151	6,062	6,226	6,655	6,851
Value of land and buildings	£ 2,616,769	2,635,863	2,733,273	2,779,663	2,880,323
Value of plant and machinery	£ 2,779,468	2,849,645	2,938,110	2,977,640	3,066,840
Wages paid ..	£ 1,251,418	1,265,898	1,332,911	1,486,780	1,569,531
Value of fuel used ..	£ 320,073	310,260	335,451	362,217	389,501
Value of materials used ..	£ 20,182,321	22,627,448	21,995,736	27,187,350	29,161,983
Total value of output ..	£ 23,376,685	25,869,089	25,434,496	31,656,156	33,094,851
Value of production ..	£ 2,874,291	2,931,321	3,103,309	4,106,589	3,543,367

(iii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced in factories and the quantities of milk used in the manufacture of butter, cheese and condensed milk during the year 1938-39:—

BUTTER, CHEESE AND CONDENSED MILK FACTORIES: PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
MILK USED (,000 OMITTED).							
For the manufacture of—							
Butter .. gals.	211,249	275,472	305,480	33,522	29,775	18,890	874,388
Cheese .. "	7,413	19,658	13,387	17,682	1,072	3,298	62,516
Condensed, &c., Milk .. "	4,864	26,469	(a)	(a)	(a)	..	(b) 33,376
PRODUCTS (,000 OMITTED).							
Butter .. lb.	113,841	126,808	154,377	17,554	14,655	9,080	436,315
Cheese .. "	7,193	19,349	(c) 13,984	18,457	977	3,181	63,141
Condensed and concentrated milk .. lb.	6,148	25,225	..	(a)	(a)	..	(b) 38,479
Powdered milk .. "	2,552	21,443	..	..	..	..	23,995
VALUE (,000 OMITTED).							
Butter .. £	7,103	7,905	9,407	1,066	983	567	27,031
Cheese .. £	272	646	(c) 444	580	43	100	2,085
Condensed and concentrated milk .. £	129	568	..	(a)	(a)	..	(b) 860
Powdered milk .. £	135	654	..	..	..	..	789

(a) Particulars not available for publication. (b) Includes States marked (a). (c) Excluding 1,765,406 lb. cheese, valued at £61,387 in establishments not classified as factories.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XV "Farmyard, Dairy and Bee Products."

23. **Meat and Fish Preserving Works.**—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, while insulated space for the carriage of chilled and frozen produce is provided by steamship companies trading between Australia and other parts of the world. The substitution of the export of chilled for frozen meat has already been referred to in Chapter XIII. "Pastoral Production."

MEAT AND FISH PRESERVING WORKS.(a) 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	6	10	12	..	2	2	32
Number of persons engaged ..	211	273	3,483	..	(b)	(c)	4,093
Value of land and buildings .. £	62,471	77,038	1,453,069	..	(b)	(c)	1,965,666
Value of plant and machinery .. £	19,307	28,821	886,097	..	(b)	(c)	1,324,575
Wages paid .. £	39,183	44,650	1,026,985	..	(b)	(c)	1,180,006
Value of fuel used .. £	5,152	4,673	116,147	..	(b)	(c)	134,218
Value of materials used .. £	119,918	274,220	5,752,067	..	(b)	(c)	6,350,713
Total value of output .. £	158,311	394,776	7,232,500	..	(b)	(c)	8,085,632
Value of production .. £	33,234	85,883	1,364,295	..	(b)	(c)	1,600,641

(a) Including meat extracts. Western Australia and Tasmania.

(b) Particulars not available for publication.

(c) Includes

Particulars regarding 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 XIII. "Pastoral Production."

24. **Bakeries.**—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on in the year 1938–39 is given in the table below. It should be noted, however, that, as explained in § 1 par. 2 above the details refer only to establishments coming within the definition of a factory. For that reason there are a large number of bakehouses omitted and consequently the table does not give complete details of the industry. 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 of this fact is deemed desirable.

BAKERIES (INCLUDING CAKES AND PASTRY), 1938–39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	789	576	246	143	132	72	1,958
Number of persons engaged ..	4,462	3,281	1,319	956	535	1,162	11,715
Value of land and buildings ..	£ 2,449,847	£ 1,231,844	£ 459,020	£ 269,634	£ 193,173	£ 356,718	£ 4,960,236
Value of plant and machinery ..	£ 641,716	£ 415,927	£ 150,293	£ 111,370	£ 54,734	£ 103,536	£ 1,477,576
Wages paid ..	£ 827,018	£ 543,277	£ 211,262	£ 151,593	£ 90,478	£ 169,665	£ 1,993,293
Value of fuel used ..	£ 132,875	£ 89,783	£ 31,568	£ 21,204	£ 13,382	£ 17,124	£ 305,936
Value of materials used ..	£ 2,551,820	£ 2,062,574	£ 766,506	£ 491,348	£ 318,637	£ 460,299	£ 6,651,184
Total value of output ..	£ 4,478,124	£ 3,479,340	£ 1,312,989	£ 807,732	£ 566,241	£ 821,761	£ 11,466,187
Value of production ..	£ 1,793,429	£ 1,326,983	£ 514,915	£ 295,180	£ 234,222	£ 344,338	£ 4,509,067

(a) Includes Confectionery.

25. **Jam and Fruit Preserving, Pickles, Sauces and Vinegar Factories.**—(i) *Details for each State, 1938–39.* The subjoined table gives particulars of factories included in this class for the year 1938–39.

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES, 1938–39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	31	43	14	16	8	11	123
Number of persons engaged ..	1,659	2,949	522	484	70	792	6,476
Value of land and buildings ..	£ 387,554	£ 675,362	£ 50,324	£ 123,186	£ 17,532	£ 128,192	£ 1,382,150
Value of plant and machinery ..	£ 211,558	£ 342,749	£ 70,306	£ 50,955	£ 4,879	£ 40,192	£ 720,639
Wages paid ..	£ 304,424	£ 335,175	£ 84,114	£ 70,609	£ 9,937	£ 144,732	£ 1,148,991
Value of fuel used ..	£ 25,989	£ 47,501	£ 6,105	£ 5,972	£ 876	£ 11,078	£ 97,521
Value of materials used ..	£ 1,165,354	£ 2,241,909	£ 562,726	£ 237,866	£ 34,671	£ 556,989	£ 4,799,515
Total value of output ..	£ 1,911,173	£ 3,390,421	£ 730,626	£ 364,738	£ 66,666	£ 767,290	£ 7,230,914
Value of production ..	£ 719,830	£ 1,101,011	£ 161,795	£ 120,900	£ 31,119	£ 199,223	£ 2,333,878

(ii) *Total for Australia, 1934–35 to 1938–39.* Particulars in connexion with these establishments in Australia for the last five years are given hereunder:—

JAM AND FRUIT PRESERVING, PICKLES, ETC., FACTORIES: AUSTRALIA.

Items.	1934–35.	1935–36.	1936–37.	1937–38.	1938–39.
Number of factories ..	122	125	121	121	123
Number of persons engaged ..	5,213	5,773	5,906	6,596	6,476
Value of land and buildings ..	£ 1,103,291	£ 1,125,204	£ 1,218,132	£ 1,309,014	£ 1,382,150
Value of plant and machinery ..	£ 521,800	£ 549,413	£ 598,126	£ 665,863	£ 720,639
Wages paid ..	£ 795,621	£ 929,792	£ 971,768	£ 1,143,190	£ 1,148,991
Value of fuel used ..	£ 78,144	£ 89,227	£ 87,019	£ 93,055	£ 97,521
Value of materials used ..	£ 3,312,257	£ 3,965,338	£ 4,177,792	£ 4,571,219	£ 4,799,515
Total value of output ..	£ 5,428,876	£ 6,276,112	£ 6,298,642	£ 6,974,291	£ 7,230,914
Value of production ..	£ 2,038,475	£ 2,221,547	£ 2,033,831	£ 2,310,017	£ 2,333,878

The progress of the jam-making industry was very marked during the war years of 1914-19, when large quantities were exported overseas for the supply of army requirements. In the year 1918-19 the production amounted to 142,290,000 lb., but it had fallen to 90,140,000 lb. in 1920-21. During the succeeding years the production varied considerably, falling to 66,120,000 lb. in 1930-31 and subsequently increasing to 84,916,000 lb. in 1938-39. The output of preserved fruit reached the record dimensions of 157,761,000 lb. in 1937-38. Production in 1938-39 was slightly lower at 150,732,000 lb. The production of pickles and sauces again showed a satisfactory improvement.

(iii) *Production.* The following table shows the quantity and value of jams, pickles and sauces manufactured in each State in 1938-39:—

JAMS, PRESERVED FRUIT, PICKLES AND SAUCES: OUTPUT, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
QUANTITY (,000 OMITTED).							
Jams and Jellies .. lb.	20,635	28,842	6,899	6,748	1,063	20,729	84,916
Fruit Pulp—							
Consumed in own works .. cwt.	9	17	10	13	5	1	55
For sale or addition to stock .. cwt.	7	47	4	12	6	106	182
Tomato Pulp—							
Consumed in own works .. cwt.	20	69	1	20	6	..	118
For sale or addition to stock .. cwt.	35	145	1	8	7	11	207
Fruit, preserved .. lb.	28,387	91,247	19,641	4,545	13	6,899	150,732
Pickles .. pints	1,939	2,647	349	1,676	237	4	6,852
Sauces	7,310	9,630	699	2,305	842	6	20,792
VALUE.							
Jams and Jellies .. £	528,049	608,055	167,435	119,110	18,704	464,218	1,905,571
Fruit, preserved .. £	507,032	1,373,433	417,029	76,613	191	115,904	2,490,202
Pickles £	81,703	86,524	17,029	65,263	6,639	1,796	258,954
Sauces £	371,930	305,847	24,616	67,792	22,627	687	793,499

26. *Confectionery Factories.*—(i) *Details for each State, 1930-39.* At the close of the year 1900 there were in New South Wales 16 establishments with 706 persons engaged and in Victoria 16 establishments, employing 731 persons, the plant and machinery in the former State being valued at £2,815, and in the latter at £19,070. The figures for the year 1938-39 given hereunder show the remarkable development since 1900:—

SUGAR CONFECTIONERY FACTORIES(a), 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (b)	Australia.
Number of factories ..	74	82	22	19	10	2	209
Number of persons engaged ..	3,892	3,087	583	401	307	6	8,276
Value of land and buildings .. £	1,054,996	644,379	218,587	82,453	(c)	(c)	(d)2,079,601
Value of plant and machinery .. £	999,575	592,342	124,712	63,701	(c)	(c)	(d)1,854,398
Wages paid .. £	595,450	479,547	76,240	38,721	(c)	(c)	(d)1,231,375
Value of fuel used .. £	67,811	51,464	9,733	9,439	(c)	(c)	(d)144,349
Value of materials used .. £	1,888,834	1,347,543	210,235	143,278	(c)	(c)	(d)3,704,774
Total value of output .. £	3,848,705	2,402,152	421,436	215,081	(c)	(c)	(d)7,107,045
Value of production .. £	1,892,060	1,003,145	201,468	62,364	(c)	(c)	(d)3,257,922

(a) Including Chocolate and Ice Cream. (b) Ice Cream factories—Other Confectionery included in Bakeries. (c) Particulars not available for publication (d) Includes Western Australia and Tasmania.

(ii) *Total for Australia, 1934-35 to 1938-39.* Particulars of the confectionery industry during the last five years are shown in the following table :—

SUGAR CONFECTIONERY FACTORIES(a) : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	218	217	214	204	209
Number of persons engaged	7,158	7,516	7,975	8,235	8,276
Value of land and buildings	£ 1,721,645	1,774,452	1,902,059	2,042,198	2,079,601
Value of plant and machinery	£ 1,749,349	1,712,163	1,773,178	1,830,166	1,854,398
Wages paid	£ 935,214	1,010,775	1,063,421	1,179,223	1,231,375
Value of fuel used	£ 112,059	117,041	98,771	141,459	144,349
Value of materials used	£ 2,743,763	3,023,696	3,202,325	3,555,710	3,704,774
Total value of output	£ 5,120,164	5,662,146	5,573,148	6,660,655	7,107,045
Value of production	£ 2,264,342	2,521,409	2,272,052	2,963,486	3,257,922

(a) See notes to previous table.

The confectionery industry expanded rapidly during the war years of 1914-19, largely as a result of the stimulus afforded by the embargo placed on the importation of luxuries during that period. The industry, however, was seriously affected by the business depression but has now regained its former position. Confectionery establishments in Tasmania have been combined with bakeries in order to conceal confidential information. Production in Australia is sufficient to supply local requirements, and an export trade is being developed. Several large British manufacturers of confectionery have established branch works in Australia.

27. *Grain-milling.*—(i) *Details for States, 1938-39.* The following table shows the position of the grain-milling industry in each State in 1938-39 :—

GRAIN-MILLING, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust. (a)	W. Aust.	Tas. (a)	Australia.
Number of factories	54	38	10	39	21	10	172
Number of persons engaged	1,356	1,099	347	458	410	113	3,783
Value of land and buildings £	805,016	595,565	199,506	166,328	255,030	69,515	2,090,960
Value of plant and machinery £	710,207	492,065	148,071	213,648	222,053	27,609	1,813,653
Wages paid	£ 312,778	274,115	82,118	102,205	101,155	23,216	895,587
Value of fuel used	£ 86,720	63,810	16,367	30,712	29,606	3,449	230,664
Value of materials used	£ 4,297,338	3,405,217	737,680	968,059	947,640	216,609	10,572,543
Total value of output	£ 5,281,514	3,972,336	959,108	1,175,188	1,239,125	267,248	12,894,519
Value of production	£ 897,456	503,309	205,061	176,417	261,879	47,190	2,091,312

(a) The manufacture of cornflour, oatmeal, etc., was also carried on in some of these establishments.

(ii) *Production of Flour and By-products, 1934-35 to 1938-39.* The production of flour by the mills in each State for the years indicated was as follows :—

GRAIN-MILLING : PRODUCTION OF FLOUR.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)	Tons.(a)
1934-35	555,173	437,262	86,246	136,716	124,130	19,260	1,358,787
1935-36	523,281	435,340	86,142	124,021	118,340	20,492	1,307,616
1936-37	464,498	420,364	82,423	119,192	122,723	19,579	1,228,779
1937-38	476,881	424,302	81,242	123,878	125,472	10,155	1,250,930
1938-39	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732

(a) Tons of 2,000 lb.

The production of flour in Australia for the last year, 1,372,732 tons, was valued at £9,371,906. In addition, 573,477 tons of bran and pollard, valued at £3,104,319, were made. The quantity of wheat ground was 66,999,071 bushels.

28. Sugar-mills.—(i) *Details for 1938-39.* The following table shows the position of the cane-crushing branch of the sugar-making industry in New South Wales and Queensland in 1938-39. Sugar-cane is not grown in the other States. Details regarding the area, yield, etc., of sugar-cane will be found in Chapter XIV. "Agricultural Production."

SUGAR-MILLS, 1938-39.

Items.	N.S.W.	Queensland.	Australia.
Number of factories	3	33	36
Number of persons engaged	212	4,419	4,631
Value of land and buildings £	240,039	1,072,412	1,312,451
Value of plant and machinery £	962,748	7,495,599	8,458,347
Wages paid £	89,470	1,293,146	1,382,616
Value of fuel used £	14,460	130,324	144,784
Value of materials used £	506,762	9,057,175	9,563,937
Total value of output £	756,567	11,462,161	12,218,728
Value of production £	235,345	2,274,662	2,510,007

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. Part of the molasses produced is used for distillation, part is prepared for human consumption, part is turned into food-cake for cattle, part is used for manuring land, and the balance is either burnt as fuel or is allowed to run to waste. The latter, however, is a diminishing quantity.

(ii) *Progress of Industry. (a) New South Wales.* The following table shows the progress which has been made in this industry in New South Wales since 1911 :—

SUGAR-MILLS: NEW SOUTH WALES.

Items.	1911.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	4	3	3	3	3
Number of employees ..	469	198	195	260	212
Cane crushed .. tons	147,799	280,472	275,169	361,724	337,038
Sugar produced .. "	17,299	36,461	38,158	47,077	45,106
Molasses produced gals.	796,440	1,390,180	1,329,660	1,754,527	1,489,090

The concentration of cane-crushing in establishments fitted with modern machinery has caused the closing of the small home mill and thereby reduced the number of mills operating. The Government assistance, referred to in Chapter XIV. "Agricultural Production," has resulted in considerable progress in the cultivation of sugar-cane and increased activity in milling. Particulars regarding cane crushed and sugar produced embodied in these tables refer to the quantities treated during the twelve months ending 30th June in each year, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced differ slightly from those given in Chapter XIV. "Agricultural Production" which relate to harvest years.

(b) *Queensland.* Details for Queensland for 1911 and the last four years are given hereunder :—

SUGAR-MILLS : QUEENSLAND, 1911 TO 1938-39.

Items.	1911.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	49	33	33	33	36
Number of persons engaged	4,295	4,176	4,381	4,324	4,631
Cane crushed .. tons	1,534,451	4,220,435	5,170,571	5,132,886	5,432,193
Sugar produced .. "	173,296	610,080	744,676	763,242	775,064
Molasses—					
Sold to distillers					
and others .. gals.	2,393,669	4,792,950	6,086,864	7,071,109	8,275,887
Used as fodder .. "	789,564	3,817,755	4,351,822	3,914,113	4,237,196
Used as manure .. "	223,000	2,559,528	3,211,423	3,363,624	3,293,543
Run to waste .. "		1,214,678	560,326	466,481	498,926
Burnt as fuel .. "		4,103,475	6,354,841	5,576,764	3,748,590
Sold or used for other purposes .. "			397,080	157,496	232,049
In stock .. "	1,197,626				
Total molasses .. "	6,451,192	16,488,386	20,962,356	20,549,587	20,286,191

29. *Sugar Refineries.*—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 1938-39 there were two sugar refineries in each of the States of Victoria and Queensland, and one in each of the States of New South Wales, South Australia and Western Australia. The quantity of raw sugar treated amounted to 349,054 tons, for a yield of 338,768 tons of refined sugar, valued at £10,918,210.

30. *Breweries.*—(i) *Details for each State, 1938-39.* The following table gives particulars concerning breweries in each State :—

BREWERIES, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	6	9	6	5	6	4	36
Number of persons engaged ..	1,009	1,516	422	229	443	90	3,709
Value of land and buildings £	949,648	789,404	430,337	202,383	292,832	136,543	2,801,147
Value of plant and machinery £	782,142	932,992	369,668	120,879	390,465	140,896	2,737,042
Wages paid ..	£ 310,682	517,005	126,226	85,204	154,603	25,103	1,218,823
Value of fuel used ..	£ 85,850	83,086	29,905	19,853	27,144	6,423	252,261
Value of materials used ..	£ 1,040,086	1,397,043	329,376	232,394	321,396	97,928	3,418,223
Total value of output ..	£ 3,492,243	2,966,119	876,534	571,720	908,230	232,239	9,047,085
Value of production ..	£ 2,366,307	1,485,990	517,253	319,473	559,690	127,888	5,376,601

(a) Includes Malt Works.

(ii) *Total for Australia, 1934-35 to 1938-39.* The next table shows the extent of this industry for the last five years :—

BREWERIES(a) : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	41	37	37	37	36
Number of persons engaged ..	3,097	3,228	3,389	3,542	3,709
Value of land and buildings ..	£ 2,411,446	2,426,415	2,537,922	2,678,983	2,801,147
Value of plant and machinery ..	£ 2,476,600	2,440,700	2,454,576	2,642,636	2,737,042
Wages paid ..	£ 952,127	1,018,985	1,072,063	1,151,585	1,218,823
Value of fuel used ..	£ 194,863	202,367	214,272	235,937	252,261
Value of materials used ..	£ 2,262,174	2,552,497	2,642,395	3,322,085	3,418,223
Total value of output ..	£ 6,439,227	7,121,946	7,456,136	8,526,470	9,047,085
Value of production ..	£ 3,882,100	4,367,082	4,599,469	5,058,448	5,376,601

(a) Includes Malt Works in Tasmania.

The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter the production increased each year to 89,231,904 gallons in 1938-39. For a number of years prior to the depression the consumption of ale, stout and beer exceeded 11 gallons per head of the population; it dropped to 7.32 gallons in 1931-32, but has since risen to 12.13 gallons.

(iii) *Materials Used and Production.* The table below shows the quantities of raw material used and the quantity and value of ale, stout and beer brewed in each State during the year 1938-39.

BREWERIES: MATERIALS USED AND PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
RAW MATERIAL USED.							
Malt .. bushels	1,059,628	1,014,010	256,199	227,928	(b)	(b)	(c) 2,940,945
Hops .. lb.	931,922	846,801	208,747	213,532	(b)	(b)	(c) 2,351,003
Sugar .. cwt.	138,440	124,920	27,520	28,080	(b)	(b)	(c) 334,660
RAW MATERIAL USED PER 1,000 GALLONS OF ALE, STOUT AND BEER PRODUCED.							
Malt .. bushels	31.23	32.24	33.82	31.49	(b)	(b)	(c) 32.96
Hops .. lb.	27.49	26.92	27.56	29.50	(b)	(b)	(c) 26.35
Sugar .. cwt.	4.08	3.97	3.63	3.89	(b)	(b)	(c) 3.75

ALE, STOUT AND BEER BREWED.

Quantity gallons	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
Quantity gallons	33,899,023	31,450,824	7,575,195	7,237,342	(b)	(b)	89,231,904
Value (a) £	3,465,199	2,930,616	875,161	567,217	(b)	(b)	(c) 8,927,220

(a) Exclusive of Excise duty.

(b) Particulars not available for publication.

(c) Includes States marked (b).

31. *Distilleries.*—Distilleries are located in all the States except Western Australia and Tasmania. The following information, which has been extracted from returns furnished by the Excise Branch of the Department of Trade and Customs, shows the materials used in distilleries in Australia and the quantity of spirits distilled therefrom for the year 1938-39:—Materials used: barley, 80,548 bushels; barley malt, 89,528 bushels; molasses, 1,405,271 cwt.; wine, 11,364,208 gallons; raisins and currants, 19,521 cwt.; grapes, 170,818 cwt. The quantity of spirits distilled from barley, malt and grain was 441,883 gallons; from molasses, 7,025,416 gallons; and from wine, 2,249,265 gallons; total, 9,716,564 gallons. The quantity of spirits denatured during the year was 4,553,152 gallons.

32. *Tobacco, etc., Factories.*—(i) *Details for each State, 1938-39.* During the year 1938-39 there were thirty establishments in which the manufacture of tobacco, cigars, or cigarettes was carried on. There were no tobacco factories in Tasmania.

TOBACCO, CIGAR AND CIGARETTE FACTORIES, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia.
Number of factories	8	14	6	1	1	30
Number of persons engaged ..	3,108	2,229	46	11	150	5,544
Value of land and buildings ..	£ 645,706	352,702	(a)	(a)	(a)	(b) 1,041,798
Value of plant and machinery ..	£ 625,774	295,576	(a)	(a)	(a)	(b) 942,644
Wages paid	£ 623,799	443,210	(a)	(a)	(a)	(b) 1,095,912
Value of fuel used	£ 23,846	9,937	(a)	(a)	(a)	(b) 34,483
Value of materials used	£ 4,806,898	2,203,221	(a)	(a)	(a)	(b) 7,080,574
Total value of output	£ 6,039,442	3,644,549	(a)	(a)	(a)	(b) 9,800,413
Value of production	£ 1,208,698	1,431,391	(a)	(a)	(a)	(b) 2,685,356

(a) Not available for publication.

(b) Including Queensland, South Australia and Western Australia.

(ii) *Total for Australia.* This industry was among the first to be established in Australia. In 1861 New South Wales had 11 factories, producing 177,744 lb. of manufactured tobacco; in the same year there was one factory in Victoria, but the quantity of tobacco manufactured is not available. The Australian market has for many years been largely supplied with local manufactures from the imported leaf. Imports during 1938-39 comprised—manufactured tobacco 631,770 lb., cigars 9,474 lb., and cigarettes 118,065 lb., while the quantities manufactured in Australian factories were respectively 16,305,310 lb., 237,543 lb., and 6,730,904 lb. The following tables show the extent of the industry in Australia for the last five years:—

TOBACCO, CIGAR AND CIGARETTE FACTORIES : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories	29	31	32	32	30
Number of employees	4,818	5,155	5,447	5,644	5,544
Approx. value of land and buildings	£ 927,122	930,521	1,001,236	1,030,344	1,041,298
Approx. value of plant and machinery	£ 784,371	726,743	870,430	932,827	942,644
Wages paid	£ 891,064	950,790	996,665	1,074,196	1,095,912
Value of fuel used	£ 18,661	20,553	29,938	34,344	34,483
Value of materials used	£ 5,373,582	6,082,506	6,345,214	6,861,305	7,080,574
Total value of output	£ 7,216,139	8,529,491	8,714,581	9,510,121	9,800,413
Value of production	£ 1,823,896	2,426,432	2,339,429	2,614,472	2,685,356

LEAF USED AND PRODUCTION.

Leaf used {	Australian (Stemmed)	1,000 lb.	3,352	3,653	4,249	4,231	4,489
Tobacco made	Imported (..)	..	13,768	14,662	15,049	15,993	16,011
Cigars made .. .. .	.. .. .	..	14,527	15,277	15,733	16,259	16,305
Cigarettes made .. .. .	.. .. .	..	253	283	262	256	238
			4,813	5,305	5,659	6,325	6,731

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 material. Increased 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; in 1932-33 the quantity of local leaf used fell to 2.7 million lb., but it has since risen to 4.5 million lb. In this connexion, see Chapter XIV. "Agricultural Production," p. 407.

33. *Sawmills, etc.—(i) Details for States, 1938-39.* The most important industry in Class X. is that of sawmilling. As separate particulars of forest sawmills are not available for some of the States, both forest and other sawmills, as well as plywood and bark mills have been combined in the following table:—

SAWMILLS, FOREST AND OTHER ; PLYWOOD AND BARK MILLS, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	448	330	464	55	144	219	1,660
Number of persons engaged	5,279	3,700	5,410	1,009	2,243	1,463	19,104
Value of land and buildings	£ 763,205	417,473	405,007	186,062	207,178	75,686	2,054,611
Value of plant and machinery	£ 680,705	606,566	707,156	138,848	437,311	215,130	2,785,716
Wages paid	£ 1,028,504	746,566	956,429	194,828	478,765	229,535	3,034,627
Value of fuel used	£ 57,339	52,738	53,101	10,314	38,211	14,079	225,782
Value of materials used	£ 2,976,161	1,580,575	2,165,825	687,115	767,731	345,488	8,522,805
Total value of output	£ 4,730,293	2,798,903	3,762,462	1,012,113	1,506,690	727,037	14,537,888
Value of production	£ 1,696,793	1,165,680	1,543,536	314,984	700,748	367,470	5,789,211

(ii) *Total for Australia, 1934-35 to 1938-39.* The development of forest and other sawmills, etc., since 1934-35 is shown in the following table :—

SAWMILLS, FOREST AND OTHER ; PLYWOOD AND BARK MILLS : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments	1,495	1,443	1,591	1,659	1,660
Number of persons engaged	15,333	17,207	18,284	19,565	19,104
Value of land and buildings	£ 2,010,001	£ 1,974,918	£ 2,015,040	£ 2,025,857	£ 2,054,611
Value of plant and machinery	£ 2,595,995	£ 2,702,063	£ 2,671,982	£ 2,807,747	£ 2,785,716
Wages paid	£ 2,319,745	£ 2,927,960	£ 3,188,000	£ 3,601,453	£ 3,634,627
Value of fuel used	£ 139,372	£ 170,705	£ 184,038	£ 225,537	£ 225,782
Value of materials used	£ 5,604,845	£ 6,663,907	£ 7,942,375	£ 8,975,242	£ 8,522,895
Total value of output	£ 9,814,197	£ 11,515,591	£ 13,379,054	£ 15,092,088	£ 14,537,888
Value of production	£ 4,069,780	£ 4,680,979	£ 5,252,641	£ 5,891,309	£ 5,789,211

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 height of the depression, had recovered to 717 million super. feet in 1938-39. Further reference is made to the sawmilling industry in Chapter XVI. "Forestry."

34. **Furniture, Cabinet-making and Upholstery.**—These industries constitute the principal manufactures in Class XI. The following table gives particulars for each State :—

FURNITURE, CABINET-MAKING AND UPHOLSTERY FACTORIES, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	258	312	113	71	88	38	880
Number of persons engaged	4,465	3,477	1,576	1,038	690	330	11,576
Value of land and buildings	£ 741,090	£ 653,350	£ 230,597	£ 119,613	£ 117,426	£ 34,555	£ 1,896,631
Value of plant and machinery	£ 228,412	£ 145,608	£ 71,897	£ 78,279	£ 34,928	£ 14,852	£ 573,976
Wages paid	£ 918,314	£ 578,259	£ 307,744	£ 164,011	£ 120,201	£ 50,589	£ 2,139,118
Value of fuel used	£ 25,608	£ 18,595	£ 8,521	£ 6,727	£ 3,403	£ 1,410	£ 64,264
Value of materials used	£ 1,466,632	£ 952,622	£ 462,241	£ 263,638	£ 184,169	£ 50,196	£ 3,379,498
Total value of output	£ 2,852,487	£ 1,885,209	£ 920,865	£ 520,580	£ 362,375	£ 125,345	£ 6,666,861
Value of production	£ 1,360,247	£ 913,992	£ 450,103	£ 250,215	£ 174,803	£ 73,739	£ 3,223,099

35. **Printing and Bookbinding Works.**—Printing and bookbinding works rank high in importance among the industries of Australia, and in 1938-39 afforded employment for about 28,460 employees, and paid more than £6,100,000 in salaries and wages, while the value of output amounted to £17,385,000. The following table gives particulars of establishments engaged in general printing and bookbinding in each State for the year 1938-39. Government printing works are included, but establishments producing newspapers and periodicals are shown separately in the succeeding table :—

GENERAL PRINTING AND BOOKBINDING ESTABLISHMENTS, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	335	426	98	64	85	20	1,028
Number of persons engaged	7,373	6,705	1,739	1,133	903	466	18,369
Value of land and buildings	£ 1,434,898	£ 1,619,505	£ 376,481	£ 216,155	£ 226,707	£ 81,802	£ 3,955,548
Value of plant and machinery	£ 1,323,404	£ 1,157,738	£ 217,923	£ 231,903	£ 175,772	£ 79,122	£ 3,185,922
Wages paid	£ 1,402,339	£ 1,249,477	£ 309,362	£ 217,725	£ 163,933	£ 92,239	£ 3,435,075
Value of fuel used	£ 42,279	£ 40,330	£ 10,516	£ 9,359	£ 5,070	£ 2,280	£ 109,834
Value of materials used	£ 1,589,129	£ 1,410,663	£ 280,862	£ 186,597	£ 172,238	£ 63,076	£ 3,702,565
Total value of output	£ 3,985,493	£ 3,530,140	£ 810,924	£ 530,008	£ 478,261	£ 226,977	£ 9,561,803
Value of production	£ 2,354,085	£ 2,079,147	£ 519,546	£ 334,052	£ 300,953	£ 161,621	£ 5,749,404

ESTABLISHMENTS PRODUCING NEWSPAPERS AND PERIODICALS, 1938-39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	213	116	62	38	36	7	472
Number of persons engaged ..	4,456	2,548	1,494	691	580	322	10,091
Value of land and buildings £	1,737,952	792,094	547,653	353,887	284,931	38,756	3,755,273
Value of plant and machinery £	1,397,544	690,589	427,881	252,927	157,208	44,212	2,970,361
Wages paid ..	1,189,832	706,554	350,960	168,558	171,349	79,962	2,667,245
Value of fuel used ..	56,892	31,917	19,849	6,678	13,016	2,492	130,844
Value of materials used ..	1,451,757	948,212	321,376	221,680	150,398	37,741	3,131,164
Total value of output ..	3,618,393	2,083,268	940,241	496,178	457,628	227,408	7,823,116
Value of production ..	2,109,744	1,103,139	599,016	267,820	294,214	187,175	4,561,108

36. Tyres, Motor and Cycle.—(i) *Details for each State, 1938-39.* During the last decade, the number of motor car and cycle users has shown a considerable advance and this necessarily has had a stimulating effect on the industry engaged in the manufacture of motor and cycle tyres. Particulars for each State during 1938-39 are shown hereunder :—

TYRES, MOTOR AND CYCLE, 1938-39.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	86	88	31	24	22	11	262
Number of persons engaged ..	2,935	2,355	160	144	73	56	5,723
Value of land and buildings £	741,152	521,280	66,301	56,760	33,487	22,151	1,441,131
Value of plant and machinery £	471,643	651,560	19,580	15,551	8,891	6,778	1,174,012
Wages paid ..	656,148	502,409	23,917	18,976	9,340	6,107	1,196,897
Value of fuel used ..	84,563	118,742	2,994	2,528	1,365	728	210,920
Value of materials used ..	1,713,247	1,825,247	46,534	33,009	18,711	9,051	3,645,799
Total value of output ..	2,614,506	3,329,652	99,744	74,621	46,171	21,994	6,186,688
Value of production ..	816,696	1,385,663	50,216	39,084	26,095	12,215	2,329,969

(a) Includes Boots and Shoes and Other Rubber Goods.

(ii) *Total for Australia, 1934-35 to 1938-39.* Prior to 1930-31 particulars regarding this industry were included with Rubber Goods but separate details are now available and are shown in the following table for the last five years :—

TYRES, MOTOR AND CYCLE(a) : AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	261	260	261	267	262
Number of persons engaged ..	3,998	4,098	4,907	5,847	5,723
Value of land and buildings ..	£ 1,240,749	1,257,800	1,583,004	1,587,808	1,441,131
Value of plant and machinery ..	£ 895,139	841,815	1,281,468	1,296,315	1,174,012
Wages paid ..	£ 736,865	786,713	980,567	1,187,061	1,196,897
Value of fuel used ..	£ 134,335	136,542	192,624	212,533	210,920
Value of materials used ..	£ 2,173,447	2,269,954	3,751,258	4,533,656	3,645,799
Total value of output ..	£ 3,499,132	3,788,333	5,851,930	6,849,686	6,186,688
Value of production ..	£ 1,191,350	1,331,837	1,908,048	2,103,497	2,329,969

(a) Includes Boots and Shoes and Other Rubber Goods for Tasmania.

37. *Electric Light and Power Works.*—(i) *Details for each State, 1938–39.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. Since 1931–32 the production of electric light and power has increased from 2,507 to 4,688 million British units, or by more than 87 per cent. Particulars for the year 1938–39 are as follows:—

ELECTRIC LIGHT AND POWER WORKS, 1938–39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	106	79	54	42	109	5	395
Number of persons engaged ..	2,072	1,376	540	1,733	681	96	6,498
Value of land and buildings £	4,584,817	1,828,560	513,073	589,183	461,885	410,539	8,388,057
Value of plant and machinery £	11,695,870	6,617,530	1,782,562	2,026,134	2,740,936	2,888,462	27,751,494
Wages paid ..	£ 634,276	388,684	162,412	465,739	199,503	26,683	1,877,297
Value of fuel used ..	£ 1,363,608	625,531	387,054	263,575	599,460	..	3,239,228
Total value of output	£ 5,719,029	2,435,604	993,341	1,395,253	1,247,770	691,938	12,482,935

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on p. 462.

(ii) *Production, 1934–35 to 1938–39.* The increase in the production of electric light and power in each of the States during the five years is clearly shown in the following table:—

ELECTRIC LIGHT AND POWER WORKS: PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	1,000 K.W.H.						
1934–35 ..	1,349,248	900,247	202,030	176,434	171,209	399,887	3,199,055
1935–36 ..	1,464,898	974,722	224,014	200,488	204,373	459,408	3,527,903
1936–37 ..	1,626,833	1,049,768	256,784	215,714	237,185	522,491	3,908,775
1937–38 ..	1,816,814	1,128,216	352,258	240,902	272,512	542,767	4,353,469
1938–39 ..	1,948,490	1,222,505	397,368	256,283	307,002	566,691	4,668,339

38. *Gas-works.*—(i) *Details for each State, 1938–39.* Gas-works are in operation in the majority of important towns in Australia. New South Wales returned seven coke factories and Queensland three, working as separate industries, but under the new classification these are included in Class I.—Treatment of Non-metalliferous Mine and Quarry Products. The subjoined table gives particulars of gas-works in each State for the year 1938–39:—

GAS-WORKS, 1938–39.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	43	39	16	3	4	2	107
Number of persons engaged ..	1,092	828	228	608	120	55	2,931
Value of land and buildings £	741,580	401,847	189,979	25,024	(a)	(a)	61,462,772
Value of plant and machinery £	3,219,493	2,167,864	560,011	1,145,049	(a)	(a)	67,498,428
Wages paid ..	£ 288,911	223,512	63,365	165,236	(a)	(a)	678,516
Value of fuel used ..	£ 207,891	21,965	5,714	1,244	(a)	(a)	250,786
Value of materials used	£ 762,764	723,365	151,024	127,528	(a)	(a)	61,872,448
Total value of output	£ 2,327,850	1,348,989	338,255	535,586	(a)	(a)	64,817,216
Value of production ..	£ 1,357,195	603,659	181,597	406,814	(a)	(a)	62,693,982

(a) Not available for publication.

(b) Includes Western Australia and Tasmania.

(ii) *Coal Used and Production, 1938-39.* The following table gives details for the year 1938-39 :—

GAS-WORKS : COAL USED AND PRODUCTION, 1938-39.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
COAL USED.							
Coal tons	578,127	391,092	92,054	(a)	(a)	(a)	61,176,629
PRODUCTS.							
Gas produced 1,000 cubic ft.	10,896,184	7,129,698	1,457,048	1,181,975	(a)	(a)	621,472,303
Gas sold. 1,000 cubic ft.	9,330,921	6,378,691	1,286,616	947,944	(a)	(a)	618,651,385
Coke produced .. tons	411,986	217,850	59,628	47,124	(a)	(a)	757,046
Coke for sale .. tons	320,022	131,680	36,408	35,712	(a)	(a)	534,105
VALUE.							
Gas sold .. £	1,807,073	1,840,986	503,326	449,190	(a)	(a)	4,878,825
Coke for sale .. £	350,238	182,822	31,670	54,040	(a)	(a)	640,851

(a) Particulars not available for publication.

(b) Includes States marked (a).

The output of gas declined from 20,929,569 thousand cubic feet in 1929-30 to an average of 17,800,000 thousand cubic feet during the three years ended June, 1934, but has since risen to a new high level of 21,472,303 thousand cubic feet in 1938-39.

CHAPTER XIX.

WATER CONSERVATION AND IRRIGATION.

§ 1. Artesian Water.

1. **General.**—In every country subject to droughts, the provision of adequate systems of water conservation is a matter of prime importance. Much has been done in Australia so far as the supply of water to centres of population is concerned, and a description of the principal water-works in each State will be found in Chapter XXII. "Local Government."

Interstate Conferences on the subject of artesian water were held in 1912, 1914, 1921, 1924 and 1928, when combined Governmental action was agreed upon with reference to delimitation of the artesian basins, hydrographic surveys, reason for decrease in flow, analyses and utilization of artesian water, etc. A map showing the extent of the known artesian basins will be found on pp. 515-6.

2. **The Great Australian Artesian Basin.**—The area known as the "Great Australian Artesian Basin," includes (a) considerably more than one-half of Queensland, taking in practically all that State lying west of the Great Dividing Range, with the exception of an area in the north-west contiguous to the Northern Territory; (b) a considerable strip of New South Wales along its northern boundary and west of the Great Dividing Range; and (c) the north-eastern part of South Australia proper, together with the extreme south-eastern corner of the Northern Territory. This basin (shown approximately by the map on pp. 515-6) is said to be the largest yet discovered, and measures about 600,000 square miles, of which 376,000 square miles are in Queensland, 118,000 square miles in South Australia, 80,000 square miles in New South Wales, and 25,000 square miles in the Northern Territory. The area of the intake beds is estimated at 60,010 square miles, comprising 50,000 square miles in Queensland and 10,010 square miles in New South Wales. A description of the basin and its geological formation will be found in previous issues of the Official Year Book (see No. 6, p. 569).

3. **The Western Australian Basins.**—The Western Australian Basins fall naturally within five distinct groups, namely, the Eucla Basin, in the extreme south-east of the State, extending well into South Australia along the shores of the Great Australian Bight; the Coastal Plain Basin, west of the Darling Range; the North-West Basin, between the Murchison and Ashburton Rivers; the Gulf basin, between Cambridge Gulf and Queen's Channel; and the Desert Basin, between the De Grey and Fitzroy Rivers.

The Recent and Tertiary strata which enter Western Australia at its eastern border, and which have a prevailing dip towards the Great Australian Bight, form the Eucla artesian water area. Where boring operations have been undertaken, the water has been found to be salt or brackish, and there are other conditions affecting the supply, such as local variation in the thickness of the beds, their relative porosity, and the unevenness of the floor upon which they rest, which so far, have not been examined with sufficient thoroughness to enable many particulars to be given in regard to this basin.

In the Coastal Plain Basin to the west of the Darling Ranges, artesian boring has, on the other hand, been carried on successfully for many years.

4. **The Murray River Basin.**—The Murray River Basin extends over south-western New South Wales, north-western Victoria, and south-eastern South Australia. It is bounded on the west by the azoic and palæozoic rocks of the Mount Lofty and other

ranges extending northwards from near the mouth of the Murray to the Barrier Range, and on the east and north-east by the ranges of Victoria and New South Wales. This tertiary water-basin is occupied by a succession of sedimentary formations, both porous and impervious. It is of interest to note that the waters of the Murray River are partly supplied by influx from the water-bearing beds of this basin; this is proved by the fact that, at low water, springs are observed at certain places flowing into the river bed from beneath the limestone cliffs from Pyap Bend downwards. Similar springs exist along the courses of other branches of the River Murray system, where they cut through the tertiary formation. On the Victorian side, bores have been put down, and water has been struck at various levels.

5. **Plutonic or Meteoric Waters.**—In previous issues of the Official Year Book will be found a statement of the theory of Professor Gregory* as to the origin of the water in the Australian artesian basins, together with the objections held thereto by a former Government Geologist of New South Wales.† (See Official Year Book No. 6, p. 570.)

6. **Artesian and Sub-Artesian Bores.**—(i) *General.* The following table gives particulars regarding artesian and sub-artesian bores in each State and in the Northern Territory:—

ARTESIAN AND SUB-ARTESIAN BORES, 1938-39.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust. (a)	W. Aust. (e)	N. Terr.	Australia.
Bores existing .. No.	737	620	6,774	162	281	191	(b) 8,765
Total depth of existing bores feet	1,132,322	30,000	4,839,000	115,598	229,391	63,375	66,409,686
Daily flow .. 1,000 gals.	(d) 67,349	2,500	250,000	12,972	(e)	7,723	(b) 349,544
Depth at which artesian water was struck—							
Maximum .. feet	4,338	3,560	6,000	4,851	4,006	1,760	6,000
Minimum .. feet	100	20	10	233	30	42	10
Temperature of flow—							
Maximum .. °Fahr.	140	120	212	208	(e)	(d)	(b) 212
Minimum .. °Fahr.	75	10	78	82	(e)	(d)	(b) 10

(a) Government bores only. (b) Incomplete. (c) Total depth of all bores. (d) Flowing bores only. (e) Not available.

(ii) *Details for States.*—Considerations of space preclude the insertion of separate particulars of operations in the States during the year 1938-39. Details for earlier years will, however, be found in issues of the Official Year Book prior to No. 23, 1930

§ 2. Irrigation.

1. **General.**—Australia's first experiments in irrigation were made with the object of bringing under cultivation areas in which an inadequate rainfall rendered agricultural and even pastoral occupations precarious and intermittent, and, although these original settlements have generally proved fairly successful, most of the States, instead of promoting new settlement in unoccupied regions, are adopting the policy of making existing settlements closer, by repurchasing large estates, sub-dividing them into holdings of suitable sizes for cultivation, and selling the land upon easy terms of payments. It is in connexion with this Closer Settlement policy that the special value of irrigation is recognized. Information regarding the various irrigation schemes in operation was given in some detail in preceding issues of the Official Year Book (see No. 23, pp. 637-61).

* See J. W. Gregory, F.R.S., D.Sc.: "The Dead Heart of Australia," London, John Murray, 1906; and "The Flowing Wells of Central Australia," Geogr. Journal, July and August, 1911.

† E. F. Pittman, A.R.S.M., formerly Government Geologist of New South Wales: "Problems of the Artesian Water Supply of Australia, with special reference to Professor Gregory's Theory." (Clarke Memorial Lecture, delivered before the Royal Society of New South Wales, 31st October, 1907); "The Great Australian Artesian Basin," Sydney, 1914; and "The Composition and Porosity of the Intake Beds of the Great Australian Artesian Basin," Sydney, 1915.

2. Areas Irrigated.—The following table gives the areas irrigated in each State during the years 1928-29 to 1938-39. It should be noted that the area shown for New South Wales refers only to crops irrigated. It does not include pasture land and fallow land which may have been irrigated and consequently the area is not strictly comparable with that shown for those States which include these areas.

IRRIGATION : AREAS IRRIGATED.

Season.	N.S.W. (a)	Victoria.	Queensland.	S. Aust.	W. Aust.	Tasmania.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
1928-29 ..	123,129	471,695	25,344	39,236	4,907	7,054	(b)671,475
1929-30 ..	126,321	566,577	26,282	40,002	4,943	6,693	770,818
1930-31 ..	135,121	463,098	26,947	43,538	5,661	6,488	680,853
1931-32 ..	114,777	418,415	28,414	42,813	6,104	7,768	618,291
1932-33 ..	130,977	474,716	31,409	42,556	6,434	7,605	693,697
1933-34 ..	131,772	435,324	29,363	42,898	7,640	9,194	656,191
1934-35 ..	125,423	494,226	34,138	39,594	8,861	7,786	(c)710,054
1935-36 ..	138,016	495,835	44,283	42,672	11,396	8,987	(c)741,312
1936-37 ..	151,683	518,827	44,509	42,292	13,295	9,987	(c)780,663
1937-38 ..	170,719	590,112	49,154	44,250	14,284	8,428	(c)876,953
1938-39 ..	183,518	515,357	48,953	43,602	14,278	8,599	(c)814,357

(a) Not including pasture and fallow lands. (b) Including 100 acres Northern Territory and 10 acres Australian Capital Territory. (c) Including Australian Capital Territory, 1934-35, 26 acres; 1935-36, 123 acres; 1936-37, 70 acres; 1937-38, 6 acres; 1938-39, 50 acres.

3. Crops on Irrigated Areas.—A classification of the crops grown on irrigated areas in each State during the year 1938-39, will be found in the table hereunder. Lucerne, grasses and green forage accounted for 29 per cent., cereals for 36 per cent., orchards and vineyards for 24 per cent., and root crops, market gardens, etc., for about 11 per cent. of the total area of crops under irrigation in 1938-39. It should be noted that the area in Victoria does not include 256,755 acres of pasture land and fallow land which were irrigated in 1938-39. Likewise 6,334 acres of pasture land are also omitted from the Tasmanian figures for the same year.

IRRIGATION : CROPS ON IRRIGATED AREAS, 1938-39.

Crop.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Cereals ..	114,842	84,379	380	..	..	..	199,601
Lucerne, Grasses and Green Forage ..	29,871	103,090	4,560	(a) 9,837	10,112	107	157,577
Orchards and Vineyards ..	28,902	65,137	7,071	28,662	2,322	637	132,731
Root Crops, Market Gardens and other Crops ..	9,903	5,996	(b) 36,942	5,103	1,844	(c) 1,521	(d) 61,359
Total ..	183,518	258,602	48,953	43,602	14,278	2,265	(d)551,268

(a) Including pasture land. (b) Including Sugar-cane, 35,515 acres; Cotton, 243 acres; and Tobacco, 1,095 acres. (c) Including Hops, 951 acres. (d) Includes 50 acres Australian Capital Territory.



CHAPTER XX.

POPULATION.

§ 1. Enumerations and Estimates.

The nature of the early "musters" of the population and the subsequent Census enumerations which have been conducted in Australia were reviewed in Official Year Book, No. 15, pp. 1083-5. This review was accompanied by a tabular statement showing the dates on which the various enumerations were made, and the numbers counted on such occasions.

§ 2. Accuracy of Estimates of Population.

The results obtained at the Census attain a very high degree of accuracy and may generally be accepted without reservation.

Since the establishment of the Commonwealth Bureau of Census and Statistics attention has been given to the improvement of intercensal estimates. There was little doubt that the principal source of error was in the records of migration, and efforts were directed particularly to the improvement of these records with very gratifying results. The Census of 1911 disclosed an error in the pre-censal estimates of an amount equal to a percentage on the recorded oversea departures from Australia of $14\frac{1}{2}$ per cent. for males and 10 per cent. for females. After the Census of 1921 these adjusting factors were reduced to 1 per cent. for males and $4\frac{1}{2}$ per cent. for females, and from the results of the Census of 30th June, 1933, it would appear that the accuracy of the records of oversea migration is such that in future no adjustment of the recorded figures for Australia as a whole will be necessary.

It is improbable that the same degree of accuracy as has been attained in the record of external migration can be reached in the case of interstate movements. Records are made of interstate movements by sea, by rail, and by air, but to record the movements by road is impracticable.

§ 3. Census Statistics.

1. *Census of 1933.*—The first occasion on which the Census of the several Australian Colonies was taken on the same date was in the year 1881. Under the provisions of the Commonwealth Census and Statistics Act, which provides for the enumeration being dealt with from one centre instead of by each State as formerly, the first Census for the Commonwealth of Australia was taken by the Commonwealth Statistician in 1911, and the second in 1921. In accordance with the provisions of the Census and Statistics Act 1905-1930 the third Commonwealth Census would have been taken in 1931, but owing to the necessity for economy in governmental expenditure it was decided to defer that Census, and the date was subsequently fixed for 30th June, 1933, the Census

for the whole of Australia being taken as for the night between 29th and 30th June, 1933. The numbers recorded in the several States and Territories on 4th April, 1921, and 30th June, 1933, were as follows:—

POPULATION OF STATES IN CENSUS YEARS, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

State or Territory.	4th April, 1921.			30th June, 1933.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales ..	1,071,501	1,028,870	2,100,371	1,318,471	1,282,376	2,600,847
Victoria ..	754,724	776,556	1,531,280	903,244	917,017	1,820,261
Queensland ..	398,069	357,003	755,972	497,217	450,317	947,534
South Australia ..	248,267	246,893	495,160	290,962	289,987	580,949
Western Australia ..	177,278	155,454	332,732	233,937	204,915	438,852
Tasmania ..	107,743	106,037	213,780	115,097	112,502	227,599
Northern Territory ..	2,821	1,046	3,867	3,378	1,472	4,850
Australian Capital Territory ..	1,567	1,005	2,572	4,805	4,142	8,947
Australia ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839

2. Increase since Census of 1881.—(i) *Australia.* The increase of population between the Census of 4th April, 1921, and that of 30th June, 1933, was 1,194,105, of which 604,241 were males and 589,864 were females, as compared with an increase of 980,729, comprising 449,835 males and 530,894 females, for the preceding ten years. The population enumerated at each Census from 1881 to 1933 was as follows:—

POPULATION OF AUSTRALIA AT EACH CENSUS, 1881 to 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Date.	Males.	Females.	Persons.	Masculinity. (a)
3rd April, 1881 ..	1,214,913	1,035,281	2,250,194	117.35
5th April, 1891 ..	1,704,039	1,470,353	3,174,392	115.89
31st March, 1901 ..	1,977,928	1,795,873	3,773,801	110.14
3rd April, 1911 ..	2,313,035	2,141,970	4,455,005	107.99
4th April, 1921 ..	2,762,870	2,672,864	5,435,734	103.36
31st March, 1931 (b) ..	3,316,423	3,197,704	6,514,127	103.71
30th June, 1933 ..	3,367,111	3,262,728	6,629,839	103.20

(a) Number of males to each 100 females.
Census of 30th June, 1933.

(b) These figures have been estimated from the

(ii) *States and Territories.* The postponement till 1933 of the Census which ordinarily would have been taken in 1931 destroyed the continuity of the decennial intercensal period which had obtained in Australia since 1881, and consequently the increase shown in the following table for the period 1921–33 (12½ years) is not directly comparable with

the results shown for the earlier periods. The corresponding increases for the ten-year period (1921-1931) have been estimated from the latest Census data, and have been inserted in the table. The increases in the population of the several States and Territories during the last five intercensal periods have been as follows:—

POPULATION : INTERCENSAL INCREASES.

State or Territory.	1881-1891.	1891-1901.	1901-1911.	1911-1921.	1921-1931 (estimated)	1921-1931 (12½ years)
New South Wales .. {						
.. Per cent.	374,129 49.90	230,892 20.54	293,602 21.67	453,637 27.55	450,930 21.47	500,476 23.83
Victoria .. {						
.. Per cent.	278,274 32.30	61,230 5.37	114,481 9.53	215,729 16.40	266,178 17.38	288,981 18.87
Queensland .. {						
.. Per cent.	180,193 84.39	104,411 26.52	107,684 21.62	150,159 24.79	164,388 21.75	191,562 25.34
South Australia .. {						
.. Per cent.	39,119 14.15	42,813 13.57	50,212 14.01	86,602 21.20	80,024 16.16	85,789 17.33
Western Australia .. {						
.. Per cent.	20,074 67.57	134,342 269.86	97,990 53.22	50,618 17.94	98,679 29.66	106,120 31.89
Tasmania .. {						
.. Per cent.	30,962 26.76	25,808 17.60	18,736 10.86	22,569 11.80	10,674 4.99	13,819 6.46
Northern Territory {						
.. Per cent.	1,447 41.93	(a) - 87 (a) - 1.78	(a) - 1,501 (a) - 31.20	557 16.83	1,104 28.55	983 25.42
Australian Capital Territory .. {						
.. Per cent.	(b) (b)	(b) (b)	(b) (b)	858 50.06	6,416 249.46	6,375 247.86
Australia .. {						
.. Per cent.	924,198 41.07	599,409 18.88	681,204 18.05	980,729 22.01	1,078,393 19.84	1,194,105 21.97

(a) Decrease.

(b) Included in New South Wales.

For Australia as a whole the numerical increase during the period 1921-1931 was greater by 97,664 than that for the period 1911-1921, but the percentage increase declined from 22.01 for 1911-1921 to 19.84 for 1921-1931. During the earlier period the increase corresponds to 2.01 per cent. per annum, and in the latter to 1.83 per cent. per annum.

§ 4. Distribution and Fluctuation of Population.

1. Present Numbers.—The population of Australia on 31st December, 1939, was estimated at 6,997,326 persons, of whom 3,534,813, or 50.52 per cent., were males and 3,462,513, or 49.48 per cent., were females. The increase during the year 1939 was 67,635, equal to 0.98 per cent., males having increased by 30,444, or 0.87 per cent., and females by 37,191, or 1.09 per cent. This increase was largely due to the excess of births over deaths, namely, 53,744, the net gain by migration being only 13,891 persons.

2. Growth and Distribution.—In issues of the Official Year Book up to No. 15, the male and female populations of Australia as a whole are given at quinquennial periods from 1788, but it is considered that the abridged table presented herewith will suffice for general purposes.

ESTIMATED POPULATION, 1800 to 1939.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

As at 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
(a) 1800	3,780	..	..	..	..	..	..	..	3,780
1810	7,585	..	..	..	..	..	..	..	7,585
1820	23,784	..	..	..	..	..	..	..	23,784
1830	33,900	..	..	..	877	(b) 18,108	..	..	54,885
1840	85,560	..	..	8,272	1,434	32,040	..	..	127,306
1850	154,976	..	..	35,902	3,576	44,229	..	..	238,683
1860	197,851	(b) 330,302	(b) 16,817	64,340	9,597	49,653	..	..	668,560
1870	272,121	397,230	69,221	94,894	15,511	53,517	..	..	902,494
1880	404,952	450,558	124,013	147,438	16,985	60,568	..	..	1,204,514
1890	602,704	595,519	223,252	166,040	28,854	76,453	..	..	1,692,831
1900	716,047	601,773	274,684	180,349	110,088	89,763	(c) 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	(b) 1,062	2,757,730
1928	1,266,254	879,478	468,323	289,639	225,072	110,750	3,231	4,670	3,247,417
1929	1,283,241	886,472	473,948	288,597	231,361	112,244	3,496	4,736	3,284,095
1930	1,294,410	892,422	481,559	288,618	232,868	113,505	3,599	4,732	3,311,722
1931	1,302,893	896,429	487,932	289,397	232,397	115,176	3,462	4,891	3,332,577
1932	1,315,003	900,663	492,516	290,254	233,049	116,067	3,353	4,560	3,355,465
1933	1,324,830	905,050	497,468	291,722	234,442	116,801	3,370	4,997	3,378,779
1934	1,335,123	910,373	502,505	292,519	235,239	116,952	3,440	4,928	3,401,079
1935	1,344,339	911,710	508,381	293,650	237,220	117,978	3,482	5,005	3,421,774
1936	1,355,493	915,304	514,174	294,807	238,704	118,833	3,596	5,287	3,446,198
1937	1,368,505	918,665	519,689	295,611	241,297	120,869	3,641	5,542	3,473,819
1938	1,379,962	925,892	525,271	297,549	243,559	122,098	3,825	6,213	3,504,369
1939	1,396,224	932,620	530,372	298,217	243,813	121,965	4,903	6,699	3,534,813
FEMALES.									
(a) 1800	1,437	..	..	..	..	..	..	..	1,437
1810	3,981	..	..	..	..	..	..	..	3,981
1820	9,759	..	..	..	..	..	..	..	9,759
1830	10,688	..	..	..	295	(b) 6,171	..	..	17,154
1840	41,908	..	..	6,358	877	13,959	..	..	63,102
1850	111,924	..	..	27,798	2,310	24,641	..	..	166,673
1860	150,695	(b) 207,932	(b) 11,239	61,242	5,749	40,168	..	..	477,085
1870	225,871	326,695	46,051	89,652	9,624	47,369	..	..	745,262
1880	336,190	408,047	87,027	128,955	12,576	54,222	..	..	1,027,017
1890	510,571	538,209	168,864	152,808	19,648	68,334	..	..	1,458,524
1900	644,258	594,440	219,163	176,901	69,879	83,137	(c) 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	(b) 910	2,659,567
1928	1,216,875	882,268	422,554	282,948	189,549	109,569	1,023	3,567	3,108,353
1929	1,236,452	891,797	428,188	284,376	195,276	111,034	1,284	3,711	3,152,118
1930	1,251,934	900,183	435,177	285,849	198,742	111,792	1,365	3,987	3,189,029
1931	1,263,421	907,141	441,794	287,682	201,289	113,288	1,384	4,030	3,220,029
1932	1,276,728	912,724	446,581	289,039	203,271	114,540	1,433	4,004	3,248,320
1933	1,288,680	919,429	451,563	290,955	205,822	115,219	1,448	4,256	3,277,372
1934	1,301,080	927,117	456,992	291,775	207,371	114,495	1,504	4,264	3,304,598
1935	1,313,327	931,313	462,338	292,793	210,516	115,130	1,609	4,314	3,331,340
1936	1,326,243	936,289	467,960	294,505	212,853	116,495	1,709	4,504	3,360,550
1937	1,342,233	940,822	473,772	295,590	215,814	118,121	1,713	4,706	3,392,771
1938	1,355,733	947,868	478,879	297,560	218,902	119,309	1,820	5,251	3,425,322
1939	1,374,124	954,658	485,555	298,828	222,103	119,611	2,070	5,564	3,462,513

(a) Details as to sex not available for earlier years.

South Wales.

(b) Previously included with New

(c) Previously included with South Australia.

ESTIMATED POPULATION—continued.

As at 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
PERSONS.									
1788	859	..	..	..	..	..	..	..	859
1790	2,056	..	..	..	..	..	..	..	2,056
1800	5,217	..	..	..	..	..	..	..	5,217
1810	11,566	..	..	..	..	..	..	..	11,566
1820	33,543	..	..	..	..	..	..	..	33,543
1830	44,588	..	..	..	1,172	(a)24,279	..	..	70,039
1840	127,468	..	..	14,630	2,311	45,999	..	..	190,408
1850	266,900	..	..	63,700	5,886	68,870	..	..	405,356
1860	348,546	(a)538,234	(a)28,056	125,582	15,346	89,821	..	..	1,145,585
1870	497,992	723,925	115,272	184,546	25,135	100,886	..	..	1,647,756
1880	741,142	858,605	211,040	276,393	29,561	114,790	..	..	2,231,531
1890	1,113,275	1,133,728	302,116	318,947	48,502	144,787	..	..	3,151,355
1900	1,360,305	1,196,213	493,847	357,250	179,967	172,900	(b)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	(a) 1,972	5,411,297
1928	2,483,129	1,761,746	890,877	572,587	414,621	220,319	4,254	8,237	6,355,770
1929	2,519,693	1,778,269	902,136	572,973	426,637	223,278	4,780	8,447	6,436,213
1930	2,546,353	1,792,605	916,736	574,467	431,610	225,297	4,964	8,719	6,500,751
1931	2,566,314	1,803,570	929,726	577,079	433,686	228,464	4,846	8,921	6,552,606
1932	2,591,731	1,813,387	939,097	579,293	436,320	230,607	4,786	8,564	6,603,785
1933	2,613,519	1,824,479	949,031	582,677	440,264	232,110	4,818	(c) 9,253	6,656,151
1934	2,636,203	1,837,490	959,497	584,294	442,610	231,447	4,944	(c) 9,192	6,705,677
1935	2,657,666	1,843,023	970,719	586,443	447,745	233,108	5,091	(c) 9,316	6,753,114
1936	2,681,736	1,851,593	982,134	589,312	451,557	235,328	5,305	(c) 9,787	6,806,752
1937	2,710,738	1,859,487	993,461	591,201	457,111	238,990	5,354	(c) 10,248	6,866,590
1938	2,735,695	1,873,760	1,004,150	595,109	462,461	241,407	5,645	11,464	6,929,691
1939	2,770,348	1,887,278	1,015,927	597,045	465,916	241,576	6,973	12,263	6,997,326

(a) Previously included with New South Wales.

(b) Previously included with South Australia.

(c) See letterpress below.

Estimates of population for intercensal years are obtained by applying the vital and migration statistics for those years to the numbers recorded at the Census. Figures for interstate migration are liable to error owing to the impracticability of tracing movements of motor traffic. The estimates of population of the Australian Capital Territory are particularly affected by this difficulty, and a supplementary Census for the Territory taken on 30th June, 1938, revealed considerable understatement in the intercensal estimates of population during the preceding five years. The discrepancy is believed to be due to the unrecorded movements by road, and the following are revised estimates of population at 31st December, based on corrected net migration figures for the years affected—1933, 9,341; 1934, 9,457; 1935, 9,761; 1936, 10,406; and 1937, 11,043. As the corresponding State population estimates are affected by relatively small amounts only, it has been considered desirable to postpone the adjustments involved until the completion of the next Commonwealth Census, when they will be incorporated in the general revision of intercensal population estimates and migration records.

The results of the 1938 Census of the Australian Capital Territory will be found in § 14 of this chapter.

A comparison of annual rates of growth of population of Australia and other countries will be found in § 5 par. 4 of this chapter.

The growth of the population of Australia and of each State thereof is illustrated by the graph accompanying this chapter on page 549.

3. Mean Population.—(i) *Calendar Years.* The following table shows the mean population for each State and Territory for the calendar years 1929 to 1939 :—

MEAN POPULATION : CALENDAR YEARS, 1929 to 1939.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Year ended 31st December.	N.S.W.	Victoria	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
1929 ..	2,503,026	1,770,133	897,569	572,457	420,756	217,752	4,467	8,541	6,394,701
1930 ..	2,532,289	1,786,217	910,319	573,242	429,079	220,933	4,979	8,961	6,466,019
1931 ..	2,555,871	1,799,241	924,825	575,717	432,347	224,811	4,959	8,801	6,526,572
1932 ..	2,579,741	1,808,618	935,575	578,010	435,041	227,084	4,917	8,925	6,577,911
1933 ..	2,601,782	1,820,568	945,454	581,019	438,688	228,434	4,860	(a)9,056	6,629,861
1934 ..	2,623,560	1,830,898	955,584	583,343	441,611	229,161	4,933	(a)9,259	6,678,349
1935 ..	2,645,575	1,839,361	966,198	585,015	445,384	229,616	5,101	(a)9,382	6,725,632
1936 ..	2,667,839	1,847,665	978,589	587,549	450,036	231,046	5,255	(a)9,765	6,777,744
1937 ..	2,694,679	1,856,033	989,668	589,143	454,295	233,951	5,411	(a)10,195	6,833,375
1938 ..	2,721,196	1,867,818	1,000,749	592,579	459,977	235,678	5,726	11,124	6,894,847
1939 ..	2,749,134	1,881,942	1,013,327	596,137	465,042	238,001	6,273	11,990	6,961,846

(a) See letterpress following previous table. The following are revised estimates :—1933, 9,078; 1934, 9,435; 1935, 9,735; 1936, 10,295; 1937, 10,902.

(ii) *Financial Years.* The mean population for financial years is now widely used in connexion with rates for those statistics which are tabulated over a financial year period. The following table shows the mean population for each State and Territory for the years ended 30th June, 1930 to 1940 :—

MEAN POPULATION : FINANCIAL YEARS, 1930 to 1940.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Year ended 30th June.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
1930 ..	2,518,553	1,778,761	903,703	572,577	425,785	219,269	4,762	8,836	6,432,246
1931 ..	2,544,691	1,792,802	917,830	574,383	431,022	222,820	5,011	8,877	6,497,436
1932 ..	2,567,639	1,804,014	930,456	576,893	433,596	226,045	4,932	8,961	6,552,536
1933 ..	2,590,840	1,814,797	940,628	579,422	436,798	227,927	4,867	8,740	6,604,019
1934 ..	2,613,063	1,824,943	950,351	582,394	440,303	229,041	4,883	(a)9,294	6,654,332
1935 ..	2,634,353	1,836,438	960,859	584,162	443,160	229,148	5,020	(a)9,276	6,702,416
1936 ..	2,656,512	1,843,079	972,190	586,197	447,855	230,374	5,164	(a)9,525	6,750,896
1937 ..	2,680,730	1,852,071	984,117	588,300	451,800	232,208	5,320	(a)10,000	6,804,636
1938 ..	2,708,833	1,861,074	995,333	590,722	457,210	235,048	5,540	(a)10,488	6,864,218
1939 ..	2,733,936	1,874,907	1,006,831	594,402	462,671	236,926	5,847	11,708	6,927,288
1940 ..	2,766,040	1,890,519	1,018,008	597,069	466,415	238,626	7,030	12,456	6,996,163

(a) See footnote (c) to table on p. 521. The following are revised estimates :—1933-34, 9,382; 1934-35, 9,540; 1935-36, 9,967; 1936-37, 10,619; 1937-38, 11,180.

4. Proportion of Area and Population, Masculinity and Density : States, 1939.—A previous table showed the estimated number of persons on 31st December, 1939, in each of the States and Territories. In the following table the percentages of the total

area and of the total population represented by each State or Territory are given, together with the masculinity and the density of population :—

MASCULINITY AND DENSITY OF POPULATION, 1939.

State or Territory.	Percentage of Total Area.	Percentage of Estimated Population, 31st December, 1939.			Masculinity (a)	Density (b)
		Males.	Females.	Persons.		
	%	%	%	%	%	%
New South Wales ..	10.40	39.50	39.69	39.59	101.61	8.95
Victoria ..	2.96	26.38	27.57	26.97	97.69	21.47
Queensland ..	22.54	15.00	14.02	14.52	109.23	1.52
South Australia ..	12.78	8.44	8.63	8.53	99.80	1.57
Western Australia ..	32.81	6.90	6.42	6.66	109.77	0.48
Tasmania ..	0.88	3.45	3.45	3.45	101.97	9.22
Northern Territory ..	17.60	0.14	0.06	0.10	236.86	0.01
Australian Capital Territory	0.03	0.19	0.16	0.18	120.40	13.06
Australia ..	100.00	100.00	100.00	100.00	102.09	2.35

(a) Number of males to each 100 females.

(b) Number of persons per square mile.

Additional information regarding masculinity and density of population appears in later sections of this chapter.

5. **Urban and Rural Distribution.**—At the Census of 30th June, 1933, information was obtained regarding the distribution of the population amongst urban and rural areas. The metropolitan division of each State includes the capital city and the adjoining urban municipal areas; the urban provincial districts in all States excepting Tasmania were taken for Census purposes as being those cities and towns which are not adjacent to the metropolitan areas, and which are incorporated for local government purposes; the rural area comprises the remainder of the State whether incorporated or not incorporated; while those persons classed as migratory were on board ships in Australian ports or were travelling on long-distance trains throughout Census night.

The results obtained at the Census for each State and Territory are shown in the following table :—

URBAN AND RURAL POPULATION : CENSUS, 30th JUNE, 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Division.	Males.	Females.	Persons.	Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
				Census, 1921.	Census, 1933.	
NEW SOUTH WALES.						
Urban—				%	%	%
Metropolitan	591,104	644,163	1,235,267	42.80	47.50	37.40
Provincial ..	283,439	282,001	565,440	25.00	21.74	7.70
Rural ..	439,486	355,615	795,101	31.64	30.57	19.64
Migratory ..	4,442	597	5,039	0.56	0.19	—56.99
Total ..	1,318,471	1,282,376	2,600,847	100.00	100.00	23.83

NOTE.—Minus sign (—) denotes decrease.

URBAN AND RURAL POPULATION, ETC.—*continued.*

Division.	Males.	Females.	Persons.	Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
				Census, 1921.	Census, 1933.	

VICTORIA.

Urban—				%	%	%
Metropolitan	464,775	527,159	991,934	50.05	54.49	29.42
Provincial ..	94,790	103,401	198,191	12.24	10.89	5.71
Rural ..	342,233	286,325	628,558	37.33	34.53	9.97
Migratory ..	1,446	132	1,578	0.38	0.09	-72.55
Total ..	903,244	917,017	1,820,261	100.00	100.00	18.87

QUEENSLAND.

Urban—						
Metropolitan	143,525	156,223	299,748	27.77	31.63	42.77
Provincial ..	97,853	101,291	199,144	24.30	21.02	8.40
Rural ..	252,357	192,232	444,589	47.49	46.92	23.84
Migratory ..	3,482	571	4,053	0.44	0.43	23.12
Total ..	497,217	450,317	947,534	100.00	100.00	25.34

SOUTH AUSTRALIA.

Urban—						
Metropolitan	147,936	164,683	312,619	51.57	53.81	22.42
Provincial ..	25,290	26,166	51,456	8.41	8.86	23.58
Rural ..	115,909	98,853	214,762	39.39	36.97	10.10
Migratory ..	1,827	285	2,112	0.63	0.36	-31.74
Total ..	290,962	289,987	580,949	100.00	100.00	17.33

WESTERN AUSTRALIA.

Urban—						
Metropolitan	99,288	108,152	207,440	46.55	47.27	33.94
Provincial ..	23,060	21,745	44,805	12.79	10.21	5.25
Rural ..	108,732	74,677	183,409	39.10	41.79	40.98
Migratory ..	2,857	341	3,198	1.56	0.73	-38.38
Total ..	233,937	204,915	438,852	100.00	100.00	31.89

NOTE.—Minus sign (—) denotes decrease.

URBAN AND RURAL POPULATION, ETC.—*continued.*

Division.	Males.	Females.	Persons.	Percentage of Total Population of State.		Percentage Increase since the 1921 Census.
				Census, 1921.	Census, 1933.	
TASMANIA.						
Urban—						
Metropolitan	28,351	32,055	60,406	24.49	26.54	15.30
Provincial ..	26,971	29,806	56,777	26.03	24.95	2.04
Rural ..	59,138	50,629	109,767	49.17	48.23	4.42
Migratory ..	637	12	649	0.31	0.28	-0.46
Total ..	115,097	112,502	227,599	100.00	100.00	6.46
NORTHERN TERRITORY.						
Urban—						
Provincial ..	912	654	1,566	36.18	32.29	11.94
Rural ..	2,391	818	3,209	62.14	66.16	33.54
Migratory ..	75	..	75	1.68	1.55	15.38
Total ..	3,378	1,472	4,850	100.00	100.00	25.42
AUSTRALIAN CAPITAL TERRITORY.						
Urban—						
Provincial ..	3,839	3,486	7,325	..	81.87	..
Rural ..	966	656	1,622	99.65	18.13	..
Migratory ..	..	..	..	0.35	..	..
Total ..	4,805	4,142	8,947	100.00	100.00	247.86
AUSTRALIA.						
Urban—						
Metropolitan	1,474,979	1,632,435	3,107,414	43.01	46.87	32.90
Provincial ..	556,154	568,550	1,124,704	19.09	16.97	8.41
Rural ..	1,321,212	1,059,805	2,381,017	37.35	35.91	17.27
Migratory ..	14,766	1,938	16,704	0.55	0.25	-43.88
Total ..	3,367,111	3,262,728	6,629,839	100.00	100.00	21.97

NOTE.—Minus sign (—) denotes decrease.

At 30th June, 1933, the metropolitan divisions contained 46.87 per cent. of the total population of Australia as compared with 43.01 per cent. at the Census of 1921. Victoria had the largest percentage of population residing in the metropolitan area (54.49) but was closely followed in this respect by South Australia (53.81). During the intercensal period, however, the highest rates of increase in metropolitan population were experienced in Queensland and New South Wales.

The percentage of population in the rural divisions of Australia declined from 37.35 per cent. on 4th April, 1921 to 35.91 per cent. on 30th June, 1933. Of the States, Tasmania, with 48.23 per cent., had the largest proportion of population residing in the rural sections of the State and Queensland was next with 46.92 per cent. Since the Census of 1921, however, the greatest percentage increase in rural population occurred in Western Australia (40.98 per cent.), which was more than double the average rate of increase for rural areas in Australia.

A feature of the metropolitan population is its high femininity. In 1921, 52.3 per cent. of the metropolitan population was composed of females, and in 1933 the proportion had risen slightly to 52.5 per cent., the proportion being highest in Victoria and Tasmania at 53.1 per cent.

6. Metropolitan Population : Australia and Other Countries.—In Australia there is an abnormal concentration of population in the capital cities, which are the only ones of outstanding importance in the various States. A comparison with the capitals of the more important countries is given in the following table :—

METROPOLITAN POPULATION : AUSTRALIA AND OTHER COUNTRIES.

State or Country.	Metropolis.	Year.	Metropolitan Population.
New South Wales	Sydney	1939	1,302,890
Victoria	Melbourne	"	1,046,750
Queensland	Brisbane	"	326,000
South Australia	Adelaide	"	322,990
Western Australia	Perth	"	224,800
Tasmania	Hobart	"	65,450
England	London (a)	1938	8,700,000
Scotland	Edinburgh	1939	473,200
Northern Ireland	Belfast	"	444,500
Ire	Dublin	"	482,300
South Africa	Capetown (b)	1936	173,412
New Zealand	Wellington	1939	157,900
Argentine Republic	Buenos Aires	1938	2,345,221
Belgium	Brussels	"	912,774
Czechoslovakia	Prague	1936	962,000
Denmark	Copenhagen	1935	843,168
Egypt	Cairo	1937	1,307,422
France	Paris	1936	2,829,746
Germany	Berlin	1939	4,332,242
Greece	Athens	1938	499,360
Hungary	Budapest	1939	1,115,877
Italy	Rome	"	1,324,775
Japan	Tokyo (c)	"	6,581,100
Netherlands	Amsterdam	1938	793,526
Norway	Oslo	"	275,000
Portugal	Lisbon	1937	670,004
Spain	Madrid	1935	991,436
Sweden	Stockholm	1938	570,771
U.S.A.	New York (d)	1940	7,648,898
U.S.S.R. (Russia)	Moscow	1939	4,137,018

(a) Greater London. (b) European population. (c) Greater Tokyo. (d) Principal City.

NOTE.—The population of Canberra in 1939 was 10,420.

7. Principal Urban Areas.—The following table gives the population of the principal urban incorporated areas in each State and Territory of Australia at the Census of 30th June, 1933 :—

POPULATION OF PRINCIPAL URBAN INCORPORATED AREAS: AUSTRALIA,
30th JUNE, 1933.

City or Town.	Population.	City or Town.	Population.
New South Wales—		Queensland—continued.	
Sydney and Suburbs	1,235,267	Townsville	25,876
Newcastle and Suburbs	104,485	Ipswich	22,498
Broken Hill	26,925	Cafrns	11,993
Goulburn	14,849	Bundaberg	11,466
Cessnock	14,385	Maryborough	11,415
Lithgow	13,444	Mackay	10,665
Lismore	11,762	Gympie	7,749
Wagga Wagga	11,631	Charters Towers	6,978
Wollongong	11,403	Warwick	6,664
Albury	10,543		
Bathurst	10,413	South Australia—	
Tamworth	9,913	Adelaide and Suburbs	312,619
Orange	9,634	Port Pirie	11,677
Fairfield	8,709	Mount Gambler	5,542
Dubbo	8,344	Murray Bridge	3,651
West Maitland	8,191	Port Augusta	3,270
Armidale	6,794	Peterborough	3,059
Katoomba	6,445	Port Lincoln	3,006
Grafton	6,411		
Liverpool	6,315	Western Australia—	
Cabramatta and Canley Vale	6,107	Perth and Suburbs	(a)207,440
Parkes	5,846	Kalgoorlie and Suburbs	17,326
Forbes	5,355	Bunbury	5,140
Glen Innes	5,352	Geraldton	4,984
Inverell	5,305	Northam	4,817
Casino	5,287	Albany	4,076
Cowra	5,056	Collie	3,784
		Tasmania—	
Victoria—		Hobart and Suburbs	60,406
Melbourne and Suburbs	991,934	Launceston and Suburbs	32,833
Geelong and Suburbs	39,223	Devonport	5,151
Ballarat and Suburbs	37,411	Queenstown	3,809
Bendigo and Suburbs	29,131	Burnie	3,390
Warrnambool	8,906	Ulverstone	2,701
Mildura	6,617		
Hamilton	5,786	Northern Territory—	
Shepparton	5,698	Darwin	1,566
Maryborough	5,631		
Wonthaggi	5,593	Australian Capital Territory—	
Horsham	5,273	Canberra	7,325
Castlemaine	5,221		
Queensland—			
Brisbane and Suburbs	299,748		
Rockhampton	29,369		
Toowoomba	26,423		

(a) Includes the City of Fremantle, 25,224.

8. **Provincial Urban Areas.**—In par. 5 above the percentage of the total population of each State which is located in incorporated urban provincial areas is shown. In the following table, however, the aggregate population of all cities and towns, outside the metropolitan area of each State, with 2,000 and 3,000 or more inhabitants is shown, irrespective of whether such centres are incorporated separately or not. In addition the percentage of the aggregate population of these cities and towns to the total population of the State at the Census of 30th June, 1933, is stated.

**AGGREGATE POPULATION OF CITIES AND TOWNS OF SPECIFIED SIZE :
CENSUS, 1933.**

State or Territory.	2,000 and over.			3,000 and over.		
	Number	Population.	Percentage of Population.	Number.	Population.	Percentage of Population.
			%			%
New South Wales ..	106	567,094	21.80	69	474,150	18.23
Victoria ..	51	266,355	14.63	29	212,686	11.68
Queensland ..	33	233,154	24.61	19	199,496	21.05
South Australia ..	9	37,207	6.40	6	30,205	5.19
Western Australia ..	9	42,572	9.70	7	37,697	8.59
Tasmania ..	6	44,512	19.55	4	39,971	17.56
Australian Capital Territory ..	1	7,325	81.87	1	7,325	81.87
Total ..	215	1,198,219	18.07	135	1,001,530	15.16

9. **Principal Cities in the World.**—The following table shows the population of the world's largest cities at the latest available dates :—

POPULATION OF THE WORLD'S LARGEST CITIES.
(Cities in the British Empire are printed in Italics.)

Country.	City.	Year.	City Population ('000 omitted).	Country.	City.	Year.	City Population ('000 omitted).
England ..	<i>London (a)</i>	1938	8,700	Australia ..	<i>Melbourne</i>	1939	1,047
U.S.A. ..	New York	1940	7,649	England ..	<i>Birmingham</i>	1938	1,041
Japan ..	Tokyo (b)	1939	6,581	Spain ..	Barcelona	1935	1,037
Germany ..	Berlin	1939	4,332	China ..	Nanking	1936	1,019
U.S.S.R. ..	Moscow	1939	4,137	Japan ..	Kobe	1939	1,006
U.S.A. ..	Chicago	1934	3,491	Canada ..	<i>Montreal</i>	1931	1,000
China ..	Shanghai	1936	3,490	Spain ..	Madrid	1935	991
Japan ..	Osaka	1939	3,394	Czechoslovakia	Prague	1936	962
U.S.S.R. ..	Leningrad	1939	3,191	Italy ..	Naples	1939	929
France ..	Paris	1936	2,830	U.S.A. ..	Cleveland	1934	923
Arg. Republic	Buenos Aires	1938	2,315	France ..	Marseilles	1936	914
U.S.A. ..	Philadelphia	1934	2,004	Belgium ..	Brussels	1938	913
Germany ..	Vienna	1939	1,918	Japan ..	Yokohama	1939	866
Brazil ..	Rio de Janeiro	1936	1,711	China ..	Canton	1931	861
Germany ..	Hamburg	1939	1,682	U.S.S.R. ..	Kiev	1939	846
China ..	Peking	1936	1,556	Denmark ..	Copenhagen	1935	843
U.S.A. ..	Detroit	1934	1,487	U.S.A. ..	St. Louis	1934	842
India ..	<i>Calcutta (c)</i>	1931	1,486	U.S.A. ..	Baltimore	1934	834
Italy ..	Rome	1939	1,325	U.S.S.R. ..	Kharkov	1939	833
Egypt ..	Cairo	1937	1,307	Germany ..	Munich	1939	828
Australia ..	<i>Sydney</i>	1939	1,303	England ..	<i>Liverpool</i>	1938	827
China ..	Tientsin	1936	1,292	Canada ..	<i>Toronto</i>	1931	809
U.S.A. ..	Los Angeles	1934	1,283	U.S.S.R. ..	Baku	1939	809
Poland ..	Warsaw	1937	1,266	U.S.A. ..	Boston	1934	798
Japan ..	Nagoya	1939	1,249	Netherlands	Amsterdam	1934	791
Italy ..	Milan	1939	1,224	China ..	Hankow	1931	778
Japan ..	Kyoto	1939	1,177	Chile ..	Santiago	1933	771
India ..	<i>Bombay</i>	1931	1,161	Germany ..	Cologne	1939	768
Scotland ..	<i>Glasgow</i>	1939	1,132	Turkey ..	Istanbul	1935	741
Brazil ..	Sao Paulo	1936	1,120	England ..	<i>Manchester</i>	1938	733
Hungary ..	Budapest	1939	1,116	Germany ..	Leipzig	1939	702
Mexico ..	Mexico City	1933	1,065	Italy ..	Turin	1939	700

(a) Greater London.

(b) Greater Tokyo.

(c) Including Howrah.

POPULATION OF THE WORLD'S LARGEST CITIES—*continued*.
(Cities in the British Empire are printed in Italics.)

Country.	City.	Year.	City Population ('000 omitted).	Country.	City.	Year.	City Population ('000 omitted).
U.S.A.	Pittsburgh	1934	686	U.S.S.R.	Odessa	1930	604
U.S.A.	San Francisco	1934	636	U.S.A.	Milwaukee	19	600
Uruguay	Montevideo	1937	683	U.S.S.R.	Taschkent	1939	585
Egypt	Alexandria	1937	682	France	Lyons	1936	571
Thailand	Bangkok	1937	681	Sweden	Stockholm	1938	571
Portugal	Lisbon	1937	670	Cuba	Havana	1938	569
Poland	Lodz	1937	665	Germany	Frankforton		
Italy	Genoa	1939	662	Main		1939	547
Germany	Essen	1939	660	Germany	Dusseldorf	1939	540
Rumania	Bucharest	1938	648	Germany	Dortmund	1940	537
India	Madras	1931	647	England	Sheffield	1938	520
U.S.S.R.	Gorky	1930	644	U.S.S.R.	Tiflis	1939	519
Hong Kong	Hong Kong	1938	641	China	Tsingtao	1931	515
China	Chuncking	1931	635	Argentina	Rosario		
China	Wenchow	1931	631	Republic (Santa Fe)		1937	511
Germany	Dresden	1939	625	U.S.S.R.	Rostov-on-Don		
Germany	Breslau	1939	612	China	Hanchow	1931	510
Netherlands	Rotterdam	1938	612	U.S.S.R.	Dnieper-petrovsk	1939	501
China	Changsha	1931	607				
U.S.A.	Buffalo	1940	607				

§ 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., 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 are given for each sex and State (see No. 22, p. 899). In the following table particulars for each sex are given in States for each quinquennium from 1901 to 1935 and for the latest ten years. The natural increase for Australia from 1861 to 1939 inclusive was 4,505,881, consisting of 2,088,384 males and 2,417,497 females, and represented 77.00 per cent. of the total increase in population. During the present century the rate of natural increase grew until it reached the maximum rate of 17.44 per thousand of population in 1914, but it steadily declined after that year to 7.07 in 1934. The figure rose to 8.00 per thousand in 1937 as the result of small gains during each of the previous three years but fell slightly in 1939 to 7.72. A graph showing the natural increase to the population of Australia from 1860 onwards appears on p. 550 of this chapter.

POPULATION: NATURAL INCREASE (a), 1901 to 1939.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
1901-05..	51,179	34,332	16,028	12,149	8,283	7,955	-223	(b)	130,303
1906-10..	64,127	38,948	21,415	14,500	10,762	8,703	-264	(b)	158,191
1911-15..	77,070	46,160	27,497	18,673	12,730	9,386	-201	78	191,393
1916-20..	72,030	41,388	26,894	16,413	9,787	8,673	-125	75	175,135
1921-25..	80,860	49,254	28,941	16,721	10,284	8,543	-68	37	194,572
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
1930 ..	14,507	8,548	5,255	2,491	2,479	1,419	-25	61	34,735
1931 ..	12,654	6,442	4,650	1,978	2,052	1,410	-25	64	29,225
1932 ..	11,010	5,078	4,272	1,721	1,817	1,179	-22	60	25,115
1933 ..	10,072	5,133	3,872	2,013	1,608	1,133	-13	42	23,910
1934 ..	8,931	4,245	4,010	1,519	1,427	1,116	-13	42	21,277
1935 ..	3,899	4,338	3,823	1,455	1,672	972	-20	62	21,201
1936 ..	10,051	4,800	4,563	1,548	1,676	1,036	14	55	23,743
1937 ..	9,865	5,319	4,454	1,788	1,918	1,241	-4	78	24,659
1938 ..	9,446	5,610	4,445	1,946	2,029	1,308	2	60	24,846
1939 ..	9,441	4,949	4,616	1,871	1,085	1,247	..	107	24,216

(a) Excess of births over deaths. (b) Part of New South Wales prior to 1911.
NOTE.—Minus sign (-) denotes excess of deaths over births.

POPULATION: NATURAL INCREASE (a)—continued.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
FEMALES.									
1901-05..	59,163	39,831	22,910	12,701	11,468	8,027	28	(b)	154,128
1906-10..	71,297	42,629	26,048	14,754	13,354	8,522	33	(b)	176,637
1911-15..	87,074	50,258	33,463	19,318	16,262	9,604	62	78	216,119
1916-20..	81,799	42,886	32,273	16,825	13,185	8,821	135	72	195,996
1921-25..	89,438	49,685	34,289	17,595	13,839	8,837	127	82	213,892
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
1930 ..	16,386	8,620	6,229	2,642	2,947	1,419	19	71	38,333
1931 ..	13,797	6,857	5,658	2,213	2,816	1,295	27	61	32,724
1932 ..	12,542	5,581	5,282	1,843	2,433	1,290	28	62	29,061
1933 ..	11,801	5,753	4,924	1,983	2,476	1,228	26	51	28,242
1934 ..	10,930	4,935	5,158	1,537	2,298	1,009	41	61	25,969
1935 ..	11,230	5,090	5,014	1,652	2,329	1,131	34	45	26,525
1936 ..	11,766	5,305	5,599	1,899	2,573	1,158	39	59	28,398
1937 ..	12,397	5,799	5,702	1,950	2,626	1,375	40	87	29,976
1938 ..	11,768	5,779	5,346	1,925	2,878	1,311	31	80	29,118
1939 ..	11,747	5,375	6,202	2,008	2,715	1,331	50	106	29,528

PERSONS.									
1901-05..	110,342	74,163	39,538	24,850	19,751	15,982	-195	(b)	284,431
1906-10..	135,424	81,577	47,463	29,254	24,116	17,225	-231	(b)	334,828
1911-15..	164,144	96,418	60,960	37,991	28,992	18,990	-139	156	407,512
1916-20..	153,829	84,274	59,167	33,238	22,972	17,494	10	147	371,131
1921-25..	170,298	98,939	63,230	34,316	24,123	17,380	59	119	408,464
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
1930 ..	30,893	17,168	11,484	5,133	5,426	2,838	-6	132	73,068
1931 ..	26,451	13,299	10,308	4,191	4,868	2,705	2	125	61,949
1932 ..	23,552	10,659	9,554	3,564	4,250	2,469	6	122	54,176
1933 ..	21,873	10,936	8,796	3,996	4,084	2,361	13	93	52,152
1934 ..	19,861	9,180	9,168	3,056	3,725	2,125	28	103	47,246
1935 ..	20,129	9,428	8,837	3,107	4,001	2,103	14	107	47,726
1936 ..	21,817	10,105	10,162	3,447	4,249	2,194	53	114	52,141
1937 ..	22,262	11,118	10,156	3,738	4,544	2,616	36	165	54,635
1938 ..	21,214	11,389	9,791	3,871	4,907	2,619	33	140	53,964
1939 ..	21,188	10,324	10,818	3,879	4,700	2,578	50	207	53,744

RATE OF NATURAL INCREASE (c)—PERSONS.									
1901-05..	15.59	12.31	15.34	13.92	18.07	17.85	-8.8	(b)	14.60
1906-10..	17.25	13.11	16.99	15.44	18.52	18.37	-12.6	(b)	15.93
1911-15..	18.27	13.91	18.61	17.55	18.76	19.63	-7.6	13.71	17.05
1916-20..	15.69	11.65	16.74	14.51	14.56	17.46	0.43	12.23	14.57
1921-25..	15.47	12.32	15.87	13.28	13.69	16.14	3.13	6.84	14.34
1926-30..	12.51	10.10	12.84	10.58	12.63	12.85	-0.22	9.60	11.72
1931-35..	8.60	5.88	9.87	6.17	9.54	10.33	2.54	12.11	7.94
1930 ..	12.20	9.62	12.61	8.96	12.65	12.84	-1.20	14.73	11.30
1931 ..	10.35	7.39	11.14	7.28	11.26	12.03	0.40	14.20	9.49
1932 ..	9.13	5.90	10.21	6.16	9.77	10.88	1.22	13.67	8.23
1933 ..	8.41	6.01	9.30	6.88	9.31	10.33	2.68	d10.24	7.86
1934 ..	7.57	5.01	9.60	5.24	8.44	9.28	5.68	d10.92	7.09
1935 ..	7.61	5.13	9.15	5.31	8.98	9.16	2.75	d10.99	7.09
1936 ..	8.17	5.47	10.39	5.87	9.44	9.50	10.08	d11.07	7.70
1937 ..	8.26	5.99	10.26	6.34	10.00	11.18	6.65	d15.14	7.99
1938 ..	7.80	6.10	9.78	6.53	10.67	11.11	5.76	12.58	7.83
1939 ..	7.71	5.48	10.68	6.50	10.11	10.84	7.97	17.26	7.72

(a) Excess of births over deaths. (b) Part of New South Wales prior to 1911. (c) Excess of births over deaths per 1,000 mean annual population. (d) Revised rates based on mean populations adjusted in accordance with the results of Census of 30th June 1938.

NOTE.—Minus sign (-) denotes excess of deaths over births.

The table above shows the decline which has taken place in the rate of natural increase in all States of the Commonwealth during recent years, the rate for Australia in 1939 being less than half that computed for the peak year 1914, namely, 17.44. During the first five years of the present century the average increment to the population of Australia by this means was about 57,000 persons per annum. The increment rose to a maximum of 82,000 persons per annum in 1921-25, but thereafter fell to 52,650 persons per annum in the quinquennium 1931-35. The average during the last four years was 53,621.

(ii) *Comparison with other Countries.* Notwithstanding its low birth-rate Australia has a higher rate of natural increase than most European Countries, owing to the fact that its death-rate is very low. The following table gives a comparison between the average rates of natural increase in 1938 for the several States of Australia and for the Dominion of New Zealand, with those of some of the principal countries for which such information is available. Corresponding annual rates for the period 1909-1913 have also been appended. Comparisons with the earlier period show, with one or two exceptions, that the fall in the rate of natural increase has been general throughout most countries of the world.

NATURAL INCREASE OF POPULATION: VARIOUS COUNTRIES.

INCREASE PER ANNUM OF MEAN POPULATION.

State or Country.	1909-13.	1938.	Country.	1909-13.	1938.
Australasia—			Europe—continued.		
Tasmania ..	18.8	11.1	Eire	6.3	5.6
Western Australia	18.1	10.7	Scotland	10.7	5.2
Queensland ..	17.9	9.8	Switzerland	9.3	3.6
N w Zealand ..	17.1	8.3	England and Wales	10.7	3.5
New South Wales	18.0	7.8	Sweden	10.4	3.4
Australia ..	16.7	7.8	Belgium	7.8	2.6
South Australia ..	16.8	6.5	France	0.8	-0.8
Victoria ..	13.6	6.1			
Europe—			Asia—		
U.S.S.R. (Russia)	15.8	(a) 17.4	Japan	13.1	(c) 13.6
Netherlands ..	15.1	12.1			
Spain	9.3	(b) 10.8	Africa—		
Italy	12.8	9.7	Union of South		
Germany	12.8	8.0	Africa (whites only)	(d)	(c) 15.1
Denmark	13.9	7.8			
Northern Ireland..	6.3	6.4	America—		
Norway	12.4	5.8	Canada	(d)	(c) 9.6
			United States ..	(d)	7.2

(a) 1926-30.

(b) 1931-35.

(c) 1937.

(d) Not available.

NOTE.—Minus sign (-) denotes decrease.

2. *Net 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 variations than is the factor of "natural increase". These variations are due to numerous causes, some of which are referred to in Official Year Book No. 22, pp. 906-7.

* The subject of migration is dealt with at some length later in this chapter.

Particulars of the increase by net migration are given below for quinquennial periods from 1901 to 1935 and annually for the last ten years:—

POPULATION: INCREASE BY NET MIGRATION, 1901 to 1939.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
1901-05..	15,671	-37,971	495	-11,031	28,127	-1,771	- 697	(a)	-7,177
1906-10..	11,157	9,400	12,291	10,590	711	-5,784	- 366	(a)	37,999
1911-15..	38,483	1,568	13,037	-4,263	189	-9,599	1,050	- 90	49,375
1916-20..	23,150	18,205	3,614	7,920	-3,782	- 67	- 551	30	48,519
1921-25..	35,660	37,760	18,834	14,244	15,375	-5,630	17	1,199	117,459
1926-30..	37,524	7,849	11,584	-2,230	19,069	-3,668	876	2,259	73,257
1931-35..	- 1,646	-5,951	6,195	-3,654	-4,215	-1,384	- 24	3	-10,676
1930 ..	- 3,329	-2,598	2,356	-2,470	- 972	- 158	128	- 65	-7,108
1931 ..	- 4,180	-2,435	1,723	-1,199	-2,523	261	- 112	95	-8,370
1932 ..	1,100	- 844	312	- 864	-1,165	- 288	- 87	- 391	-2,227
1933 ..	- 236	- 796	1,080	- 545	- 309	- 309	30	395	- 596
1934 ..	1,353	1,078	1,027	- 722	- 630	-1,055	83	- 111	1,023
1935 ..	317	-3,001	2,053	- 324	318	54	62	15	- 506
1936 ..	1,103	-1,206	1,230	- 391	- 201	- 181	100	227	681
1937 ..	3,147	-1,958	1,061	- 984	675	795	49	177	2,062
1938 ..	2,011	1,617	1,137	- 8	233	- 79	182	611	5,704
1939 ..	6,821	1,779	485	-1,203	-1,731	-1,380	1,078	379	6,228
FEMALES.									
1901-05..	1,566	-21,984	-2,398	-8,448	22,293	- 726	81	(a)	-9,616
1906-10..	9,390	10	7,780	4,403	1,867	-4,023	- 148	(a)	19,279
1911-15..	48,612	25,051	12,054	5,389	10,650	-5,658	271	118	96,487
1916-20..	21,294	985	2,776	3,863	-4,530	-2,211	47	- 34	22,190
1921-25..	24,660	19,443	12,154	7,482	6,706	-5,138	- 244	744	65,807
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
1930 ..	- 904	- 234	760	-1,169	519	- 661	62	205	-1,422
1931 ..	- 2,310	101	959	- 380	- 269	201	- 8	- 18	-1,724
1932 ..	765	2	- 495	- 486	- 451	- 38	21	- 88	- 770
1933 ..	151	952	58	- 67	75	- 549	- 11	201	810
1934 ..	1,470	2,753	271	- 717	- 749	-1,733	15	- 53	1,257
1935 ..	1,017	- 894	332	- 634	816	- 496	71	5	217
1936 ..	1,150	- 329	23	- 187	- 236	207	61	127	816
1937 ..	3,593	-1,266	110	- 865	335	251	- 36	119	2,241
1938 ..	1,732	1,267	- 239	45	210	- 123	76	465	3,433
1939 ..	6,644	1,415	474	- 740	486	-1,029	200	213	7,663

(a) Part of New South Wales prior to 1911.

NOTE.—Minus sign (-) indicates the excess of departures over arrivals.

POPULATION: INCREASE BY NET MIGRATION—*continued.*

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
PERSONS.									
1901-05..	17,237	-59,955	-1,903	-19,479	50,420	-2,497	- 616	(a)	-16,793
1906-10..	20,547	9,410	20,071	14,993	2,578	-9,807	- 514	(a)	57,278
1911-15..	87,095	26,619	25,091	1,126	10,839	-15,257	1,321	28	136,862
1916-20..	44,444	19,190	6,390	11,783	-8,312	-2,278	- 504	- 4	70,709
1921-25..	60,320	57,203	30,988	21,726	22,081	-10,768	- 227	1,943	183,266
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	(b)50	-10,886
1930 ..	- 4,233	-2,832	3,116	-3,639	- 453	- 819	190	140	-8,530
1931 ..	- 6,490	-2,334	2,682	-1,579	-2,792	462	- 120	77	-10,094
1932 ..	1,865	- 842	- 183	-1,350	-1,616	- 326	- 66	-479	-2,997
1933 ..	- 85	156	1,138	- 612	- 140	- 858	19	(b)596	214
1934 ..	2,823	3,831	1,298	-1,439	-1,379	-2,788	98	(b)-164	2,280
1935 ..	1,334	-3,895	2,385	- 958	1,134	- 442	133	(b)20	- 289
1936 ..	2,253	-1,535	1,253	- 578	- 437	26	161	(b)354	1,497
1937 ..	6,740	-3,224	1,171	-1,849	1,010	1,046	13	(b)296	5,203
1938 ..	3,743	2,884	898	37	443	- 202	258	1,076	9,137
1939 ..	13,465	3,194	959	-1,943	-1,245	-2,409	1,278	592	13,891

(a) Part of New South Wales prior to 1911. (b) See footnote (c) to table on p. 521. The following are revised estimates:—1931-35, 492; 1933, 684; 1934, 13; 1935, 197; 1936, 531; 1937, 472.

NOTE.—Minus sign (-) indicates the excess of departures over arrivals.

From 1861 to 1939 the increment to the population arising from net migration amounted to 1,345,860 or 23.00 per cent. of the total increase in population. During the 39 years since 1900 the total increase to the population was made up of 2,652,116 or 82.06 per cent. by natural increase, and 579,871 or 17.94 per cent. by net migration.

There was a loss of population by migration in the first five years of the present century; in the subsequent twenty-five years the increase from migration averaged about 115,000 in each quinquennial period, but during the last nine years the excess of arrivals over departures totalled only 18,842 persons.

Rates of increase by migration from 1901 to 1939 may be found for each State and Territory of Australia in *Demography Bulletin* No. 57.

3. Total Increase.—The total increase of the population is obtained by the combination of the natural increase with the net migration.

The total increase in each decade from 1861 to 1920 was given in Official Year Book No. 22, p. 902. The total increment to the population from the beginning of the year 1861 to the end of the year 1939 was 5,851,741, while that from 1901 to 1939 was 3,231,987. The annual results for the last ten years are shown below, and quinquennial figures from 1901 to 1935 are also included. A graph showing the increase in the population of Australia from 1860 accompanies this chapter on page 550.

POPULATION: TOTAL INCREASE, 1901 to 1939.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Australia.
MALES.									
1901-05..	66,850	-3,639	17,123	1,118	36,410	6,184	- 920	(a)	123,126
1906-10..	75,284	48,348	33,706	25,090	11,473	2,919	- 630	(a)	196,190
1911-15..	115,553	47,728	40,534	14,410	12,919	- 213	849	- 12	231,768
1916-20..	95,180	50,593	30,508	24,333	6,005	9,606	- 676	105	223,654
1921-25..	116,520	87,014	47,775	30,905	25,659	2,913	- 51	1,236	312,031
1926-30..	109,954	51,605	37,229	12,353	30,314	3,333	739	2,434	247,961
1931-35..	49,920	19,335	26,822	5,032	4,361	4,426	- 117	273	110,052
1930 ..	11,178	5,950	7,611	21	1,507	1,261	103	- 4	27,627
1931 ..	8,474	4,007	6,373	779	- 471	1,671	- 137	159	20,855
1932 ..	12,110	4,234	4,584	857	652	891	- 109	- 331	22,888
1933 ..	9,836	4,387	4,952	1,468	1,393	824	17	437	23,314
1934 ..	10,284	5,323	5,037	797	797	61	70	- 69	22,300
1935 ..	9,216	1,337	5,876	1,131	1,990	1,026	42	77	20,695
1936 ..	11,154	3,594	5,793	1,157	1,475	855	114	282	24,424
1937 ..	13,012	3,361	5,515	804	2,593	2,036	45	255	27,621
1938 ..	11,457	7,227	5,582	1,938	2,262	1,229	184	671	30,550
1939 ..	16,262	6,728	5,101	668	254	- 133	1,078	486	30,444
FEMALES.									
1901-05..	60,729	17,847	20,512	4,253	33,761	7,301	109	(a)	144,512
1906-10..	80,687	42,639	33,828	19,157	15,221	4,499	- 115	(a)	195,916
1911-15..	135,686	75,309	45,517	24,707	26,912	3,946	333	196	312,606
1916-20..	103,093	43,871	35,049	20,688	8,655	6,610	182	38	218,186
1921-25..	114,098	69,128	46,443	25,077	20,545	3,699	- 117	826	279,699
1926-30..	114,039	56,949	34,665	15,006	23,769	2,600	404	2,251	249,763
1931-35..	61,393	31,159	27,161	6,944	11,774	3,309	244	327	142,311
1930 ..	15,482	8,386	6,989	1,473	3,466	758	81	276	36,911
1931 ..	11,487	6,958	6,617	1,833	2,547	1,496	19	43	31,000
1932 ..	13,207	5,583	4,787	1,357	1,982	1,252	49	- 26	28,291
1933 ..	11,952	6,705	4,982	1,916	2,551	679	15	252	29,052
1934 ..	12,400	7,688	5,429	820	1,549	- 724	56	8	27,226
1935 ..	12,247	4,196	5,346	1,018	3,145	635	105	50	26,742
1936 ..	12,916	4,976	5,622	1,712	2,337	1,365	100	186	29,214
1937 ..	15,990	4,533	5,812	1,085	2,961	1,626	4	206	32,217
1938 ..	13,500	7,046	5,107	1,970	3,088	1,188	107	545	32,551
1939 ..	18,391	6,790	6,676	1,268	3,201	302	250	313	37,191
PERSONS.									
1901-05..	127,579	14,208	37,635	5,371	70,171	13,485	- 811	(a)	267,638
1906-10..	155,971	90,987	67,534	44,247	26,694	7,418	- 745	(a)	392,106
1911-15..	251,239	123,037	86,051	39,117	39,831	3,733	1,182	184	544,374
1916-20..	198,273	103,464	65,557	45,021	14,660	15,216	- 494	143	441,840
1921-25..	230,618	156,142	94,218	56,042	46,204	6,612	- 168	2,062	591,730
1926-30..	224,013	108,554	71,894	27,419	54,083	5,933	1,143	4,685	497,724
1931-35..	111,313	50,494	53,983	11,976	16,135	7,735	127	(b)600	232,363
1930 ..	26,660	14,336	14,600	1,494	4,973	2,019	184	272	64,538
1931 ..	19,961	10,965	12,990	2,612	2,676	3,167	- 118	202	51,855
1932 ..	25,417	9,817	9,371	2,214	2,634	2,143	- 60	- 357	51,179
1933 ..	21,788	11,092	9,934	3,384	3,944	1,503	32	(b)689	52,366
1934 ..	22,684	13,011	10,466	1,617	2,346	- 663	126	(b)- 61	49,526
1935 ..	21,463	5,533	11,222	2,149	5,135	1,661	147	(b)127	47,437
1936 ..	24,070	8,570	11,415	2,869	3,812	2,220	214	(b)468	53,638
1937 ..	29,002	7,894	11,327	1,880	5,554	3,662	49	(b)461	59,838
1938 ..	24,957	14,273	10,689	3,908	5,350	2,417	291	1,216	63,101
1939 ..	34,653	13,518	11,777	1,936	3,455	169	1,328	799	67,635

(a) Part of New South Wales prior to 1911. (b) See footnote (c) to table on p. 521. The following are revised figures:—1931-35, 1,042; 1933, 777; 1934, 116; 1935, 304; 1936, 645; 1937, 637.

NOTE.—Minus sign (-) denotes decrease.

4. Rates of Increase.—(i) *States.* The annual rates of increase of population of the several States of the Commonwealth in each of the years 1935 to 1939 inclusive were as follows :—

POPULATION : RATES OF INCREASE.

State or Territory.	Annual Rate of Increase of Population.				
	1935.	1936.	1937.	1938.	1939.
	%	%	%	%	%
New South Wales ..	0.81	0.91	1.08	0.92	1.27
Victoria ..	0.30	0.46	0.43	0.77	0.72
Queensland ..	1.17	1.18	1.15	1.08	1.17
South Australia ..	0.37	0.49	0.32	0.66	0.33
Western Australia ..	1.16	0.85	1.23	1.17	0.75
Tasmania ..	0.72	0.95	1.56	1.01	0.07
Northern Territory ..	2.97	4.20	0.92	5.44	23.53
Australian Capital Territory	(a) 3.12	(a) 6.27	(a) 5.84	11.87	6.97
Australia ..	0.71	0.79	0.88	0.92	0.98

(a) Revised rates based on figures adjusted in accordance with results of Census of 30th June, 1938. See footnote (b) to preceding table.

(ii) *Various Countries.* The table hereunder gives approximate rates of increase of the population of Australia and its component States, in comparison with those for other countries :—

POPULATION : RATES OF INCREASE IN VARIOUS COUNTRIES.

State or Country.	Annual Rate of Increase of Population during period—						
	1901 to 1906.	1906 to 1911.	1911 to 1916.	1916 to 1921.	1921 to 1926.	1926 to 1931.	1931 to 1936.
	%	%	%	%	%	%	%
AUSTRALASIA—							
Australia ..	1.38	2.04	1.87	2.07	2.11	1.50	0.76
New South Wales (a) ..	1.99	2.05	2.61	2.19	2.20	1.74	0.87
Victoria ..	0.17	1.70	1.38	1.68	2.00	1.18	0.53
Queensland ..	1.35	2.77	2.18	2.17	2.38	1.53	1.14
South Australia (b) ..	0.27	2.48	1.47	2.33	2.17	0.81	0.41
Western Australia ..	6.22	2.42	1.77	1.31	2.66	2.56	0.81
Tasmania ..	1.33	0.63	0.43	1.90	0.04	1.01	0.55
New Zealand ..	2.81	2.43	1.56	2.13	2.06	1.38	0.79
EUROPE—							
England and Wales ..	1.04	1.02	-0.84	1.81	0.64	0.44	0.42
Scotland ..	0.55	0.56	0.31	0.24	0.09	-0.21	0.50
Eire ..	-0.22	-0.06	-0.21	0.58	-0.60	-0.12	0.28
Belgium ..	1.26	0.69	0.53	-0.55	1.03	0.71	0.42
Denmark ..	1.12	1.26	1.20	2.13	1.01	0.67	0.84
France ..	0.15	0.06	-0.72	0.55	0.76	0.53	0.02
Germany ..	1.46	1.33	0.71	-1.60	0.37	0.55	0.58
Italy ..	0.52	0.80	1.16	0.22	0.91	0.31	0.63
Netherlands ..	1.53	1.22	1.72	1.16	1.53	1.06	1.26
Norway ..	0.51	0.73	1.01	1.14	0.65	0.42	0.46
Spain ..	0.52	0.87	0.66	0.82	0.65	0.89	1.46
Sweden ..	0.61	0.84	0.70	0.64	0.40	0.29	0.34
Switzerland ..	1.28	1.17	0.81	0.01	0.38	0.62	0.44
ASIA—							
Ceylon ..	1.62	1.20	1.71	1.28	2.30	1.18	1.34
Japan ..	1.29	1.08	1.42	0.37	1.42	1.48	0.77
AMERICA—							
Canada ..	2.99	2.99	2.20	1.81	1.33	1.97	1.23
United States ..	2.00	1.82	1.67	1.21	1.67	1.27	0.69

(a) Including Australian Capital Territory.

(b) Including Northern Territory.

NOTE.—Minus sign (-) denotes decrease

(iii) *Variations in the rates.* The annual rate of increase of the population during the present century has averaged 1.60 per cent., but the results from year to year have deviated widely from this figure. In the following table the period from 1900 to 1939 has been arranged into certain defined groups of years according to the occurrence of influences seriously affecting the growth of population :—

POPULATION : PERIODICAL RATES OF INCREASE.

Period from 31st December.	Interval.	Increase during Period.	Average Annual Increase.	Average Annual Rate of Increase.		
				Natural Increase.	Net Migration.	Total.
				%	%	%
	Years.	Million.	Thousand.			
1900 to 1913	13	1.13	87	1.59	0.53	2.04
1913 to 1923	10	0.86	86	1.50	0.15	1.64
1923 to 1929	6	0.68	113	1.27	0.64	1.88
1929 to 1939	10	0.56	56	0.82	0.01	0.84

Up to 1913 the rate of natural increase was rising, and this factor, coupled with the impetus given to immigration from 1911 onwards, was responsible for the comparatively high annual rate of 2.04 per cent. during this period. The War of 1914-19 was a dominating influence in the decade 1914-1923, and its effects can be seen in the reduction of the rate from 2.04 to 1.64 per cent. In the next span from 1923 to 1929 a more settled and prosperous era was experienced; 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 depression; immigration ceased, in fact Australia actually lost people through an excess of departures over arrivals in 1930, 1931, 1932 and 1935. With so much unemployment in the early part of this period the rate of natural increase also fell, and the rate of growth of the population receded to 0.84 per cent. per annum.

If the population increased at the average rate of the present century, namely, 1.60 per cent., it would double itself in 43 years. It has been estimated, however, on the assumptions that the present birth and death-rates remain unchanged and that no increment to the population results from migration, that the annual rates of natural increase would be for the period 1933-43, 0.64 per cent.; 1933-53, 0.55 per cent.; 1933-63, 0.45 per cent. and 1933-73, 0.33 per cent. In this respect the experience in Australia would be very similar to that of many other countries as the result of the low birth-rate.

Rates of increase from 1901 to 1939 may be found for each State and Territory of Australia in *Demography Bulletin* No. 57.

§ 6. Seasonal Variations of Population.

1. *Variations in Natural Increase.*—The following notes are based on the experience of the ten years 1930-1939. For Australia as a whole the rate of natural increase was greatest in the quarter ended March, and least in the quarter ended September. In New South Wales, Victoria, South Australia and Tasmania the March quarter was the most favourable, and in Queensland and Western Australia the June quarter. The natural increase was lowest in New South Wales, Victoria, Queensland, South Australia and Western Australia in the September quarter, and in Tasmania in the June quarter.

2. **Variations in Net Migration.**—For the decade 1930-1939 for Australia as a whole the quarter ended December showed the greatest rate of increase from migration. The greatest gains in New South Wales have on the average occurred in the September quarter, in Victoria in the March quarter, in Queensland and Western Australia in the June quarter, and in South Australia and Tasmania in the December quarter. The gain to the southern States in the quarter ended December is due to oversea traffic and to tourists and sugar workers returning from Queensland, which State loses heavily during the December quarter, but gains in the June quarter by tourists seeking the warmer climate. The increase to Tasmania during the quarter ended December is due to the influx of tourists from the mainland.

§ 7. Influences affecting Increase and Distribution.

In previous issues of the Official Year Book the influence of the various factors affecting the growth and distribution of population was traced. Detailed information on this subject appears in Official Year Book No. 22. pp. 906-7.

§ 8. 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 a population on 31st December, 1939, of 7,048,883, including 51,557 full-blood aboriginals, has a density of only 2.37 persons to the square mile, and is, therefore, the most sparsely populated of the civilized countries of the world. For the other continents the densities are approximately as follows:—Europe, 120; Asia, 73; Africa, 13; North and Central America, 21; and South America, 13. The population of Australia has thus about one-sixth of the density of South America and of Africa; about one-ninth of that of North and Central America; about one-thirtieth of that of Asia; and about one-fiftieth of that of Europe.

On account of the enormous area of Australia 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 2.37 in 1939. Victoria's density, however, has grown from 13.77 to 21.47, and that of New South Wales from 4.43 to 8.95 in the same period.

A map showing the density of population throughout Australia at the Census of 1933 appears on page 551 of this chapter. 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 area of New South Wales receiving less than 10 inches of rainfall is 16 per cent.; Victoria, nil; Queensland, 12 per cent.; South Australia, 82 per cent.; Western Australia, 50 per cent.; Tasmania, nil; and Australia, 36 per cent.

Particulars concerning the number and density of the population of the most important countries of the world at 31st December, 1937, are given in the following table. These figures have been taken, with the exception of those for China, Afghanistan, and Australia, from the *Statistical Year Book of the League of Nations, 1938-39*. The figures for China and Afghanistan were taken from the *Statesman's Year Book, 1939*. In some instances, more particularly in the cases of Asia and Africa, the numbers must be considered as rough approximations only.

POPULATION OF THE WORLD: NUMBER AND DENSITY, 1937.

Country.	Population. (000 omitted)	Density. (a)	Country.	Population. (000 omitted)	Density (a)
EUROPE.			AFRICA.		
U.S.S.R. (European) ..	133,400	57.6	Nigeria and Protectorate (e)	20,477	60.6
Germany (b) ..	78,800	350.2	Egypt ..	16,030	41.5
Great Britain and North- ern Ireland ..	47,387	498.8	French West Africa ..	14,750	8.1
Italy (c) ..	44,149	339.6	Belgian Congo ..	10,217	11.2
France ..	41,970	197.0	Union of South Africa ..	9,889	21.0
Poland ..	34,515	230.1	Algeria ..	7,400	8.7
Spain (including Canary and Balearic Islands) ..	25,000	128.9	French Morocco ..	6,430	41.8
Rumania ..	19,646	172.3	Anglo-Egyptian Sudan ..	6,187	6.4
Yugoslavia ..	15,400	160.4	Abyssinia ..	5,300	15.3
Hungary ..	9,035	251.3	Other ..	56,920	10.7
Netherlands ..	8,640	664.6	Total Africa ..	153,600	13.3
Belgium ..	8,361	696.8	NORTH AND CENTRAL AMERICA.		
Portugal ..	7,380	205.0	United States of America	129,818	42.9
Greece ..	7,013	140.3	Mexico ..	19,320	25.4
Bulgaria ..	6,319	158.0	Canada ..	11,165	3.0
Sweden ..	6,285	39.3	Cuba ..	4,200	95.5
Switzerland ..	4,183	261.4	Other ..	17,117	14.9
Denmark ..	3,630	24.2	Total North and Central America ..	181,620	21.0
Finland ..	2,941	108.9	SOUTH AMERICA.		
Elre ..	2,906	23.2	Brazil ..	43,247	13.2
Norway ..	19,580	107.0	Argentine Republic ..	12,762	11.8
Other ..	..	..	Colombia ..	8,600	19.2
Total Europe ..	530,330	120.2	Peru ..	7,100	14.7
ASIA.			Chile ..	4,597	16.0
China and Dependencies	457,835	106.8	Other ..	13,424	7.0
British India ..	362,000	229.8	Total South America ..	89,730	12.7
Japan and Dependencies	102,670	391.9	OCEANIA, ETC.		
Netherlands Indies ..	67,400	117.4	Australia (j) ..	6,920	2.3
U.S.S.R. (Asiatic) ..	35,600	6.1	New Zealand ..	1,602	15.4
French Indo-China ..	23,300	82.0	Territory of New Guinea	670	7.2
Burma ..	15,797	67.5	Hawaii ..	402	57.4
Turkey ..	(d) 15,480	54.3	Papua ..	280	3.1
Iran ..	15,000	23.6	Fiji ..	205	29.3
Thai (Siam) ..	14,650	73.3	Other ..	541	2.9
Philippine Islands ..	13,600	119.3	Total Oceania, etc. ..	10,620	3.1
Afghanistan ..	10,000	39.8	SUMMARY.		
Arabia ..	7,000	7.0	Europe ..	530,330	120.2
Ceylon ..	5,860	234.4	Asia ..	1,170,535	72.9
Nepal ..	5,600	103.7	Africa ..	153,600	13.3
Other ..	18,743	46.5	America, North and Central	181,620	21.0
Total Asia ..	1,170,535	72.9	America, South ..	89,730	12.7
			Oceania, etc. ..	10,620	3.1
			Total ..	2,136,435	41.7

(a) Number of persons per square mile. (b) Including Austria and part of Czechoslovakia including Albania. (c) Excludes European Territory—1,320,000. (d) Excludes British Cameroons. (e) Including 53,000 full-blood aboriginals. (f) Including 53,000 full-blood aboriginals.

2. Position of the British Empire.—The approximate relationship of the British Empire to the world as a whole in regard to its area and population is given hereunder:—

AREA AND POPULATION: BRITISH EMPIRE AND WORLD.(a)

Particulars.	The World.	British Empire.
Area in square miles (exclusive of Polar Circles) ..	51,179,000	13,353,952
Population ..	2,136,385,000	500,774,000
Population per square mile ..	41.74	37.50

(a) Statistical Year Book of the League of Nations, 1937-38, and The Statesman's Year Book, 1939.

§ 9. General Characteristics.

1. Sex Distribution.—(i) General. Detailed information respecting the distribution of the sexes in the population of Australia appears in previous issues of the Official Year Book. (See No. 22, p. 910.)

(ii) *Masculinity.*—(a) *States.* The number of males to each hundred females has been adopted as the "masculinity" of the population. On pp. 163-5 in the second issue of this publication a table was included showing the masculinity of the population of each of the States for each year from 1796 to 1907. In the fifth issue, on p. 123, the figures in this table for the years 1901 to 1907 were modified in accordance with the results of the Census of 3rd April, 1911.

With the exception of some dislocation arising from the War of 1914-19 there has been a continuous diminution of the masculinity of the population. In 1900, the masculinity was 110.55; in 1910, 107.87 and in 1920, 103.47. After 1921, however, the masculinity tended to rise until 1927 (104.54) since when it has gradually fallen to 102.09 in the year 1939.

The following table shows the masculinity of the population at quinquennial periods from 1901 to 1935 and for each year from 1936 onwards:—

POPULATION: MASCULINITY, 1901 to 1939.

(Males per 100 Females.)

As at 31st December—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Nor. Terr.	Aust. Cap. Terr.	Aust.
1901	110.12	101.16	125.78	102.71	155.69	107.90	593.32	..	110.15
1905	111.05	97.60	121.75	101.65	141.35	106.09	496.76	..	108.65
1910	109.23	98.71	119.02	103.12	132.90	104.14	486.32	(a)	107.87
1915	105.66	95.07	114.74	98.26	117.23	99.77	400.33	109.75	103.55
1920	104.31	97.38	112.00	99.83	114.55	101.67	270.04	116.70	103.47
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	102.36	97.90	109.96	100.29	112.69	102.46	216.41	116.02	102.71
1936	102.21	97.77	109.88	100.10	112.15	101.95	210.42	117.49	102.55
1937	101.96	97.64	109.69	100.01	111.81	102.33	212.55	117.76	102.39
1938	101.79	97.63	109.69	100.00	111.26	102.34	210.16	118.32	102.31
1939	101.61	97.69	109.23	99.80	109.77	101.97	236.86	120.40	102.09

(a) Part of New South Wales prior to 1911.

(b) *Various Countries.* The difference between young and old countries in the masculinity of their populations is clearly illustrated by the comparisons furnished in the following table, which are based on the latest statistics available:—

POPULATION: MASCULINITY IN VARIOUS COUNTRIES.

Country.	Year.	Number of Males to each 100 Females.	Country.	Year.	Number of Males to each 100 Females.
Argentine Republic ..	1928	114.1	Denmark	1937	97.2
Canada	1938	106.5	Hungary	1937	96.2
Eire	1936	105.0	Norway	1936	95.9
Union of South Africa (a)	1937	103.2	Spain	1930	95.3
New Zealand	1938	102.8	Poland	1938	95.3
Australia	1939	102.1	Northern Ireland ..	1937	95.0
United States of America	1935	101.6	Germany	1937	95.0
Japan	1936	100.4	Italy	1936	94.3
Netherlands	1937	99.7	U.S.S.R. (Russia) ..	1926	93.5
Belgium	1938	98.0	France	1936	93.0
Sweden	1937	98.0	Scotland	1937	92.9
Yugoslavia	1931	97.9	England and Wales	1937	92.4

(a) White population only.

2. *Age Distribution.*—The age distribution of the population is obtained only at a Census. The following table shows the variation which has taken place in the age constitution of the population during the 12½ years since the 1921 Census. Reference to the graph on page 552 will show regular wave-like movements in the curves depicting age constitution at various Censuses owing to fluctuations in the birth-rate and in migration. The curve of age constitution for the 1921 Census showed definite troughs in the age-group 0 to 4 years owing to the decline in the birth-rate during the war years, and in the age-group 20 to 24 years owing to the decline in the birth-rate in the late 'nineties of

last century and to the loss of young adult males during the War of 1914-19. At the 1933 Census these same troughs are still prominent, but owing to the lapse of time they now show at the later ages of 12 to 16 years and 32 to 36 years. Another depression has appeared in the age-group 0 to 4 years, which makes an even greater trough in the age constitution curve than that caused by the war. This was due to the serious decline in the birth-rate, which had been exaggerated by the economic depression. Marriages were postponed and births diminished.

Of the 6,629,839 persons enumerated at the 1933 Census, 8.6 per cent. were under 5 years of age; 9.5 per cent. were 5 years of age and under 10 years; 9.4 per cent. from 10 to 14 years; 9.3 per cent. 15 to 19 years; and 38.6 per cent. were under age 21. At the 1921 Census 11.0 per cent. were under 5 years; 11.0 per cent. 5 to 9 years; 9.7 per cent. 10 to 14 years; 8.6 per cent. 15 to 19 years; and 41.9 per cent. under 21 years of age.

The effect of the falling birth-rate on the number of young lives in the population is indicated by comparing the experience during the intercensal period from 1921 to 1933 with that for the previous intercensal period from 1911 to 1921. Whereas during the earlier period of ten years the population under 10 years of age in Australia increased by 213,822 persons, there was actually a decline of 693 in the numbers of this age-group during the subsequent 12½ years to 1933. Had the average effective birth-rate which prevailed between the Censuses of 1911 and 1921 continued until the 30th June, 1933, there would have been about 350,000 more children under 10 years of age in Australia than were actually enumerated at the Census.

On the other hand, the number of persons aged 65 years and over in Australia at 30th June, 1933, was 188,630 more than at the previous Census, as compared with an increase of 48,813 during the previous intercensal period from 1911 to 1921.

POPULATION: GRADUATED AGE DISTRIBUTION, AUSTRALIA, 1921 AND 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Age last Birthday.	Census 1921.			Census 1933.			Increase 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Years.							
0-4	305,397	294,319	599,716	290,461	278,502	568,963	-30,753
5-9	302,481	294,336	597,317	318,037	308,440	627,377	30,060
10-14	266,289	260,556	526,845	317,524	307,698	625,222	98,377
15-19	236,268	230,424	466,692	311,799	303,619	615,409	148,717
20-24	219,013	231,680	450,693	297,993	286,612	584,605	133,912
25-29	226,602	237,497	464,189	277,461	256,509	533,970	69,781
30-34	227,512	221,988	449,500	251,513	237,663	489,176	39,676
35-39	198,870	199,405	398,275	228,658	237,498	466,156	76,881
40-44	168,889	160,437	329,326	220,828	226,473	456,301	126,975
45-49	146,203	136,520	282,723	209,329	199,389	408,718	125,995
50-54	134,828	118,982	253,810	171,687	162,780	334,467	80,657
55-59	117,275	100,550	217,825	132,320	128,857	261,177	43,352
60-64	89,502	77,501	167,003	114,864	113,744	228,608	61,605
65-69	56,530	49,184	105,714	92,940	90,493	183,433	77,719
70-74	33,325	31,849	65,174	66,015	64,282	130,297	65,123
75-79	19,586	20,373	39,959	35,929	36,259	72,188	32,229
80-84	9,553	10,334	19,887	13,857	15,740	29,597	9,710
85-89	3,658	4,198	7,856	4,643	6,228	10,871	3,015
90-94	818	1,064	1,912	1,147	1,607	2,754	842
95-99	129	157	286	100	302	492	206
100-104	22	10	32	25	33	58	26
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105
Under 21 years	1,154,998	1,125,025	2,280,023	1,300,253	1,258,310	2,558,563	278,540
21 years and over	1,607,872	1,547,839	3,155,711	2,066,858	2,004,418	4,071,276	915,565
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

As the recorded ages at a Census are not free from error the figures are subject to a process of graduation, and the graduated results have been used in the table above.

Owing to the striking changes which are taking place in the age distribution of the population of Australia, consequent upon the lower birth-rate and the increasing expectation of life, efforts have been made to estimate these particulars for later years by applying to the age distribution at the Census the subsequent experience of births, deaths and migration. The results of this tabulation are shown in the following summary:—

POPULATION: ESTIMATED AGE DISTRIBUTION, AUSTRALIA, 1936 TO 1939.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Age last Birthday.	30th June, 1936.		30th June, 1937.		30th June, 1938.		30th June, 1939.	
	Males.	Females.	Males.	Females.	Males.	Females.	Males.	Females.
Years—								
0-4 ..	268,604	258,078	271,798	261,786	278,291	267,694	285,141	274,569
5-9 ..	306,323	295,042	296,901	285,370	285,851	274,768	276,972	266,224
10-14 ..	322,813	313,558	320,641	310,971	318,198	307,933	315,678	304,647
15-19 ..	308,752	298,565	312,132	302,185	317,190	306,852	323,327	312,557
20-24 ..	309,556	302,177	310,736	303,273	309,676	301,578	305,918	297,662
25-29 ..	287,584	272,541	291,153	277,921	295,809	283,981	300,807	290,917
30-34 ..	264,036	244,385	269,366	248,587	274,190	253,660	278,759	259,810
35-39 ..	236,249	234,298	241,836	233,827	247,180	234,260	252,282	236,275
40-44 ..	226,846	232,251	224,075	232,716	223,151	232,771	224,626	232,572
45-49 ..	218,942	213,493	220,931	217,303	222,352	220,714	223,082	223,765
50-54 ..	189,319	180,689	194,760	186,610	199,176	192,350	203,109	197,738
55-59 ..	146,805	142,685	153,106	148,578	159,634	154,944	165,991	161,274
60-64 ..	115,018	116,357	116,065	117,697	118,141	119,743	121,707	123,297
65-69 ..	96,133	97,887	96,537	99,852	96,729	101,593	96,639	102,585
70-74 ..	69,322	70,515	70,616	72,752	72,279	75,135	73,523	77,674
75-79 ..	41,998	43,448	43,100	45,401	43,798	46,982	44,128	48,269
80-84 ..	16,574	18,721	18,004	20,239	19,614	22,002	20,935	23,620
85-89 ..	4,687	6,446	4,739	6,524	4,812	6,681	4,808	6,800
90-94 ..	1,121	1,726	1,141	1,760	1,204	1,829	1,144	1,780
95-99 ..	163	214	141	197	130	194	80	195
100-104 ..	15	25	10	27	1	13	..	3
Total ..	3,432,260	3,343,101	3,457,788	3,373,576	3,487,406	3,405,677	3,518,656	3,442,233
Under 21 years ..	1,269,141	1,226,305	1,263,134	1,219,972	1,259,835	1,215,606	1,260,390	1,215,421
21 years and over ..	2,163,119	2,116,796	2,194,654	2,153,604	2,227,571	2,190,071	2,258,266	2,226,812
Total ..	3,432,260	3,343,101	3,457,788	3,373,576	3,487,406	3,405,677	3,518,656	3,442,233

The estimates in the table above are based on the graduated results of the 1933 Census.

The next table shows the change which has been taking place in the age constitution of the population of Australia since the year 1871. Each successive Census except 1921 has revealed a larger percentage of the population over 15 years of age than was recorded at the previous Census. This movement, as previously mentioned, was greatly accentuated during the period 1921 to 1933 owing to the serious decline in the birth-rate which was partly the outcome of the economic depression. This change has resulted during the intercensal period in an increase in the average age of males in Australia from 28.54 to 30.44 years and of females from 28.29 to 30.62 years. Not only has there been an increase in the average age of both sexes but also a steady approach to similarity in the age composition of males and females in harmony with the equalization of the numbers of each sex in Australia.

POPULATION : AGE DISTRIBUTION, AUSTRALIA, 1871 to 1933.

Census Year.	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

3. **Conjugal Condition.**—Of the total population of Australia at the 1933 Census, 55.5 per cent. had never married; 39.2 per cent. were married; 5.0 per cent. widowed; and 0.3 per cent. divorced. Since the 1921 Census the number never married had increased by 15.4 per cent.; those married by 29.8 per cent.; the widowed by 37.9 per cent.; and the divorced by 148 per cent.

The relatively low rate of increase in the number of single persons under age 15 is another symptom of the falling birth-rate. At 30th June, 1933, the number of males aged 15 years and over who had never married was 193,139 more than the females and the excess of males was 40,721 greater than at the previous Census.

The marriage-rate for Australia declined from 9.6 per 1,000 of population in the year 1920 to 7.0 per 1,000 of population in the year 1933. The divorce-rate for the period 1911–1920 was 8.1 per 10,000 existing marriages, but increased to nearly double (15.5) during the decennium 1921–1930. During the intercensal period widowed females increased in number by 63,700, and at a higher percentage rate of increase (39.9) than the widowed males (33.3) during the same period. Actually there were more than twice as many widowed females as widowed males in Australia at 30th June, 1933. The greater number of widowed females than widowed males is the result of two influences. The first is the greater longevity of married females coupled with the usually younger age at marriage; and the second is that a larger proportion of males cancel their widowhood by remarriage.

The numbers of divorced males and females in this table differ slightly from those given on p. 205 where the conjugal conditions of those for whom particulars were not given at the Census have been distributed proportionally among the various groups.

POPULATION : CONJUGAL CONDITION, AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Conjugal Condition.	Census 1921.			Census 1933.			Increase 1921–1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Never Married—							
Under age 15	875,098	849,906	1,725,004	926,924	894,643	1,821,567	96,563
Age 15 and over	801,797	649,379	1,451,176	1,018,587	825,448	1,844,035	392,859
Total	1,676,895	1,499,285	3,176,180	1,945,511	1,720,091	3,665,602	489,422
Married	999,274	999,388	1,998,662	1,299,693	1,293,922	2,593,615	594,953
Widowed	73,341	164,480	237,821	97,775	230,180	327,955	90,134
Divorced	4,230	4,298	8,528	10,251	10,862	21,113	12,585
Not Stated	9,130	5,413	14,543	13,881	7,673	21,554	7,011
Total	2,762,870	2,672,364	5,435,234	3,367,111	3,262,728	6,629,839	1,194,105

4. **Dependent Children under 16 years of Age.**—In reply to this question, 804,695 males and 61,417 females stated they had children under 16 years of age dependent on them at 30th June, 1933, the total number of dependent children under age 16 claimed being 1,919,859, of whom 1,811,247 or 94.3 per cent. were dependent on males and 108,612 or 5.7 per cent. were dependent on females. This represents an average of 2.3 for each male with dependent children and 1.8 for each female with dependent children. For each adult male in Australia there was an average of 0.88 dependent children, and for each male breadwinner (excluding pensioners) an average of 0.81 dependent children under 16 years of age.

Thirty-eight per cent. of the males with dependent children under 16 years of age had one dependent child; 29 per cent. two children; 16 per cent. three children; 9 per cent. four children; 4 per cent. five children; and 4 per cent. more than five children. Of the females with dependent children under 16 years of age, 57 per cent. had one dependent child; 24 per cent. two children; 11 per cent. three children; 5 per cent. four children; 2 per cent. five children; and 1 per cent. more than five children.

POPULATION : PERSONS WITH DEPENDENT CHILDREN UNDER SIXTEEN YEARS OF AGE, AUSTRALIA, 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Number of Dependent Children.	Number of Persons with Dependent Children.			Total Number of Children Dependent on—		
	Males.	Females.	Persons.	Males.	Females.	Persons.
1	306,695	34,823	341,518	306,695	34,823	341,518
2	233,167	14,631	247,798	466,334	29,262	495,596
3	131,646	6,724	138,370	394,938	20,172	415,110
4	69,485	3,067	72,552	277,940	12,268	290,208
5	34,676	1,337	36,013	173,380	6,685	180,065
6	17,270	557	17,827	103,620	3,342	106,962
7	7,497	185	7,682	52,479	1,295	53,774
8	2,931	75	3,006	23,448	600	24,048
9	964	15	979	8,676	135	8,811
10	281	3	284	2,810	30	2,840
11	69	..	69	759	..	759
12	14	..	14	168	..	168
Total ..	804,695	61,417	866,112	1,811,247	108,612	1,919,859

5. **Orphanhood.**—The number of children under 16 years of age in Australia at 30th June, 1933, totalled 1,941,050, of whom 51 per cent. were males and 49 per cent. females. Of all children for whom particulars were stated, 94.0 per cent. had both parents living; 3.6 per cent. were without father living; 2.1 per cent. without mother; and 0.3 per cent. were bereft of both parents.

The number of fatherless children is much greater than the number without mothers. For every two children who are motherless there are approximately four who are fatherless. This is due to the higher rate of mortality amongst males of middle age as compared with females. The ratio of children without one or both parents to the total children enumerated is the same for both boys and girls.

**POPULATION: ORPHANHOOD OF CHILDREN UNDER SIXTEEN YEARS OF AGE,
AUSTRALIA, 1933.**

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Particulars.	Males.	Females.	Persons.
Both Parents Living	915,707	884,174	1,799,881
Father Dead	34,642	33,998	68,640
Mother Dead	20,204	19,642	39,846
Both Parents Dead	3,144	2,713	5,857
Not Stated	13,813	13,013	26,826
Total	987,510	953,540	1,941,050

6. **Schooling.**—The number of persons receiving instruction at Government schools at the date of the Census totalled 904,383, or 77 per cent.; those attending private schools numbered 224,994, or 19 per cent.; and 33,125 persons or 3.0 per cent., were stated to be receiving instruction at home. Since the 1921 Census the number attending Government schools had increased by 14 per cent., while those attending private schools increased by 16 per cent.

**POPULATION: PERSONS RECEIVING INSTRUCTION AT DATE OF THE CENSUS,
AUSTRALIA, 1921 AND 1933.**

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Receiving Instruction at—	Census 1921.			Census 1933.			Increase 1921-1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Government School	413,035	378,689	791,724	474,087	430,296	904,383	112,659
Private School ..	88,800	104,974	193,774	107,091	117,903	224,994	31,220
University ..	5,129	2,123	7,252	6,252	2,273	8,525	1,273
Home ..	14,141	16,571	30,712	16,623	16,503	33,126	2,414
Total ..	521,105	502,357	1,023,462	604,053	566,975	1,171,028	147,566

7. **War Service.**—This inquiry was restricted to those who served with the Australian Forces during the War of 1914-19. The numbers recorded at the Census of 30th June, 1933, as having served abroad were 226,438 males and 1,844 females, 11 per cent. of the adult male population of Australia being ex-members of the Australian Forces with oversea service.

Of this number 4,339 served with the naval forces, so that the number of ex-members of the A.I.F. in Australia at 30th June, 1933, was 222,099. According to official records, 265,000 members of the A.I.F. were discharged in Australia upon return from service overseas, but, as this figure included duplications for those persons who enlisted on more than one occasion and consequently were discharged on more than one occasion,

a special detailed examination of A.I.F. records at the Defence Department, Melbourne, was made in order to ascertain the number of individuals who were discharged upon return to Australia. This inquiry disclosed that 257,519 soldiers and 1,665 nurses returned to Australia and that 7,030 soldiers and nurses were discharged overseas. At the 1933 Census the number recorded in Australia totalled 222,099, which shows a reduction of 35,420, or 13.75 per cent., in the number of returned soldiers since their return to Australia.

The particulars ascertained from the 1933 Census and the results of the special statistical inquiry instituted at Base Records, Department of Defence, were referred to Mr. F. W. Barford, A.I.A., Actuary of the Commonwealth Superannuation Board. Although it was not possible from these data to construct a Life Table comparable to the Australian Life Tables 1932-1934 it was possible to make some comparison between the two experiences—national and returned soldiers. As the result of these calculations it was ascertained that the mortality amongst returned soldiers since discharge exceeds that of a body of males of the same age constitution drawn from the general population by about 13 per cent.

POPULATION: PERSONS WHO SERVED ABROAD WITH THE AUSTRALIAN FORCES IN THE WAR OF 1914-1919, CENSUS 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

State or Territory.	Metro- politan.	Provincial.	Rural.	Migratory.	Total.
New South Wales	44,681	14,676	23,681	237	83,275
Victoria	38,116	6,098	23,273	102	67,589
Queensland	11,215	5,411	13,397	186	30,209
South Australia	11,953	1,484	6,658	73	20,168
Western Australia	8,995	1,662	8,482	87	19,226
Tasmania	2,286	1,619	2,959	43	6,907
Australian Capital Territory .. ..	..	541	64	..	605
Northern Territory .. ..	..	66	237	..	303
Total	117,246	31,557	78,751	728	228,282

8. Religion.—At the 1921 Census 92,258 persons in Australia, or 1.7 per cent., gave no reply to this question, but at the 1933 Census, when the public was informed there was no legal obligation to answer this question, 848,948 persons, or 12.8 per cent., gave no reply. Thus 14.0 per cent. of the male and 11.5 per cent. of the female population of Australia did not state their religion.

The greatest numerical increase during the intercensal period was recorded by the Church of England, followed by the Roman Catholic and Catholic undefined, which may be grouped without serious error as the latter term usually signified Roman Catholic. Then followed Presbyterian and Methodist. The greatest proportional increases, however, were recorded by the Christian Scientist, Greek Catholic and Seventh Day Adventist denominations, whilst the greatest proportional decreases were experienced by the Australian Church, Catholic Apostolic, Latter Day Saints and Congregational denominations.

Ninety-nine per cent. of those who stated their religion professed the Christian Faith as compared with 98 per cent. at the 1921 Census. For every 100 females who declared they were adherents to some Christian denomination, there were 99 male

adherents, as compared with 101 males at the previous Census. Since the previous Census the number who stated they were of non-Christian religion decreased by 20 per cent., and those specifically stating they had no religion decreased by 43 per cent. These comparisons with the 1921 figures, however, need to be interpreted with some care, in view of the fact that so large a proportion of the population gave no reply to this question at the 1933 Census.

POPULATION: RELIGION, AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Religion.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Christian—							
Baptist	49,194	56,509	105,703	49,654	56,220	105,874	171
Brethren	5,493	6,532	12,025	4,501	5,542	10,043	- 1,982
Catholic, Greek	3,938	1,434	5,372	8,435	3,476	11,911	6,539
Catholic, Roman	565,029	568,973	1,134,002	577,997	583,458	1,161,455	27,453
Catholic, undefined	20,082	18,577	38,659	63,861	63,681	127,542	88,883
Church of Christ	24,680	20,894	45,574	28,220	33,934	62,154	8,180
Church of England	1,212,772	1,160,223	2,372,995	1,297,589	1,267,529	2,565,118	192,123
Congregational	34,931	39,582	74,513	30,411	34,791	65,202	- 9,311
Lutheran	31,677	25,892	57,519	32,569	28,234	60,803	3,284
Methodist	306,785	325,844	632,629	331,602	352,420	684,022	51,393
Presbyterian	322,072	314,902	636,974	356,743	356,486	713,229	76,255
Protestant, undefined	37,309	29,803	67,112	37,750	35,014	72,764	5,652
Salvation Army	14,584	17,005	31,589	14,297	16,913	31,210	- 379
Seventh Day Adventist	4,640	6,665	11,305	5,992	7,973	13,965	2,660
Other	16,508	16,162	32,670	19,605	22,241	41,846	9,176
Total Christian	2,649,644	2,617,997	5,267,641	2,859,826	2,867,912	5,727,738	460,097
Non-Christian—							
Buddhist	1,945	120	2,065	640	95	735	- 1,330
Chinese	3,512	79	3,591	298	7	305	- 3,286
Confucian	2,536	156	2,692	772	15	787	- 1,905
Hebrew	11,392	10,223	21,615	12,183	11,370	23,553	1,938
Mohammedan	2,647	221	2,868	1,668	209	1,877	- 991
Other	1,896	678	2,574	865	348	1,213	- 1,361
Total Non-Christian	23,928	11,477	35,405	16,426	12,044	28,470	- 6,935
Indefinite	13,096	6,790	19,886	8,133	4,896	13,029	- 6,857
No Religion	16,022	4,522	20,544	8,969	2,685	11,654	- 8,890
No Reply	60,180	32,078	92,258	473,757	375,191	848,948	756,690
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (-) denotes decrease.

9. Birthplace.—At the 1933 Census the native-born element of the population represented 86.3 per cent. as compared with 84.5 per cent. at the 1921 Census, the number of native-born having increased by 25 per cent., while the immigrant population increased by 7 per cent. only.

Although the number born in the British Isles increased by 39,055 or 5.8 per cent., they were equivalent to only 10.7 per cent. of the total population as compared with 12.4 per cent. at the previous Census. Those born in other European countries increased by 24,155, or 34.0 per cent., and represented 1.4 per cent. of the total population of Australia as compared with 1.3 per cent. in the year 1921. The number of Asiatic

birthplace decreased by 5,733, or 18.9 per cent., during the intercensal period, and was equivalent to only 0.4 per cent. of the total population as compared with 0.6 per cent. at the previous Census.

Of those not born in Australia, 57 per cent. were males and 43 per cent. females. Fifty-five per cent. of those born in the British Isles and 72 per cent. of those born in other European countries were males.

POPULATION : BIRTHPLACES, AUSTRALIA, 1921 AND 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Birthplace.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Australia	2,273,999	2,307,664	4,581,663	2,848,282	2,878,284	5,726,566	1,144,903
New Zealand	20,002	18,609	38,611	23,837	22,126	45,963	7,352
Other Australasian ..	315	209	524	468	306	774	250
Total Australasia ..	2,294,316	2,326,482	4,620,798	2,872,587	2,900,716	5,773,303	1,152,505
England	246,134	199,990	446,124	268,849	217,982	486,831	40,707
Wales	7,845	5,645	13,490	8,492	5,994	14,486	996
Scotland	60,419	48,337	108,756	73,488	59,001	132,489	23,733
Ireland	53,221	51,812	105,033	41,576	37,076	78,652	- 26,381
Germany	14,117	8,279	22,396	10,826	6,016	16,842	- 5,554
Greece	3,147	507	3,654	6,548	1,789	8,337	4,683
Italy	6,306	1,829	8,135	20,064	6,692	26,756	18,621
Other European	27,576	9,265	36,841	31,456	11,790	43,246	6,405
Total Europe	418,765	325,664	744,429	461,299	346,340	807,639	63,210
British India	4,976	1,942	6,918	4,544	2,230	6,774	- 144
China	14,859	365	15,224	8,072	507	8,579	- 6,645
Other Asiatic	6,541	1,609	8,150	6,690	2,516	9,206	1,056
Total Asia	26,376	3,916	30,292	19,306	5,253	24,559	- 5,733
South African Union ..	2,784	2,624	5,408	3,271	2,908	6,179	771
Other African	806	561	1,367	926	716	1,642	275
Total Africa	3,590	3,185	6,775	4,197	3,624	7,821	1,046
Canada	2,378	1,172	3,550	2,621	1,290	3,920	370
United States of America ..	4,134	2,470	6,604	3,569	2,497	6,066	- 538
Other American	1,195	723	1,918	965	628	1,593	- 325
Total America	7,707	4,365	12,072	7,155	4,424	11,579	- 493
Polynesia	1,901	1,177	3,168	1,582	1,305	2,887	- 281
At Sea	1,872	1,836	3,708	985	1,066	2,051	- 1,657
Not Stated	8,253	6,239	14,492	(a)	(a)	(a)	..
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) 11,165 persons (5,769 males, 5,396 females), whose birthplace was not stated, were distributed after further analysis of other particulars on the Householders' Schedule.

NOTE.—Minus sign (-) denotes decrease.

10. Period of Residence in Australia.—The decline in immigration into Australia during recent years is reflected in the figures in this table. They show that, of residents not born in Australia who stated their period of residence, 6 per cent. had resided in Australia for a period of less than five years, and 25 per cent. for less than ten years, as compared with 11 per cent. and 35 per cent. respectively at the previous Census.

Fluctuations in immigration into Australia over a long period are also partially revealed by this table, which classifies the immigrant population of Australia according to the period of their residence in Australia. Those in the group 80-84 years represent the survivors in Australia of the arrivals during the gold rush of the 'fifties, while the heavy numbers in the 45-49 group are the survivors of those arriving during the boom period of the 'eighties. The particularly heavy immigration during the years 1911 to 1913 is reflected in the outstanding number in the 20-24 years group, followed by the slump during the war period of 1914 to 1919 in the numbers in the 15-19 years group, and the increasing immigration after that war in the 10-14 and 5-9 years groups. The great reduction in immigration brought about by the economic depression is the cause of the relatively small numbers in the 0-4 years group. The 10,190 persons shown as having a period of residence of under 1 year are mostly the passengers and crews of overseas vessels which were in Australian waters on the night of the Census.

IMMIGRANT POPULATION: Period of Residence in Australia of Persons who were not born in Australia, 1921 AND 1933.

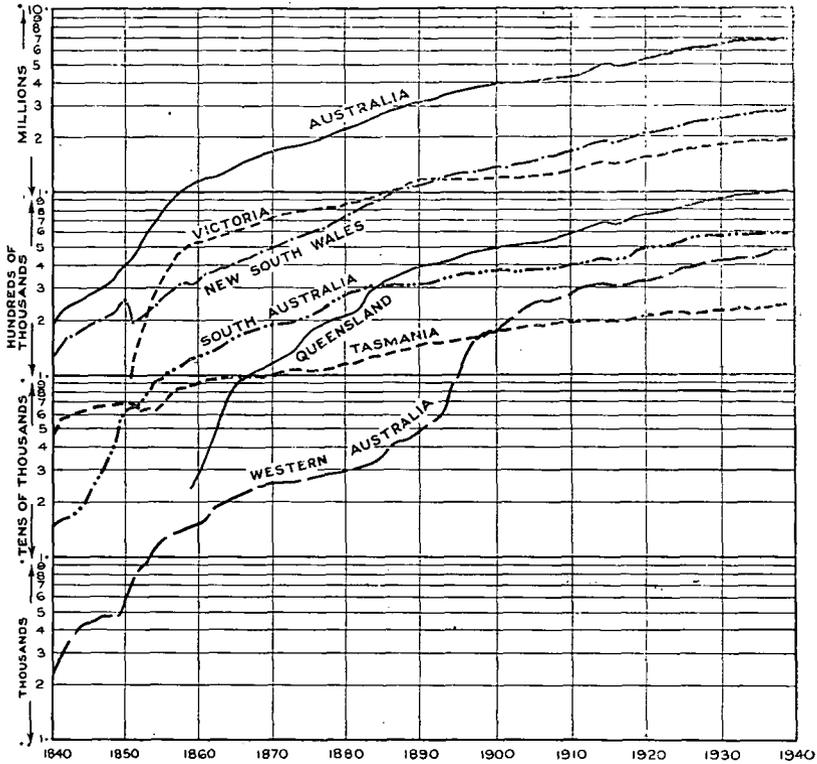
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Number of Completed Years of Residence.	Census 1921.			Census 1933.			Increase, 1921-1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Years.							
0	28,386	19,827	48,213	7,407	2,783	10,190	- 38,023
1	8,375	16,998	25,373	2,133	1,856	3,989	- 21,384
2	2,026	2,490	4,516	2,243	2,277	4,520	4
3	1,715	1,404	3,119	5,683	5,411	11,094	7,975
4	2,779	2,623	5,402	10,761	9,121	19,882	14,480
0-4	43,281	43,342	86,623	28,227	21,448	49,675	- 36,948
5-9	111,895	87,723	199,618	104,664	68,661	173,325	- 26,293
10-14	58,919	31,883	90,802	66,084	56,685	122,769	31,967
15-19	15,077	7,818	22,895	26,987	26,098	53,085	30,190
20-24	18,875	8,990	27,865	113,060	77,714	190,774	162,909
25-29	16,873	10,721	27,594	23,203	10,938	34,141	6,547
30-34	47,206	32,273	79,479	16,473	8,331	24,804	- 54,675
35-39	56,144	38,272	94,416	11,187	6,304	17,491	- 76,925
40-44	31,843	20,851	52,694	22,110	17,196	39,306	- 13,388
45-49	16,616	11,776	28,392	36,670	28,207	64,877	36,575
50-54	10,954	9,649	20,603	27,147	20,486	47,633	27,030
55-59	13,077	12,912	25,989	11,412	9,432	20,844	- 5,145
60-64	10,372	11,671	22,043	5,739	5,427	11,166	- 10,877
65-69	11,378	13,594	24,972	3,751	4,424	8,175	- 16,797
70-74	2,875	3,669	6,544	2,037	3,673	6,610	66
75-79	716	935	1,651	2,672	4,050	6,722	5,071
80-84	519	693	1,212	1,246	1,926	3,172	1,960
85-89	78	124	202	113	167	280	78
90-94	16	15	31	26	44	70	39
95-99	1	..	1	3	5	8	7
100 and over .. .. .	..	..	..	..	1	1	1
Not Stated	13,903	12,050	25,953	15,118	13,137	28,255	2,302
Total not born in Australia	480,618	358,961	839,579	518,829	384,444	903,273	63,694
Born in Australia ..	2,282,252	2,313,903	4,596,155	2,848,282	2,878,284	5,726,566	1,130,411
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

NOTE.—Minus sign (—) denotes decrease.

11. Nationality.—The number of foreign nationals in Australia has increased since the 1921 Census by 32 per cent.—males by 25 per cent. and females by 71 per cent.—as compared with an increase of 22 per cent. in the number of British nationality. There has been little change, however, in the proportion of foreign nationals relative to the

POPULATION OF AUSTRALIA, 1840 TO 1939 (RATIO GRAPH).

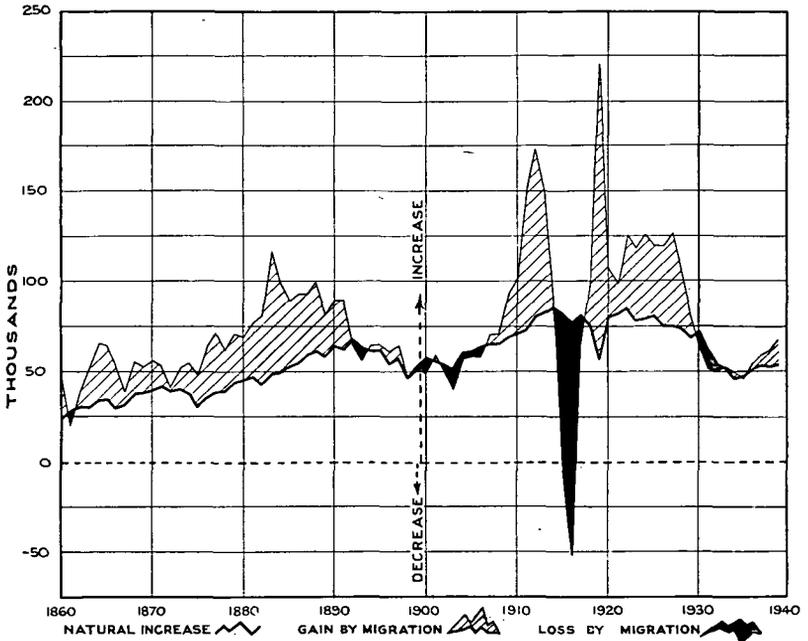


(See page 521.)

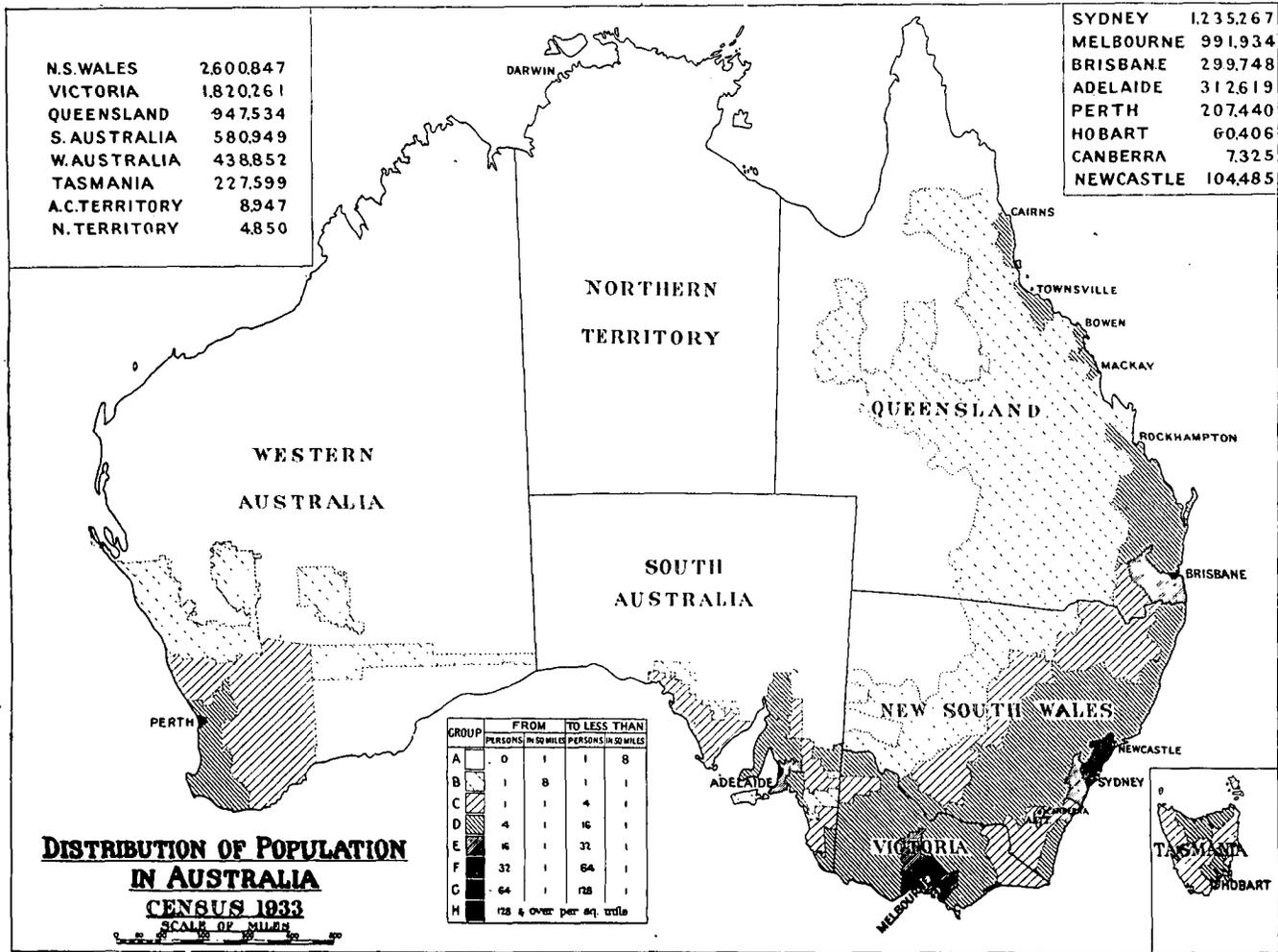
EXPLANATION.—This is a ratio graph, the vertical scale being logarithmic, and the curves rise and fall according to the rate of increase or decrease. Actual numbers are indicated by the scale at the side of the graph.

The curves represent the estimated population of each State at 31st December each year.

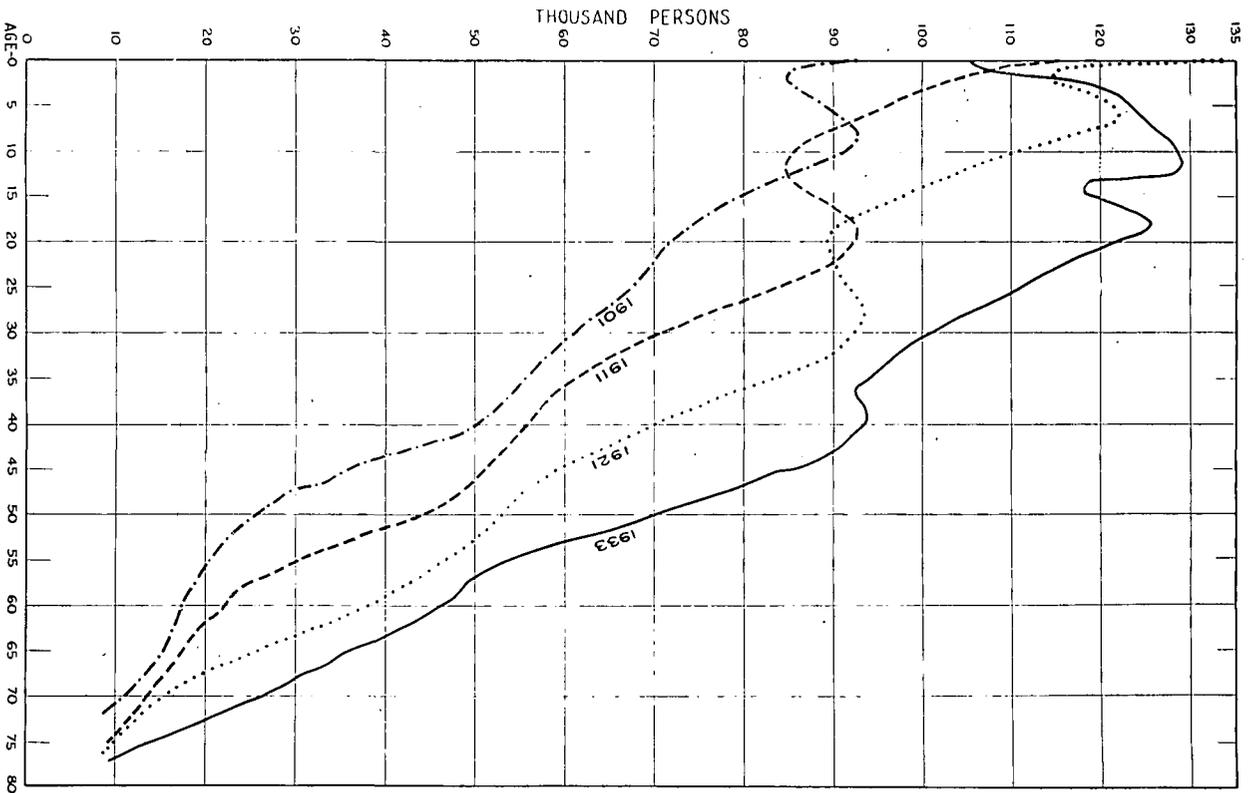
INCREASE OF POPULATION—AUSTRALIA, 1860 TO 1939.



EXPLANATION.—The increase of population each year is represented by the distance between the light curve and the dotted zero line. The distance between the zero line and the heavy curve shows the amount of increase due to natural increase, while the distance between the two curves indicates gain or loss by migration, the shaded areas representing gains by migration and the black areas losses by migration. Where the black area extends below the dotted zero line, as it did during the years of the War of 1914-19, a net loss in population is indicated.



AUSTRALIA—GRADUATED AGE DISTRIBUTION OF POPULATION, CENSUSES OF 1901,
1911, 1921 AND 1933.



EXPLANATION.—This graph affords a comparison between the age distribution of the population at each of the last four censuses.

total population, 99.1 per cent. of the population being British subjects, as compared with 99.2 per cent. at the previous Census. The greatest increases numerically among the foreign nationals were—Italian, 12,755; Greek, 2,835; Yugoslav, 2,217; and Polish, 1,257; whilst those of Chinese nationality decreased by 6,007; Dutch by 702; and Japanese by 555.

The number of persons in Australia who were born in countries outside the British Empire totalled 113,557, and of this number 60,259, or 54 per cent., were of foreign nationality at 30th June, 1933, the remainder being British subjects by naturalization, etc.

The percentages of foreign nationals to the numbers born in the corresponding foreign birthplaces were as follows:—Japanese nationals, 92 per cent. of the Japanese born; Chinese, 91 per cent.; Yugoslav, 71 per cent.; Greek, 68 per cent.; Italian, 66 per cent.; Russian, 42 per cent.; American, U.S., 42 per cent.; and German, 22 per cent.

POPULATION: NATIONALITY (i.e., ALLEGIANCE), AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Nationality.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
British	2,722,152	2,665,053	5,387,205	3,318,228	3,251,290	6,569,518	1,182,313
Foreign—							
American, U.S. .. .	2,520	737	3,257	1,904	653	2,557	— 700
Chinese	13,614	185	13,799	7,615	177	7,792	— 6,007
Danish	956	260	1,216	1,046	233	1,279	63
Dutch	1,430	187	1,617	786	129	915	— 702
Estonian	(a)	(a)	(a)	515	323	838	(a) 838
Finnish	517	37	554	962	100	1,062	508
French	1,221	867	2,088	924	723	1,647	— 441
German	2,538	1,017	3,555	2,738	934	3,672	117
Greek	2,430	387	2,817	4,639	1,013	5,652	2,835
Italian	3,984	919	4,903	14,068	3,590	17,658	12,755
Japanese	2,489	150	2,639	1,937	147	2,084	— 555
Norwegian	960	65	1,025	1,150	88	1,238	213
Polish	351	149	500	1,008	749	1,757	1,257
Russian	1,655	662	2,317	1,283	772	2,055	— 262
Spanish	405	140	545	463	133	596	51
Swedish	1,399	80	1,479	1,274	96	1,370	— 109
Swiss	413	151	564	680	272	952	388
Yugoslav	502	107	609	2,503	323	2,826	2,217
Other	1,683	587	2,270	3,347	962	4,309	2,039
Total Foreign .. .	39,067	6,687	45,754	48,842	11,417	60,259	14,505
Not Stated	1,651	1,124	2,775	41	21	62	— 2,713
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Included with " Other " in 1921.

NOTE.—Minus sign (—) denotes decrease.

12. Race.—The people of Australia may be classified into two groups with respect to racial characteristics, namely, non-indigenous and indigenous. The former group comprises the European and other races who have migrated to Australia and their descendants born in Australia, while the latter group consists of the full-blood aboriginal natives of Australia whose estimated numbers at 30th June, 1939, were 51,557 but who are not included in the general population figures of the Commonwealth. The non-indigenous population of Australia is fundamentally British in race and nationality. The Australian people have the essential characteristics of their British ancestors, with perhaps some accentuation of the desire for freedom from restraint. The complete change of climatic and social environment, the greater opportunity for an open-air life and the absence of the restricting conventions of older countries are exerting a noticeable influence upon the physical characteristics and social instincts of the people.

At 30th June, 1933, 99.2 per cent. of the population of Australia was of European race and 0.8 per cent. of non-European as compared with 99.1 per cent. and 0.9 per cent. respectively at the 1921 Census. The non-European group is divided into two sections, namely, full-bloods who represented 46 per cent. of the total non-Europeans at the 1933 Census and 64 per cent. at the previous Census, and half-castes who accounted for 54 per cent. and 36 per cent. respectively.

During the intercensal period the number of full-blood non-Europeans decreased by 8,195 persons, or 26 per cent., and the number of half-castes increased by 9,450 persons, or 54 per cent. Of the latter the greatest proportion was half-caste Australian aboriginals, who increased in number by 9,084 persons, or 79 per cent. The half-caste population, i.e., persons having a mixture of European and non-European blood, was equivalent to 0.41 per cent. of the total population of Australia as compared with 0.32 per cent. in the year 1921.

POPULATION: RACE, AUSTRALIA, 1921 AND 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Race.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Full-blood— European	2,726,515	2,660,628	5,387,143	3,334,775	3,245,218	6,579,993	1,192,850
Non-European—							
Chinese	16,011	1,146	17,157	9,311	1,535	10,846	- 6,311
Cingalese	231	38	269	196	78	274	5
Filipino	319	103	422	214	78	292	- 130
Indian (a)	2,743	138	2,881	2,216	188	2,404	- 477
Japanese	2,546	194	2,740	2,007	234	2,241	- 499
Malay	986	101	1,087	813	156	969	- 118
Papuan	142	21	163	221	18	239	76
Polynesian (other)	1,562	551	2,113	883	505	1,388	- 725
Syrian	1,584	1,308	2,892	1,553	1,327	2,880	- 12
Other	1,077	174	1,251	895	352	1,247	- 4
Total Non-European Full-blood	27,201	3,774	30,975	18,309	4,471	22,780	- 8,195
Half-caste—							
Australian Aboriginal	5,980	5,556	11,536	10,631	9,989	20,620	9,084
Chinese	1,891	1,778	3,669	1,901	1,602	3,503	- 166
Indian (a)	366	329	695	360	334	694	- 1
Japanese	97	91	188	116	109	225	37
Negro	108	72	180	119	89	208	28
Polynesian	184	165	349	218	216	434	85
Syrian	173	175	348	149	153	302	- 46
Other	355	296	651	533	547	1,080	429
Total Half-caste	9,154	8,462	17,616	14,027	13,039	27,066	9,450
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Native of India.

NOTE.—Minus sign (-) denotes decrease.

13. Foreign Language.—On the occasion of the 1933 Census, persons who could not read and write English but could read and write some foreign language were asked to state that language. This question had never appeared on the Census Schedule before and there is some doubt whether the question was correctly understood, as it appears that some persons who were able to read and write English and a foreign language also may have replied to this question incorrectly.

The recorded figures indicate that at the 1933 Census, 29,738 persons, comprising 23,638 males and 6,100 females, stated they were not able to read and write English, but were able to read and write a foreign language. Of this number 39 per cent. were

able to read and write Italian; 17 per cent. Chinese; 10 per cent. Greek; 5 per cent. Yugoslav; 4 per cent. Japanese; and 4 per cent. German. Included in the total are 1,014 persons who were passengers, or members of the crews, of oversea vessels in Australian waters on Census night.

Forty-three per cent. of the Italian-born population of Australia stated that they were unable to read and write English but were able to read and write Italian. Similarly, 59 per cent. of the Chinese, 54 per cent. of the Japanese, 36 per cent. of the Yugoslav, 37 per cent. of the Greek, and 20 per cent. of the Maltese stated that they were unable to read and write English but could read and write a foreign language.

Particulars were not obtained concerning the number, if any, of foreign-born persons who could not read and write any language.

IMMIGRANT POPULATION: FOREIGN LANGUAGE, AUSTRALIA, 1933.

PERSONS NOT ABLE TO READ AND WRITE ENGLISH, BUT ABLE TO READ AND WRITE A FOREIGN LANGUAGE.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Foreign Language.	Males.	Females.	Persons.
Albanian	428	1	429
Arabic	178	99	277
Bulgarian	144	21	165
Chinese	5,008	64	5,072
Croatian	128	19	147
Czechoslovak	76	12	88
Danish	59	27	86
Estonian	35	29	64
Filipino	65	1	66
Finnish	233	49	282
French	105	130	235
German	598	466	1,064
Greek	2,185	906	3,091
Hebrew	134	203	337
Hindu	614	4	618
Italian	8,630	2,901	11,531
Japanese	1,142	76	1,218
Malay	389	1	390
Maltese	445	119	564
Norwegian	124	5	129
Polish	102	124	226
Russian	278	302	580
Serbian	74	6	80
Spanish	277	93	370
Swedish	143	20	163
Syrian	93	67	160
Yugoslav	1,158	263	1,421
Other	793	92	885
Total	23,638	6,100	29,738

14. Industry.—The following table shows the population of Australia classified according to the industry group in which they are usually engaged. The number of breadwinners in Australia at 30th June, 1933, was 3,155,621, of whom 2,367,780 were males and 787,841 females. The term "breadwinner" generally includes persons of all ages who are employers, working on own account, wage and salary earners,

unemployed persons, pensioners, and those of independent means. Pensioners included in this number totalled 286,091. Excluding pensioners, the breadwinners numbered 2,869,530, comprising 2,239,677 males and 629,853 females. Owing to the adoption of an improved classification since the 1921 Census, in accordance with the recommendations of the Conference of Empire Statisticians, there has been some difficulty in making a strictly accurate comparison between the numbers engaged in each group at the Censuses of 1921 and 1933. The main divergence is that relating to the proportion of breadwinners to total population. This is the result of the exclusion of pensioners from the industry groups under the new classification.

At the 1921 Census pensioners were classified to their previous industry, or to the dependent or independent groups, whichever was stated. On this occasion, however, they were specifically directed to state if they were pensioners and they have been classed accordingly. These facts need to be borne in mind in considering the recorded changes to which attention is called below.

The proportion of breadwinners (including all pensioners shown) in the male population increased from 68.1 per cent. at the 1921 Census to 70.3 per cent. at the 1933 Census, and female breadwinners from 17.5 per cent. to 24.1 per cent. If pensioners are excluded, the proportion of breadwinners at the 1933 Census was as follows:—Males, 66.5 per cent. and females 19.3 per cent. Comparable figures for the year 1921 are not available.

Since the 1921 Census the total of male breadwinners, including pensioners, has increased by 25.8 per cent., and female breadwinners by 68.7 per cent. This increase in the number of female breadwinners is due in large measure to the increase in the stated number of old-age and invalid pensioners in 1933 as compared with the stated number in 1921. Excluding those who were not definitely stated to be associated with some occupation or industry, the number of breadwinners has increased by 17.9 per cent.—males by 15.4 per cent. and females by 27.9 per cent.

At the 1933 Census, as also at the previous Census, the Industrial group (factories, construction works, etc.) was the predominant group of industries and included 32.1 per cent. of the breadwinners (excluding those not definitely associated with industry) in Australia in 1933 as compared with 31.4 per cent. at the 1921 Census. The number of persons engaged in industrial occupations throughout Australia exceeded those in all primary industries by 209,120, or 32 per cent., as compared with 22 per cent. at the previous Census. The proportion of breadwinners engaged in the Agricultural, Pastoral and Dairying industries decreased from 21.0 per cent. at the 1921 Census to 20.3 per cent. in the year 1933.

During the intercensal period the aggregate increase in the number of males employed in each industry group was greater than that for females, with the exception of Personal and Domestic Service, and the Public Administration and Professional groups. The proportion of females to the total number of persons engaged in the various occupational groups has increased in the majority of groups, as follows:—Personal and Domestic Service from 76.2 per cent. in the year 1921 to 78.4 per cent. in the year 1933; Public Administration and Professional from 39.0 per cent. to 46.1 per cent.; Commerce and Finance from 21.8 per cent. to 24.9 per cent.; Entertainment, Sport and Recreation from 13.0 per cent. to 16.4 per cent.; Transport and Communication from 3.5 per cent. to 5.2 per cent.; and Agricultural, Pastoral, etc., from 2.1 per cent. to 3.6 per cent. In the Industrial group (factories, construction works, etc.), the numbers of persons engaged in the Building and Construction sections—where the proportion of females is low—have increased more than in the Factory group with the result that the proportion of females in the group has fallen from 16.7 per cent. to 15.9 per cent. Considered separately, it will be seen that the proportion of females in the several sections has scarcely altered since 1921 so that the smaller proportion of females in the group

as a whole is due to the altered values of the component parts of the group. In all industry groups taken together the proportion of females to the total number of persons engaged has increased from 19.9 to 21.6 per cent.

POPULATION: NUMBERS ENGAGED IN INDUSTRY, AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Industry Group.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Fishing and Trapping ..	10,671	81	10,752	14,570	41	14,611	3,859
Agricultural, Pastoral and Dairying ..	471,460	9,895	481,355	528,154	19,633	547,787	66,432
Forestry ..	30,191	89	30,280	26,019	114	26,133	4,147
Mining and Quarrying ..	66,524	242	66,766	68,327	193	68,520	1,754
Industrial—							
Manufacturing ..	326,847	118,727	445,574	375,434	136,077	511,511	65,937
Building ..	94,878	396	95,274	107,039	407	107,446	12,172
Roads, Earthworks, etc.	137,057	49	137,106	217,335	321	217,656	80,550
Other ..	39,126	726	39,852	28,584	974	29,558	10,294
Total Industrial ..	597,908	119,898	717,806	728,392	137,779	866,171	148,365
Transport and Communica- tion ..	200,523	7,214	207,737	212,161	11,732	223,893	16,156
Commerce and Finance ..	258,595	72,083	330,678	338,837	112,335	451,172	120,494
Public Administration and Professional ..	131,234	83,995	215,229	125,002	107,120	232,212	16,983
Entertainment, Sport and Recreation ..	15,517	2,313	17,830	20,278	3,972	24,250	6,420
Personal and Domestic Service ..	49,934	159,880	209,814	52,354	190,024	242,378	32,564
No Industry or Industry not stated ..	50,115	11,299	61,414	a 125,493	a 46,910	a 172,403	110,989
Pensioners ..	(b)	(b)	(b)	128,103	157,988	286,091	(b)
Total Breadwinners ..	1,882,672	466,989	2,349,661	2,367,780	787,841	3,155,621	805,960
Dependants ..	880,198	2,205,875	3,086,073	999,331	2,474,887	3,474,218	388,145
Total ..	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Includes unemployed persons for whom industry was not stated. (b) Comparable figure not available. NOTE.—Minus sign (—) denotes decrease.

15. **Grade of Employment.**—This table shows the population of Australia classified according to the capacity in which they are engaged in the various branches of industry. The number of employers at 30th June, 1933, was 207,680, an increase of 48.7 per cent. over the number stated at the 1921 Census, but actually 2 per cent. less than the number of employers at the earlier 1911 Census. Those persons who were stated to be working on own account showed an increase of 7.9 per cent. since the 1921 Census.

Of the population of Australia at 30th June, 1933, 2,099,548 persons or 31.7 per cent. were in the wage-earning group. This was slightly more than the percentage of 30.8 recorded at the previous Census. Since the 1921 Census the number of persons in the wage-earning group has increased by 26.3 per cent.—males increasing by 23.7 per cent., and females by 35.7 per cent.

The proportion of females to the total number of persons in the wage-earning group has increased from 22.6 per cent. in the year 1921 to 24.3 per cent. at the time of the 1933 Census.

Of the wage-earning group, 1,447,507 or 69.0 per cent. were in full-time employment at the date of the Census; 170,997 persons, or 8.1 per cent., were employed part-time (this number includes those who stated themselves to be on sustenance work or relief work); and 481,044, or 22.9 per cent., stated themselves to be unemployed.

POPULATION : GRADE OF EMPLOYMENT, AUSTRALIA, 1921 AND 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Grade.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Employer	129,142	10,481	139,623	186,849	20,831	207,680	68,057
Working on Own Account	296,291	46,030	342,321	318,951	50,424	369,375	27,054
Wage or Salary Earner	1,148,132	354,761	1,502,893	1,019,158	401,982	1,421,140	115,611
Apprenticed				20,674	5,693	26,367	
Wage Earner				144,170	26,827	170,997	
Employed Part-time	137,675	21,405	159,080	405,269	75,775	481,044	321,964
Unemployed	31,620	3,172	34,792	40,754	5,262	46,016	11,224
Helper not receiving Salary or Wages	994,590	2,229,653	3,224,243	1,226,806	2,674,756	3,901,562	677,319
Grade not applicable (a)	25,420	7,362	32,782	4,480	1,178	5,658	-27,124
Not Stated							
Total	2,762,870	2,672,864	5,435,734	3,367,111	3,262,728	6,629,839	1,194,105

(a) Includes pensioners, persons of private means not in business, females engaged in home duties, scholars and other dependants. NOTE.—Minus sign (—) denotes decrease.

16. Unemployment.—The number of persons who stated they were wholly unemployed at 30th June, 1933, totalled 481,044, or 22.9 per cent. of the number of persons in the wage-earning group. Of those unemployed, 405,269 were males and 75,775 females, representing a percentage of unemployment of 25.5 for males and 14.8 for females respectively.

Corresponding percentages of unemployment from the 1921 Census results were males 10.7 per cent. and females 5.7 per cent. At the 1933 Census 15,061 males and 7,710 females who were unemployed and under 21 years of age stated they had never been in employment.

The percentage of males unemployed in Australia according to the Census returns (25.5 per cent.) was practically the same as the percentage of members of reporting Trade Unions in Australia who were unemployed (25.4), as shown by the returns supplied by the Unions to the Commonwealth Statistician for the second and third quarters of 1933.

Of the 481,044 persons unemployed, 453,487 stated the cause of their unemployment : 90.9 per cent was due to scarcity of employment ; 5.6 per cent. to illness ; 1.1 per cent. to accident ; and 2.4 per cent. to all other causes. The proportion of wage earners who were unemployed as the result of illness and accident had decreased since the 1921 Census from 2.7 per cent. to 1.4 per cent. for males, and from 2.6 per cent. to 1.7 per cent. for females.

POPULATION : CAUSE OF UNEMPLOYMENT, AUSTRALIA, 1921 AND 1933.
(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Cause.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Scarcity of Employment ..	68,751	6,092	74,843	355,935	56,296	412,231	337,388
Illness	29,799	9,551	39,350	17,223	8,268	25,491	-13,859
Industrial Dispute	4,249	290	4,539	1,526	85	1,611	-2,928
Accident	4,556	246	4,802	4,484	391	4,875	73
Other Causes	24,069	4,061	(a)28,130	1,590	308	1,898	-26,232
Voluntarily (so described)	(b)	(b)	(b)	4,579	2,802	7,381	(b)7,381
Not Stated	6,251	1,165	7,416	19,932	7,625	27,557	20,141
Total	137,675	21,405	159,080	405,269	75,775	481,044	321,964

(a) Many classified as "Other Causes" were due to "Scarcity of Employment". (b) Not shown separately in 1921. (c) Excluding wage earners stated to be employed part-time or on Sustenance or Relief Work. NOTE.—Minus sign (—) denotes decrease.

Of those who stated the duration of their unemployment, 24.9 per cent. had been unemployed for less than 24 weeks; 14.1 per cent. between 24 weeks and 1 year; 13.9 per cent. between 1 and 2 years; 18.2 per cent. between 2 and 3 years; 18.9 per cent. between 3 and 4 years; and 10.0 per cent. for 4 years or longer. Sixty-four per cent. of the males unemployed and 43 per cent. of the females unemployed stated that a period of over one year had elapsed since they were last regularly employed.

POPULATION: DURATION OF UNEMPLOYMENT, AUSTRALIA, 1921 AND 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Duration of Unemployment.	Census 1921.			Census 1933.			Increase, 1921- 1933.
	Males.	Females.	Persons.	Males.	Females.	Persons.	
Under 1 week	12,107	1,751	13,858	1,970	682	2,652	- 11,206
1 week	14,250	2,318	16,568	4,612	1,980	6,592	- 9,976
2 weeks	11,537	1,795	13,332	5,698	2,218	7,916	- 5,416
3	9,477	1,424	10,901	5,035	1,917	6,952	- 3,949
4 weeks and under 8 weeks	20,957	3,289	24,256	16,637	5,382	22,019	- 2,237
8	12,202	1,958	14,160	13,711	3,771	17,482	3,322
12	10,662	1,698	12,360	17,815	4,542	22,357	9,997
16				10,352	2,441	12,793	
20				7,007	1,512	8,519	
24				24,607	6,306	30,913	
28				6,289	1,171	7,460	
32				6,046	1,103	7,149	
36				7,240	1,213	8,453	
40				3,882	691	4,573	
44				113	10	123	
48				2,170	358	2,528	
Total under 1 year				133,184	35,297	168,481	
1 year and under 2 years				50,344	9,700	60,044	
2 years 3				69,848	8,667	78,515	
3 4				75,895	5,660	81,564	
4 and over				40,607	2,616	43,223	
Not Stated	20,671	3,477	24,148	35,391	13,826	49,217	25,069
Total	137,675	21,405	159,080	405,269	75,775	481,044	321,964

(a) Excluding wage earners stated to be employed part-time or on Sustenance or Relief Work.

NOTE.—Minus sign (-) denotes decrease.

17. Income.—The 1933 Census was the first occasion on which any question regarding income was placed on the Census Schedule in Australia. Its successful introduction in the New Zealand Census in 1926 inspired the hope that a similar inquiry could be successfully undertaken in Australia. Of the 3,155,621 breadwinners in Australia, 3,052,582 gave the required particulars concerning their income; only 1.6 per cent. of the male and 2.7 per cent. of the female breadwinners failed to furnish this information. The breadwinner group comprised 207,680 employers, 369,375 persons working on own account, 1,447,507 wage and salary earners, 170,997 persons employed only part-time, 481,044 unemployed, 46,016 helpers not receiving wages, and 433,002 persons who did not state their grade of employment or to whom this classification was not applicable. This latter section includes pensioners, independent and retired persons and males over age 16 for whom particulars as to occupation were not stated. In addition to breadwinners, 218,616 persons, comprising dependants and others who stated that the questions concerning occupation were not applicable to their circumstances, were in receipt of some income during the year ended 30th June, 1933. The Census figures have now been analysed separately for employers, those working on own account, wage and salary earners, those in part-time employment, unemployed persons and pensioners.

The following table shows the information concerning income supplied by persons in the breadwinner group, classified in conjunction with grade of occupation :—

POPULATION : INCOME, AUSTRALIA, CENSUS 1933.

(EXCLUSIVE OF FULL-BLOOD ABORIGINALS.)

Income.	Em- ployer.	Working on own Account.	Wage or Salary Earner.	Wage Earner employed Part- time.	Unem- ployed.	Helper not receiving Wages.	Grade not applica- ble and not stated. (a)	Total Bread- winners.
MALES.								
No Income (b) ..	5,942	16,894	..	..	175,662	40,754	50,043	289,295
Under £52 per annum ..	12,042	74,424	187,238	59,271	147,109	..	86,130	566,814
£52 to £103 per annum ..	22,498	80,372	168,491	44,746	47,228	..	21,720	385,055
£104 „ £155 „ „ ..	26,475	50,477	134,733	23,937	17,141	..	14,270	273,033
£156 „ £207 „ „ ..	23,878	33,058	184,764	9,572	6,388	..	7,989	265,649
£208 „ £259 „ „ ..	21,362	19,716	170,670	2,473	2,419	..	6,132	222,772
£260 or over ..	72,252	35,087	183,915	655	1,245	..	14,650	307,804
Not Stated ..	1,800	2,923	10,021	3,516	8,077	..	31,021	57,358
Total ..	186,849	318,951	1,039,832	144,170	405,269	40,754	231,955	2,367,780
FEMALES.								
No Income (b) ..	766	4,631	..	..	37,273	5,262	11,339	59,271
Under £52 per annum ..	2,579	17,039	145,483	17,247	27,958	..	98,383	308,689
£52 to £103 per annum ..	4,268	14,149	133,434	7,926	6,500	..	22,279	188,550
£104 „ £155 „ „ ..	3,531	6,638	77,756	998	1,278	..	12,452	102,653
£156 „ £207 „ „ ..	2,367	2,848	30,052	123	236	..	5,924	41,550
£208 „ £259 „ „ ..	1,778	1,529	10,201	32	40	..	3,928	17,508
£260 or over ..	5,139	2,044	5,613	24	32	..	11,081	23,933
Not Stated ..	403	1,546	5,136	477	2,458	..	35,661	45,681
Total ..	20,831	50,424	407,675	26,827	75,775	5,262	201,047	787,841
Total Breadwinners ..	207,680	360,375	1,447,507	170,997	481,044	46,016	433,002	3,155,621

(a) Includes pensioners, persons of private means not in business, females engaged in home duties, scholars and other dependants. (b) Includes deficit.

§ 10. Dwellings.

1. Number of Dwellings.—The great majority of the questions on the Census Schedule related to the individual members of the household, but other important questions referred to the dwellings in which the people were living at the date of the Census. From the replies to these questions much valuable information has been tabulated concerning housing conditions. For census purposes a dwelling is the habitation of a family group, whether this comprises the whole of any building or only part thereof. Where two or more separate buildings in one place are used by a single family for dwelling purposes, the whole is regarded as one dwelling. On the other hand, where a building is subdivided into tenements or flats which are occupied as separate units, each unit is counted as a dwelling. A flat has been defined as a room or suite of rooms which was designed, or has been adapted, to be occupied as a separate domicile.

The Census definition of a dwelling includes private houses, tenements, flats, hotels, boarding-houses, hospitals, other institutions and any other structure used for the purpose of human habitation. Since the 1921 Census, the number of dwellings in Australia

including those being built has been increased by 407,714, or 33.7 per cent., which is a much higher rate of increase than that of 22.0 per cent. for the population during the same period. At the previous Census there was one private dwelling for every 4.9 persons in Australia but at 30th June, 1933, this ratio had increased to one dwelling for every 4.4 persons.

The following table represents a summary of the information relating to the number of dwellings in Australia at 30th June, 1933 :—

DWELLINGS : AUSTRALIA, CENSUS, 30th JUNE, 1933.

(Exclusive of Dwellings occupied solely by full-blood Aboriginals.)

Division.	Occupied.	Unoccupied.	Being Built.	Total.	Percentage of Total Dwellings.
Urban—					%
Metropolitan	732,247	24,123	976	757,346	46.79
Provincial	257,259	10,105	474	267,838	16.55
Rural	557,870	34,544	902	593,316	36.66
Total	1,547,376	68,772	2,352	1,618,500	100.00

Details for each State and Territory are as follows :—

DWELLINGS : STATES, CENSUS, 30th JUNE, 1933.

State or Territory.	Occupied.	Unoccupied.	Being Built.	Total.
New South Wales	599,750	28,737	746	629,233
Victoria	432,872	18,763	750	452,385
Queensland	216,122	9,311	301	225,734
South Australia	139,274	5,353	160	144,787
Western Australia	103,578	4,029	260	107,867
Tasmania	52,484	2,421	129	55,034
Northern Territory	1,301	55	1	1,357
Australian Capital Territory	1,995	103	5	2,103
Total	1,547,376	68,772	2,352	1,618,500

2. **Class of Dwelling.**—As previously indicated, the dwellings in which the people are housed comprise private houses, tenements, flats, hotels, boarding-houses, charitable institutions, 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, i.e., private houses, tenements and flats.

At the 1933 Census 1,509,671, or 97.6 per cent. of the total occupied dwellings in Australia, were private dwellings, as compared with 1,107,010, or 96.0 per cent., at the previous Census. During the intercensal period the number of private dwellings in the Commonwealth increased by 402,661, or 36.4 per cent.; those in the metropolitan areas increased by 244,993, or 52.4 per cent.; the urban provincial by 41,804, or 20.1 per cent.; and in the rural areas by 115,864, or 26.9 per cent.

DWELLINGS : CLASS OF OCCUPIED DWELLING, AUSTRALIA, 1921 AND 1933.
(Exclusive of Dwellings occupied solely by full-blood Aborigines.)

Class of Occupied Dwelling.	Number of Occupied Dwellings.								Increase, 1921-1933.
	Census, 4th April, 1921.				Census, 30th June, 1933.				
	Urban.		Rural	Total Australia.	Urban.		Rural.	Total Australia.	
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.			
Private House ..	440,092	202,270	426,245	1,068,607	651,138	240,199	543,182	1,434,519	365,912
Tenement or Flat ..	27,821	5,537	5,045	38,403	61,768	9,412	3,972	75,152	36,749
Total Occupied Private Dwellings ..	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661
Caretaker's Quarters in Store, Office, etc. ..	864	298	462	1,624	1,326	483	651	2,460	836
Hotel ..	1,925	2,330	3,711	7,966	1,683	1,853	3,062	6,598	1,368
Boarding-house, Lodging House, Coffee Palace ..	18,354	4,837	4,474	27,665	14,092	3,606	3,234	20,932	6,733
Educational Institution ..	400	325	309	1,034	479	303	359	1,141	107
Religious Institution (non-educational) ..	97	59	66	222	52	13	30	95	127(a)
Hospital ..	721	766	717	2,204	747	619	773	2,139	65(a)
Charitable Institution (other than Hospital) ..	240	109	260	609	253	66	109	428	181(a)
Penal Establishment ..	63	51	19	133	9	24	16	49	84(a)
Military or Naval Establishment ..	48	63	220	331	19	16	10	45	286(a)
Police Station or Barracks ..	207	386	882	1,475	209	300	1,011	1,520	45
Fire Station ..	158	82	25	265	117	102	42	261	4
Other (Includes Club) ..	194	165	2,388	2,747	310	231	1,308	1,849	-710
Not Stated ..					45	32	111	188	
Total Other Occupied Dwellings ..	23,271	9,471	13,533	46,275	19,341	7,648	10,716	37,705	- 8,570
Total Occupied Dwellings ..	491,184	217,278	444,823	1,153,285	732,247	257,259	557,870	1,547,376	394,091
Total Occupied Dwellings per square mile ..	492.26	59.68	0.15	0.39	579.99	82.99	0.19	0.52	0.13
Wagon, Van, etc. (includes campers-out)	63	570	4,588	5,221	268	1,669	7,444	9,381	4,160

(a) At the 1921 Census, detached buildings in some cases may have been counted separately, whereas in 1933 they have been counted together as one institution. NOTE.—Minus sign (—) denotes decrease.

3. **Number of Rooms.**—For Census purposes, the kitchen and any enclosed sleep-out or portion of a verandah that was permanently enclosed were included in the number of rooms in the dwelling, but the bathroom, pantry and store were not included unless generally used for sleeping. The average number of rooms per private house in Australia at 30th June, 1933, was 5.03, and was slightly higher than that of 4.99 rooms at the previous Census. The average per private house in the metropolitan areas increased from 5.24 to 5.36 rooms; in the provincial sections the average scarcely altered, being 5.09 as compared with 5.11; and in the rural areas the average of 4.60 rooms per house was slightly lower than at the 1921 Census when the average was 4.67.

The average number of rooms for all tenements and flats was considerably less than that for private houses, and showed a substantial decline from 3.77 to 3.08 rooms, indicating a tendency towards even smaller flats. The reduction in the size of tenements and flats occurred throughout all divisions; the average for the metropolitan areas fell from 3.74 to 3.22 rooms and for the provincial sections from 3.87 to 2.52 rooms, with the heaviest decline of all in the rural areas from 3.85 to 2.24 rooms.

DWELLINGS : OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO NUMBER OF ROOMS, AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.)

Number of Rooms per Dwelling (a)	Number of Occupied Private Dwellings.								Increase, 1921-1933.
	Census, 4th April, 1921.				Census, 30th June, 1933.				
	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.	
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.			
1	5,845	4,036	35,956	45,837	7,676	7,556	49,063	64,295	18,458
2	8,897	5,489	26,772	41,158	16,005	8,142	33,440	57,587	16,429
3	34,784	11,289	34,378	80,451	39,684	11,622	40,271	91,577	11,126
4	112,254	49,565	102,397	264,216	148,457	52,362	122,579	323,398	59,182
5	143,637	69,411	101,774	314,822	220,327	81,170	130,650	432,147	117,325
6	89,968	39,172	65,293	194,433	165,017	52,846	89,408	307,271	112,838
7	37,049	15,187	29,985	82,221	63,560	19,816	39,830	123,206	40,985
8	17,311	6,607	14,600	38,518	24,776	7,416	17,356	49,548	11,030
9	7,190	2,789	6,052	16,031	10,153	2,876	6,982	20,011	3,980
10	3,932	1,530	3,517	8,979	4,706	1,463	3,859	10,028	1,049
11	1,675	593	1,298	3,565	1,968	546	1,520	4,034	469
12	1,208	391	1,248	2,847	1,463	382	1,419	3,264	417
13	483	172	429	1,084	560	124	452	1,136	52
14	469	136	532	1,137	499	140	588	1,227	90
15	230	64	261	555	244	64	346	654	99
16	151	37	223	411	144	45	236	425	14
17	95	35	112	242	89	19	168	276	34
18	62	16	91	169	51	24	122	197	28
19	39	4	56	99	29	7	49	85	14
20 and over	199	54	308	561	131	32	352	515	46
Not Stated	2,435	1,231	6,008	9,674	7,367	2,959	8,464	18,790	9,116
Total Private Dwellings	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661
Average Number of Rooms per Private Dwelling (a) ..	5.15	5.07	4.66	4.94	5.23	5.06	4.65	4.99	0.05

(a) Includes kitchen and enclosed sleep-out or portion of a verandah that has been permanently enclosed but does not include bathroom, pantry, store or outhouse, unless generally used for sleeping.

NOTE.—Minus sign (—) denotes decrease.

4. Nature of Occupancy.—At the 1921 Census the nature of occupancy of private houses was not tabulated separately from tenements and flats. At the 1933 Census, however, it was ascertained that 42.8 per cent. of the private houses in Australia for which particulars were supplied were occupied by owners; 13.5 per cent. by purchasers by instalments; 39.1 per cent. by tenants; and 4.6 per cent. by others.

In the metropolitan areas 51.4 per cent. of the occupants of private houses were owners or purchasers by instalments, as compared with 54.4 per cent. in the provincial areas, and 63.2 per cent. in the rural areas. In the latter areas, however, the ownership of the house is associated with the ownership of the land acquired as a means of livelihood.

More than 91 per cent. of the tenements and flats in the Commonwealth were occupied by tenants. The figures for all private dwellings, including tenements and flats, show that at the 1933 Census 53.8 per cent. of the dwellings were occupied by owners or were in process of purchase by instalments and 41.7 per cent. were occupied by tenants, as compared with 53.7 per cent. and 41.7 per cent. respectively at the 1921 Census, showing practically no alteration during the intercensal period.

DWELLINGS: OCCUPIED PRIVATE DWELLINGS CLASSIFIED ACCORDING TO THE NATURE OF OCCUPANCY, AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.)

Nature of Occupancy.	Number of Occupied Private Dwellings.								Increase, 1921- 1933.
	Census, 4th April, 1921.				Census, 30th June, 1933.				
	Urban.		Rural.	Total Aus- tralia.	Urban.		Rural.	Total Aus- tralia.	
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.			
Owner	133,729	81,008	227,026	441,763	218,539	100,421	285,453	604,413	162,650
Purchaser by Instalments .. .	79,055	25,607	33,321	137,983	117,305	28,720	43,602	189,627	51,644
Tenant	241,567	91,031	117,082	449,680	360,393	108,359	146,660	615,412	165,732
Caretaker					6,410	5,022	29,331	40,763	
Other Methods of Occu- pancy	6,036	6,025	37,514	49,575	3,146	2,810	19,166	25,122	16,310
Not Stated	7,526	4,136	16,347	28,009	7,113	4,279	22,942	34,334	6,325
Total	467,913	207,807	431,290	1,107,010	712,906	249,611	547,154	1,509,671	402,661

5. **Rent per Week.**—The information which has been tabulated concerning rents is restricted to the actual rent paid per week for unfurnished private dwellings occupied by tenants. For 15.5 per cent. of the private houses the rent was less than 10s. per week; for 49.8 per cent., between 10s. and £1 per week; for 27.4 per cent., between £1 and £1 10s. per week; and for 7.3 per cent., over £1 10s. per week. Three-fourths of the houses with rents of less than 10s. per week were located outside the metropolitan areas.

The average rent was 17s. per week for unfurnished private houses throughout the Commonwealth. In the metropolitan areas the average was 10s. 7d. per week, in the provincial areas 15s. 9d., and in the rural areas 11s. 2d.

The average rent for unfurnished tenements and flats in the metropolitan areas was 23s. 6d. per week, or approximately 20 per cent. more than that paid for private houses in the same areas, notwithstanding that private houses in the metropolitan areas contain 50 per cent. more rooms than flats. In the provincial and rural areas, however, the rent of tenements and flats was approximately 15 per cent. and 11 per cent. respectively less than for private houses. For 16.9 per cent. of the tenements and flats a rent of less than 10s. per week was paid, and this percentage was slightly greater than for private houses; the 33.8 per cent. between 10s. and £1 per week was only two-thirds the proportion of private houses in this group; the percentage of 26.5 between £1 and £1 10s. per week was practically similar for private houses and flats; but the 22.8 per cent. of tenements and flats with rent exceeding £1 10s. per week was three times the percentage of private houses in this rental group.

A comparison of the average rents at the 1933 Census with those at the previous Census is possible for all private dwellings only and not for private houses separately from tenements and flats, which were not tabulated separately at the 1921 Census. The average rent of 17s. 6d. per week for all private dwellings comprising private houses, tenements and flats in the Commonwealth was 6 per cent. higher than that at the 1921 Census.

During the intercensal period particulars are collected regularly by the Commonwealth Statistician from house agents in certain cities and towns throughout the Commonwealth showing the rents as at the middle of each quarter. A comparison of these figures for the first quarter of 1921 with the second quarter of 1933 shows approximately the same change in average rents as was obtained from the Census figures. They also show that the peak period of high rents during the intercensal period occurred in the first quarter of 1928 when the average for the metropolitan areas of Australia was 21 per cent. higher than for 1921, but since that peak year the average has fallen by 20 per cent. to the 1933 figure.

In the metropolitan areas 15 per cent. of the total private dwellings were tenements and flats, and the percentages of the total numbers of private dwellings in the several rental groups which consisted of tenements and flats were as follows:—Under 10s. per week, 29 per cent.; between 10s. and £1, 10 per cent.; between £1 and £1 10s., 13 per cent.; between £1 10s. and £2, 26 per cent.; between £2 and £2 10s., 36 per cent.; and in the over £2 10s. per week rental group 47 per cent. were tenements and flats.

DWELLINGS : PRIVATE DWELLINGS OCCUPIED BY TENANTS CLASSIFIED ACCORDING TO THE RENT PER WEEK, AUSTRALIA, 1921 AND 1933.

(Exclusive of Dwellings occupied solely by full-blood Aborigines.)

Rent per week Unfurnished.	Number of Occupied Private Dwellings.								Increase, 1921-1933.
	Census, 4th April, 1921.				Census, 30th June, 1933.				
	Urban.		Rural.	Total Australia.	Urban.		Rural.	Total Australia.	
	Metro-politan.	Pro-vincial.			Metro-politan.	Pro-vincial.			
Under 5s.	1,067	3,317	18,304	22,688	1,663	2,837	14,869	19,309	- 3,319
5s. and under 10s.	12,786	19,885	37,957	70,628	20,333	13,865	32,083	66,281	- 4,347
10s. " " 15s.	56,331	31,158	29,830	117,319	71,755	30,618	33,435	135,808	18,480
15s. " " 20s.	56,581	16,535	10,189	83,305	86,365	25,186	16,036	127,587	44,282
20s. " " 25s.	40,486	9,104	5,683	55,273	74,460	16,806	9,173	100,439	45,166
25s. " " 30s.	25,373	3,709	1,516	30,628	39,777	6,310	2,860	48,447	18,319
30s. " " 35s.	14,305	1,884	1,061	17,250	21,493	2,827	1,051	25,281	8,031
35s. " " 40s.	5,900	441	207	6,548	8,274	712	180	9,166	2,618
40s. " " 45s.	6,589	570	469	7,628	7,992	505	170	8,667	1,030
45s. " " 50s.	2,726	179	126	3,031	2,642	95	55	2,792	- 239
50s. " " 55s.	1,556	123	85	1,764	1,488	57	21	1,566	- 198
55s. " " 60s.	579	24	26	629	593	10	5	608	- 21
60s. " " 65s.	503	35	34	572	445	5	2	452	- 120
65s. " " 70s.	210	11	3	224	189	6	...	195	- 29
70s. " " 75s.	580	14	29	623	482	7	4	493	- 130
75s. " " 80s.	15,995	4,042	11,533	31,570	22,532	8,513	36,716	67,761	36,191
80s. " " 85s. . . . .	...	...	...	...	...	...	...	...	...
85s. " " 90s. . . . .	...	...	...	...	...	...	...	...	...
90s. " " 95s. . . . .	...	...	...	...	...	...	...	...	...
95s. " " 100s. . . . .	...	...	...	...	...	...	...	...	...
100s. and over	...	...	...	...	...	...	...	...	...
Not Stated	...	...	...	...	...	...	...	...	...
Total Private Dwellings	241,567	91,031	117,082	449,680	360,393	108,359	146,660	613,412	165,732
Average Weekly Rent per Private Dwelling	20s. 8d.	14s. 0d.	9s. 11d.	16s. 6d.	20s. 2d.	15s. 7d.	11s. 2d.	17s. 6d.	18. 0d.

NOTE.—Minus sign (-) denotes decrease.

6. **Private Houses of Three to Six Rooms.**—A special inquiry was undertaken concerning private houses of three to six rooms with walls of wood, or of brick or stone, as a more satisfactory average of predominant rents paid by wage earners can be obtained by restricting the analysis to this group, which as previously indicated comprised 78.1 per cent. of the private houses in Australia.

Since the 1921 Census the number of houses of three to six rooms in Australia has increased by 34 per cent. to a total of 1,108,594. Particulars as to rent were summarized for 440,560 houses of this number with walls of wood, brick or stone which were occupied by tenants; 46 per cent. had walls of brick or stone and 54 per cent. of wood. The distribution is the same as that of the previous Census and there was no proportional increase in the number of brick houses of three to six rooms in the rented group during the intercensal period.

At the 1933 Census there was a smaller proportion of rented houses of three and four rooms and an increased proportion of those of five and six rooms, for both wooden houses and brick houses. The relative increases for rented houses of three, four, five and six rooms during the intercensal period were 2, 28, 43 and 60 per cent. respectively. The proportional increase of houses of five and six rooms was even higher in the metropolitan areas. The average rent of 18s. 5d. per week for all private houses, three to six rooms, of wood, brick or stone in the metropolitan areas at the 1933 Census was practically the same as at the previous Census.

In the provincial sections the average rent of 15s. 7d. per week was much higher than at the previous Census and the increase is found for all houses of three, four, five or six rooms, whether of wood, brick or stone. In the rural areas also the average rent of 11s. 6d. was much higher than that at the 1921 Census, and an increase is found in all types of houses included in this group.

An interesting comparison regarding the rent of private houses is that based on the average weekly rent per room. At the 1933 Census the average rent per room for wooden houses in the metropolitan areas of Australia was 3s. 5d. per week, and showed little alteration from the average of 3s. 6d. per week at the 1921 Census. Similarly, the average of 4s. 1d. per room for brick houses in the metropolitan areas was practically the same as at the previous Census.

In the urban provincial sections, however, the average rent of 3s. 1d. per room for wooden houses was higher than the 1921 Census figure of 2s. 8d. per week, and the rent of 3s. 6d. per week for brick houses was also higher in comparison with the previous figure of 3s. 1d. per week. The average rent per room in the rural areas also showed increases from 2s. 1d. to 2s. 6d. per week for wooden houses, and from 2s. 3d. to 2s. 7d. per week for those of brick. With the exception of brick houses in the metropolitan areas, the average rent per room for houses of three rooms was generally higher than for houses of four, five or six rooms. The increase since the 1921 Census in the rent per room was somewhat similar for all houses of three to six rooms in the provincial and rural sections of the Commonwealth.

DWELLINGS : AVERAGE WEEKLY RENT PER ROOM OF PRIVATE HOUSES, THREE TO SIX ROOMS, WITH WALLS OF WOOD, BRICK OR STONE, OCCUPIED BY TENANTS, AUSTRALIA, 1921 AND 1933.

(Exclusive of Tenements, Flats, Boarding-houses, Hotels, etc., and of Dwellings occupied solely by full-blood Aboriginals.)

Particulars.	Average Weekly Rent per Room.									Increase, 1921-1933.
	Census, 4th April, 1921.				Census, 30th June, 1933.				s. d.	
	Urban.		Rural.	Total. Aus- tralia.	Urban.		Rural.	Total. Aus- tralia.		
	Metro- politan.	Pro- vincial.			Metro- politan.	Pro- vincial.				
Private Houses 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>	
Wood—										
3 rooms	3 9	3 3	2 6	3 2	3 8	3 6	2 8	3 3	0 1	
4 "	3 7	2 9	2 2	2 10	3 7	3 4	2 7	3 2	0 4	
5 "	3 5	2 7	2 1	2 9	3 5	3 1	2 6	3 1	0 4	
6 "	3 5	2 6	2 0	2 7	3 4	2 11	2 3	2 11	0 4	
3 to 6 rooms ..	3 6	2 8	2 1	2 9	3 5	3 1	2 6	3 1	0 4	
Brick or Stone—										
3 rooms	4 0	3 5	2 4	3 10	4 0	3 9	2 6	3 11	0 1	
4 "	4 2	3 3	2 2	3 11	4 2	3 7	2 7	4 0	0 1	
5 "	4 2	3 1	2 3	3 10	4 1	3 6	2 8	3 11	0 1	
6 "	4 1	3 0	2 3	3 10	4 1	3 5	2 7	3 11	0 1	
3 to 6 rooms ..	4 2	3 1	2 3	3 10	4 1	3 6	2 7	3 11	0 1	
Wood, Brick or Stone—										
3 rooms	3 11	3 4	2 5	3 6	3 11	3 7	2 8	3 7	0 1	
4 "	3 11	2 11	2 2	3 3	3 11	3 4	2 7	3 6	0 3	
5 "	3 11	2 9	2 1	3 3	3 10	3 3	2 6	3 6	0 3	
6 "	3 11	2 8	2 0	3 3	3 10	3 1	2 4	3 5	0 2	
3 to 6 rooms ..	3 11	2 9	2 2	3 3	3 10	3 3	2 6	3 6	0 3	

§ 11. Oversea Migration.

i. Oversea Migration during 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 the *Demography Bulletins* issued by this Bureau give this information for the individual years. On pp. 532-3 of this chapter will be found a summary showing the increase by net migration to the population of the States from 1901 to 1935 in quinquennial groups and from 1930 to 1939 in single years. The following table shows for Australia as a whole the arrivals and departures as well as the net migration since 1901 :—

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	183,357	473,052	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
1930 ..	33,881	29,212	63,093	40,989	30,634	71,623	- 7,108	- 1,422	- 8,530
1931 ..	21,986	18,428	40,414	30,356	20,152	50,508	- 8,370	- 1,724	-10,094
1932 ..	22,637	19,360	41,997	24,864	20,130	44,994	- 2,227	- 770	- 2,997
1933 ..	24,457	23,335	47,792	25,053	22,525	47,578	- 596	810	214
1934 ..	27,451	26,253	53,704	26,428	24,996	51,424	1,023	1,257	2,280
1935 ..	27,676	27,740	55,416	28,182	27,523	55,705	- 506	217	- 289
1936 ..	29,726	30,168	59,894	29,045	29,352	58,397	681	816	1,497
1937 ..	35,123	34,679	69,802	32,161	32,438	64,599	2,962	2,241	5,203
1938 ..	39,910	38,018	77,928	34,206	34,585	68,791	5,704	3,433	9,137
1939 ..	37,719	37,366	75,085	31,491	29,703	61,194	6,228	7,663	13,891

NOTE.—Minus sign (—) indicates an excess of departures over arrivals.

The net migration has varied greatly during the foregoing periods, reaching a maximum in the five years 1921-25. The War of 1914-19, during which 331,781 members of the Australian Imperial Forces embarked for service overseas, was responsible for a very large increase in the departures during the years 1914 to 1918. Immigration increased rapidly from 1910 to 1912, the gain during the latter year being the greatest in any one year in the present century (with the exception of 1919 when the troops were returning to Australia).

Although the quinquennium 1926-30 as a whole resulted in the considerable gain of 129,707 persons, the figures for the individual years reveal the decline in immigration which set in after 1927 and which resulted in an actual loss of population in 1930, 1931, 1932 and 1935.

The influence of the Commonwealth immigration policy is clearly reflected in the figures above. The average annual number of nominated and selected immigrants arriving in Australia during the periods specified was as follows:—

IMMIGRATION: NUMBER OF NOMINATED AND SELECTED PERSONS.

Period.	Average Annual Number.	Year.		Recorded Number.
1901-05	Not available	1933	72	
1906-10	7,945	1934	159	
1911-15	30,111	1935	100	
1916-20	2,326	1936	9	
1921-25	23,090	1937	141	
1926-30	19,881	1938	852	
1931-35	156	1939	2,686	

The number of nominated and selected immigrants reached its peak in 1926, when 31,260 arrivals were recorded.

2. **Country of Embarkation and Destination.**—The countries from which the migrants arrived or to which they departed are shown for the year 1939 in *Demography Bulletin* No. 57. Annual averages for the period 1925-29 appear in *Official Year Book* No. 25.

3. **Nationality or Race.**—The majority of migrants to and from Australia are of British nationality, while only a small proportion are of non-European race.

The numbers of arrivals and departures of migrants since 1926 classified according to nationality or race are shown in the next table:—

NATIONALITY OR RACE OF ARRIVALS AND DEPARTURES: AUSTRALIA.

Nationality or Race.	Arrivals.			Departures.		
	1926-30.	1931-35.	1939.	1926-30.	1931-35.	1939.
British	386,669	200,159	56,094	281,449	210,549	52,764
French	3,394	3,090	431	3,292	3,003	491
German	3,172	1,446	5,583	1,961	1,294	712
Greek	3,842	1,435	996	2,040	1,629	185
Italian	19,170	7,234	2,460	8,617	5,711	563
Yugoslav	4,426	1,203	499	2,280	1,242	202
American, U.S.	8,916	5,065	2,318	8,101	5,119	2,359
Other European	15,355	4,432	3,899	7,001	4,863	1,256
Total European	444,944	224,064	72,280	314,741	233,410	58,532
Chinese	15,649	8,709	1,639	17,513	9,972	1,572
Japanese	1,762	1,625	251	2,004	2,050	296
Indian and Cingalese	2,790	2,007	527	2,095	1,775	518
Other Non-European	5,335	2,918	388	4,420	3,002	276
Total Non-European	25,536	15,259	2,805	26,032	16,799	2,662
Total	470,480	239,323	75,085	340,773	250,209	61,194

During the period 1926-30 there was a considerable influx of Italian, Greek and Yugoslav settlers, so that although there was also much concurrent emigration of these nationals they provided a large permanent addition to the population of Australia. In the following quinquennium 1931-35, however, there was a considerably reduced increment to the Italian population by migration, whilst there was actually an excess of departures of most other nationals. In 1939 the net addition of Southern Europeans to the population was 3,396 persons, compared with 3,782 in 1937 and 4,309 in 1938. Usually there is an excess of departures of non-European people as a whole though it is not true of all non-European nationals, but in each of the last three years the movements of non-Europeans resulted in an excess of arrivals. The net gain or loss according to nationality or race for the same periods and the percentage of each nationality on the total gain or loss for the year are given in the following table:—

NET GAIN OR LOSS : NATIONALITY OR RACE, AUSTRALIA.

Nationality or Race.	Net Gain or Loss.			Proportion.		
	1926-30.	1931-35.	1939.	1926-30.	1931-35.	1939.
				Per cent.	Per cent.	Per cent.
British	105,220	— 10,390	3,330	81.12	— 95.44	23.97
French	102	87	60	0.08	0.80	0.43
German	1,211	152	4,871	0.93	1.40	35.07
Greek	1,802	— 194	811	1.39	— 1.78	5.84
Italian	10,553	1,523	1,897	8.14	13.99	13.65
Yugoslav	2,146	— 39	297	1.65	— 0.36	2.14
American, U.S. ..	815	— 54	41	0.63	— 0.50	0.30
Other European ..	8,354	— 431	2,643	6.44	— 3.96	19.03
Total European ..	130,203	— 9,346	13,748	100.38	— 85.85	98.97
Chinese	— 1,864	— 1,263	67	— 1.44	— 11.61	0.48
Japanese	— 242	— 425	45	— 0.19	— 3.90	0.32
Indian and Cingalese	695	232	9	0.54	2.13	0.06
Other Non-European	915	— 84	112	0.71	— 0.77	0.81
Total Non-European	— 496	— 1,540	143	— 0.38	— 14.15	1.03
Total ..	129,707	— 10,886	13,891	100.00	— 100.00	100.00

Owing to the depressed conditions in Australia the gain by migration decreased rapidly during the years 1928 and 1929 and there were actual losses of population during the next three years. There was little variation in the figures for arrivals and departures from 1933 to 1936, but in 1938 the arrivals exceeded the departures by 9,137 and in 1939 the excess was 13,891, the greatest gain to the population by migration since 1928. Migrants of German nationality showed the greatest net gain in numbers in 1939, followed by British and Italians in that order. Over 81 per cent. of the net migration in 1926-30 consisted of persons of British nationality and the remaining 19 per cent. were other Europeans. In the following quinquennium, 1931-35, there was a loss by migration of persons of British nationality and a gain of those of Italian nationality. Non-Europeans, with the exception of Indians and Cingalese, also showed an excess of departures.

4. **Classes of Arrivals and Departures.**—Since 1st July, 1924, the arrivals and departures have been classified according to the declared intention of the migrant in regard to intended residence. The figures for the quinquennial periods 1926–30 and 1931–35 and for the years 1937 to 1939 are as follows :—

MIGRANTS CLASSIFIED ACCORDING TO INTENDED RESIDENCE : AUSTRALIA.

Classification.	1926-30.	1931-35.	1937.	1938.	1939.
Permanent new arrivals ..	224,010	54,444	16,291	19,548	24,068
Australian residents returning from abroad ..	121,395	84,554	25,198	24,900	24,756
Temporary visitors ..	125,029	100,325	28,313	33,480	26,261
Not Stated	46	..	..	..	..
Total Arrivals ..	470,480	239,323	69,802	77,928	75,085
Australian residents departing permanently ..	103,209	71,670	11,216	11,403	11,541
Departing temporarily ..	111,714	79,426	24,350	24,163	19,361
Temporary visitors ..	125,772	99,108	29,033	33,225	30,292
Not Stated	78	5	..	..	..
Total Departures ..	340,773	250,209	64,599	68,791	61,194

Although permanent new arrivals increased during each of the last eight years the number in 1939 was considerably below the annual average for the quinquennium 1926–1930. Permanent departures were far more numerous in the years 1928 to 1931 than in the earlier years of the period but they declined during each of the six years ended 1937, the number in the latter year being the lowest yet recorded. Up to and including 1929 there was a considerable gain of permanent residents, but during 1930 and 1931 there was a heavy loss. The loss was very much reduced in 1932, 1933 and 1934, whilst during the past five years there was a small gain in permanent residents.

The figures in the table above are based on the information supplied by travellers at the time of arrival or departure. For various reasons the intentions of travellers are subject to subsequent modification, and the figures quoted in the table must therefore be accepted as a record of intention only.

§ 12. Immigration.

(A) Assisted Migration into Australia.

1. **Joint Commonwealth and States' Scheme.**—In 1920 an arrangement was arrived at between the Commonwealth and State Governments whereby the Commonwealth became responsible for the recruiting and medical inspection of migrants, and for their transport to Australia. The State Governments advised the Commonwealth from time to time as to the numbers and classes of migrants they were prepared to receive, and became responsible for their subsequent settlement. In addition, personal and group nominations were accepted by the States, the nominators undertaking responsibility for their settlement and after care.

In 1930 owing to the financial and industrial depression it was decided to confine the grant of assisted passages to the wives and dependent children of men who arrived in the Commonwealth prior to 1st January, 1930.

On 4th March, 1938, the Commonwealth decided, in co-operation with the Government of the United Kingdom, to resume assisted migration, and provision was made for the grant of assisted passages from the United Kingdom in favour of—

- (a) persons (relatives and friends) resident in the United Kingdom nominated by individuals or approved organizations ;
- (b) migrants specially requisitioned for by any State ; and

(c) persons of British stock resident in the United Kingdom, who would be in possession of—

(1) in the case of a married man, not less than £300 capital on arrival in Australia, or alternatively, a pension or other income of not less than £100 per annum;

(2) in the case of a single man not less than £50 capital on arrival.

It was also decided that the Commonwealth Government would co-operate with any State to the extent that the migration policy of that State coincided with the policy of the Commonwealth, provided that the Commonwealth would itself deal with nominations which did not fall within the ambit of the policy of any particular State, but which were acceptable under the Commonwealth policy.

2. Assisted Passage Rates.—The British and Commonwealth Governments jointly contribute towards the fares of approved migrants, the rates in operation being tabled as under:—

IMMIGRATION: ASSISTED PASSAGE RATES.

Migrant.	Fare Charged to Migrant. (a)	Amount of Assistance jointly contributed by British and Commonwealth Governments.
	£ s. d. Sterling.	£ s. d. Sterling.
Married persons and widows or widowers accompanied by at least one child under 19 years (children at rate according to age) .. each	11 0 0	26 0 0
Married persons and widows or widowers without at least one child under 19 years .. each	16 10 0	20 10 0
Other adults, 19 years and over ..	16 10 0	20 10 0
Juveniles, 17 and under 19 years ..	11 0 0	26 0 0
Juveniles, 12 and under 17 years ..	5 10 0	31 10 0
Children under 12 years ..	Free	18 10 0

(a) As a result of the recent increase in passage money rates during the War, the fares charged to migrants in this column have been increased by £7 sterling, and in the case of children under twelve years of age by £3 10s. sterling.

The Commonwealth Government also decided to make a grant of a passage money contribution equivalent to one-half of the tourist steamer fare from India to Australia in respect of retired British Army Officers and Civil Servants resident in India and Burma. This concession covers their wives and families.

Further information may be obtained from the Secretary, Department of the Interior, Canberra, Australian Capital Territory, or from the Official Secretary, High Commissioner's Office, Australia House, Strand, London, W.C.2.

3. Number of Persons Assisted.—The number of assisted migrants for the years 1929 to 1939 inclusive, and the total from the earliest years up to the end of 1939, are given in the following table:—

IMMIGRATION: NUMBER OF PERSONS ASSISTED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
1929	5,431	2,604	1,292	526	2,976	101	13	12,943
1930	1,174	468	484	61	471	20	5	2,683
1931	76	45	43	6	99	5	1	275
1932	21	3	23	..	123	5	..	175
1933	11	3	1	1	56	..	..	72
1934	11	4	1	..	143	..	..	159
1935	1	..	1	..	98	..	..	100
1936	4	2	1	..	2	..	..	9
1937	60	33	6	3	39	..	..	141
1938	410	179	19	43	161	38	2	852
1939	1,309	544	376	126	304	24	3	2,686
Total from earliest years to end of 1939.. ..	347,613	256,070	236,397	115,990	87,010	25,019	72	1,068,171

4. Suspension of Assisted Passage Scheme during War.—Consequent upon the outbreak of hostilities the United Kingdom and Commonwealth Governments decided to discontinue the grant of assisted passages during the War, except in cases of close family reunion involving wives and dependent children, and other special cases having exceptional features, for which special approval is required.

(B) The Regulation of Immigration into Australia.

1. Powers and Legislation of the Commonwealth.—(i) *Constitutional.* Under Part V., Sec. 51, xxvii, and xxviii. of the Commonwealth Constitution Act, the Parliament of the Commonwealth is empowered to make laws with respect to immigration and emigration and the influx of criminals.

(ii) *Legislation.* A summary of the provisions of the Immigration Act 1901–1925 and the Contract Immigrants Act 1905 (except the provisions of the Amending Immigration Acts of 1920, 1924 and 1925, which will be found in Official Year Book No. 21, p. 927), containing particulars regarding the admission of immigrants, prohibited immigrants, the liabilities of shipmasters and others, and kindred matters will be found in preceding issues of the Official Year Book (see No. 12, pp. 1166–8).

The Immigration Act 1930.—Under this Act it is provided that Section 5, subsection (1) of the Immigration Act 1901–1925 applies to any person who, since the commencement of the Immigration Restriction Act 1901, evaded an officer when entering Australia, or gained admission or re-admission by fraudulent means. Steps can be taken to deal with such persons as prohibited immigrants at any time after they have landed in Australia.

The Immigration Act 1932.—This Act provides (a) that any alien who fails to satisfy an officer that he holds a landing permit, or that his admission has been authorized, may be prohibited from landing; (b) for the increase of the period during which a person may be declared a prohibited immigrant from three to five years; (c) that a person not a British subject and who has been convicted of a crime of violence against the person may be deported pursuant to an order of the Minister without his being subjected to a dictation test; (d) for the deportation of a person who has been convicted of a criminal offence or who has become an inmate of an insane asylum or public charitable institution within five years from the date of arrival instead of three years as hitherto; and (e) that where the wife of a person whom it is proposed to deport so desires, her name and the names of her dependent children may be included in her husband's deportation order. This would of course apply only to wives and children who were themselves immigrants.

The Immigration Act 1933.—This Act provides that Section 8A, as amended by the Immigration Act 1932—see (d) above—shall apply to persons who arrived in Australia since the commencement of the Section, i.e., since 2nd December, 1920. It also makes statutory provision for the taking of securities for compliance with the provisions of the Act.

The Immigration Act 1935.—The main purpose of this Act was to add a penalty clause to Section 5 of the principal Act, to overcome a legal difficulty which had arisen in regard to relying on Section 7 for the imposition of penalties on persons convicted under Section 5 on charges of being prohibited immigrants offending against the Act.

The Immigration Act 1940.—This Act provides (a) that the holder of a landing permit shall on demand satisfy an officer that he is able to comply with the conditions specified in the permit; (b) for the issue of, and extensions of, certificates of exemption; (c) that a non-British person who is convicted of a crime of violence against the person

or of extorting any money or thing by force or threat, or of any attempt to commit such a crime or who is convicted of any other criminal offence for which he is sentenced to imprisonment for one year or longer may be deported; (d) for the exercise of discretion by the Minister in enforcing an order for the deportation of a person; and (e) for the provision and enforcement of maintenance guarantees in relation to persons seeking to enter the Commonwealth.

2. **Conditions of Immigration into Australia.**—(i) *Immigration of Non-European or Coloured Persons.* In pursuance of the "White Australia" policy, the general practice is not to permit Asiatics or other coloured immigrants to enter Australia for the purposes of settling permanently.

There are special arrangements with India, Japan and China under which facilities are afforded for subjects of those countries who are bona fide merchants, students, or tourists to enter and remain in Australia under exemption whilst they retain their status.

(ii) *Immigration of White Aliens.* Aliens seeking to enter Australia for permanent residence are required to obtain landing permits or special authority for admission from the Department of the Interior. Applications for such permits are considered on their merits in respect of the following classes :—

- (a) Dependent relatives of persons already settled in Australia, subject to satisfactory guarantees for maintenance. (*Note.*—The term "dependent relatives" includes wives, children under 21 years of age, adult single daughters and sisters, parents and fiancées.)
- (b) Aliens outside the category of dependent relatives who (i) are nominated by persons in Australia guaranteeing to the satisfaction of the Minister that the nominees will not be allowed to become a charge upon the State; (ii) will engage in trades and occupations in which there is opportunity for their absorption without detriment to Australian workers; and (iii) are in possession of £50 (Australian) landing money.
- (c) Aliens without guarantors in Australia who will engage in trades and occupations in which there is opportunity for their absorption without detriment to Australian workers, provided also that they are in possession of £200 (Australian) landing money. Every alien applying for admission is required to furnish satisfactory certificates of health and character and, except in the case of dependent relatives, to submit evidence of his qualifications to follow his proposed occupation in Australia.

Aliens seeking to enter Australia are also required to hold valid national passports visaed by a British Consul for travel to Australia except in cases where visa requirements have been abolished by reciprocal arrangements to which the Commonwealth Government is a party. At the outbreak of War the exemptions applied to nationals of the following countries :—Belgium, Denmark, France, Italy, Liechtenstein, Netherlands, Norway, Portugal, Spain, Sweden and Switzerland, but under the National Security (Passport) Regulations, Statutory Rules 1939, No. 89, all aliens will require to obtain British visas before entering Australia during the period those Regulations remain in force.

Following the outbreak of War, alien immigration into Australia was severely restricted, and at present the admission of aliens from European countries has been virtually suspended.

(iii) *General Information.* General information as to conditions of entry into Australia may be obtained from the following offices :—

- (a) In Australia : The Secretary, Department of the Interior, Canberra, A.C.T., Australia; (b) In Great Britain : The Official Secretary, High Commissioner's Office, Australia House, Strand, London, England; (c) In the United States of America : The Australian Government Trade Commissioner in the United States of America, 630 Fifth Avenue, New York, U.S.A.

3. **Persons Admitted Without Dictation Test.**—The following table shows the number and nationality of persons admitted during 1939 without passing the dictation test. Persons who are permitted to land pending transhipment to another country are not included :—

**PERSONS ADMITTED WITHOUT DICTATION TEST : NATIONALITIES,
AUSTRALIA, 1939.**

Nationality or Race.		1939.	Nationality or Race.		1939.
Albanian	.. ..	259	American, U.S.	.. ..	2,318
Belgian	.. ..	58	Other Whites	.. ..	274
British	.. ..	55,870	American Negro	.. ..	8
Bulgarian	.. ..	40			
Czechoslovak	.. ..	354	ASIATIC—		
Danish	.. ..	96	Chinese	.. ..	701
Dutch	.. ..	456	Filipino	.. ..	17
Estonian	.. ..	67	Japanese	.. ..	276
Finnish	.. ..	37	Javanese	.. ..	4
French	.. ..	429	Koepanger	.. ..	56
German	.. ..	5,583	Malay	.. ..	11
Greek	.. ..	996	Indian and Cingalese	.. ..	293
Hungarian	.. ..	522	Palestinian	.. ..	104
Italian	.. ..	2,460	Syrian	.. ..	3
Maltese (British)	.. ..	212			
Norwegian and Swedish	.. ..	93	OTHER—		
Polish	.. ..	1,016	Maori	.. ..	1
Russian	.. ..	377	Pacific Islander	.. ..	19
Spanish	.. ..	26	Papuan	.. ..	130
Swiss	.. ..	235	Other and Unspecified	.. ..	83
Yugoslav	.. ..	499	Total	.. ..	73,983

4. **Departures of Persons of Non-European Races.**—The following figures in common with the other statistics in this sub-section have been compiled by the Department of the Interior and are exclusive of transhipments. They are not therefore in agreement with departures, compiled in this Bureau and published elsewhere, which include transhipments. The number of persons of non-European race who left Australia during 1939 was 1,936, distributed among the various nationalities as follows:—American Negroes, 1; Arabs, 1; Chinese, 694; Filipinos, 35; Natives of India and Ceylon, 454; Japanese, 433; Javanese, 7; Koepangers, 44; Malays, 36; Pacific Islanders, 32; Papuans, 122; West Indians, 8; other coloured, 69.

(C) Passports.

Provision is made in the Immigration Act 1901–1940 for the production of passports by all persons over 16 years of age who desire to enter Australia. Under the Passports Act 1920, it was compulsory also for all persons over 16 years of age to be in possession of a passport or other document authorizing his departure. This Act has now been superseded by the Passports Act 1938, which has dropped the compulsory provisions and is now simply a machinery measure governing the issue of passports and the grant of other passport facilities. The Act extends to the Territories of the Commonwealth, including Papua, Norfolk Island and the Mandated Territory of New Guinea.

Although it is no longer compulsory to be in possession of a passport when leaving Australia, it is very desirable in their own interests that Australians proceeding abroad should provide themselves with a passport as a means of establishing their identity and nationality. The possession of a passport is necessary for admission into most countries overseas, and the holder of an Australian passport also has no difficulty in landing on return to the Commonwealth. The charge for an Australian passport is £1; for an ordinary visa 8s. and for a transit visa, 2s.

§ 13. Naturalization.

1. **Commonwealth Legislation.**—Naturalization in Australia is governed by the Nationality Act 1920-1936. The qualifications necessary for naturalization are:—
 (a) Residence in Australia continuously for not less than one year immediately preceding application for naturalization and previous residence either in Australia or in some other part of His Majesty's dominions for a period of four years within the last eight years before the application; (b) good character and an adequate knowledge of the English language; and (c) intention to settle in the British Empire.

The amending Act of 1930 provided for the charge of a prescribed fee for a Certificate of Naturalization. The fee is £5, except in the case of a certificate granted to a woman who was a British subject prior to her marriage to an alien, in which case the amount is 5s. An applicant who served with a good record in the Commonwealth Naval or Military Forces during the War of 1914-19 is exempt from payment of any fee. In the case of indigent persons the Minister may reduce the fee payable for a Certificate of Naturalization to 10s.

The amending Act of 1936 provided for certain alterations in the law dealing with the national status of married women, and vested in the Minister for the Interior certain powers and functions hitherto exercised by the Governor-General.

The amending Act, which came into operation on 1st April, 1937, provided for the following exceptions of the general principle that the wife of a British subject shall be deemed to be a British subject, and the wife of an alien deemed to be an alien:—

- (a) a woman who was a British subject prior to her marriage to an alien does not cease to be a British subject unless by reason of her marriage she acquires her husband's nationality;
- (b) if a man, during the continuance of his marriage, ceased to be a British subject his wife does not lose her British nationality unless she acquires her husband's new nationality;
- (c) if a man, during the continuance of his marriage ceased to be a British subject and his wife acquires his new nationality she may within one year from the date of which she acquired her husband's new nationality, or within such further time as the Minister in special circumstances allows, make a declaration that she desires to retain her British nationality;
- (d) if after 31st March, 1937, a certificate of naturalization is granted to an alien, his wife, if she is not already a British subject, shall not be deemed to be a British subject, unless within one year from the date of such certificate, or within such further time as the Minister in special circumstances allows, she makes a declaration that she desires to acquire British nationality.
- (e) where an alien is a subject of a State at war with His Majesty, his wife, if she was a natural born British subject, may upon making a declaration that she desires to resume British nationality be granted a certificate of naturalization.

Provision was also made in the amending Act whereby a woman who was a British subject prior to her marriage and who acquired her husband's nationality may make a declaration that she desires to retain while in Australia or in a Territory to which the Act applies the rights, powers and privileges of a British subject.

A summary of the main provisions of the Principal Act appears in Official Year Book No. 22, pp. 934-5.

2. Certificates Granted.—(i) *Australia*. Particulars regarding the previous nationalities of the recipients of certificates of naturalization issued under the Act during the year 1939, and the countries from which such recipients had come, are given in the following table :—

NATURALIZATION : CERTIFICATES GRANTED, 1939.

Previous Nationalities of Recipients.				Countries from which Recipients of Commonwealth Certificates had come.			
Nationality.	Certificates Granted.	Nationality.	Certificates Granted.	Country.	Certificates Granted.	Country.	Certificates Granted.
Albanian ..	22	Lithuanian ..	7	Albania ..	19	Lebanon ..	3
American, U.S. ..	23	Luxemburger ..	1	U.S.A. ..	61	Lithuania ..	6
Argentinian ..	2	Mexican ..	1	Belgium ..	14	Mexico ..	9
Belgian ..	6	Norwegian ..	37	Bulgaria ..	14	New Hebrides ..	9
Bulgarian ..	14	Palestinian ..	33	China ..	20	Norway ..	24
Chinese ..	2	Peruvian ..	1	Czechoslovakia ..	17	Palestine ..	64
Czechoslovak ..	37	Polish ..	105	Denmark ..	23	Poland ..	58
Danish ..	36	Portuguese ..	1	Holland ..	14	Portugal ..	1
Dutch ..	16	Roumanian ..	7	Egypt ..	28	Roumania ..	2
Estonian ..	38	Russian ..	71	Estonia ..	29	Spain ..	18
Finnish ..	31	Spanish ..	23	Finland ..	18	South Africa ..	11
French ..	21	Swedish ..	34	France ..	50	Sweden ..	23
German ..	169	Swiss ..	38	Germany ..	129	Switzerland ..	29
Greek ..	144	Syrian ..	10	Great Britain ..	105	Syria ..	9
Hungarian ..	6	Turkish ..	8	Greece ..	119	U.S.S.R. (Russia) ..	19
Italian ..	902	No State ..	1	Hungary ..	2	Others ..	38
Yugoslav ..	79			Italy ..	893		
Latvian ..	12			Yugoslavia ..	66		
Lebanese ..	5	Total ..	1,943	Latvia ..	5	Total ..	1,943

(ii) *States*. The certificates of naturalization granted in 1939 were issued in the various States as follows :—New South Wales, 628; Victoria, 676; Queensland, 248; South Australia, 100; Western Australia, 269; Tasmania, 10; Northern Territory, 6; and the Australian Capital Territory, 5; Total, 1,942.

§ 14. Population of Territories.

At the Census of 30th June, 1933, special arrangements were made to obtain complete and uniform information concerning each of the six Territories of Australia including the Mandated Territories of New Guinea and Nauru, namely :—(1) Northern Territory; (2) Australian Capital Territory; (3) Norfolk Island; (4) Papua; (5) Mandated Territory of New Guinea; and (6) Mandated Territory of Nauru.

A summary of the figures as to the population and number of dwellings in each Territory at the Census of 1933 is given in the following table :—

**POPULATION AND DWELLINGS : TERRITORIES, 30th June, 1933.
(EXCLUSIVE OF INDIGENOUS POPULATION.)**

Territory.	Population.			Dwellings.			
	Males.	Females.	Persons.	Occu- pied.	Unoccu- pied.	Being Built.	Total.
Northern Territory ..	3,378	1,472	4,850	1,301	55	1	1,357
Australian Capital Territory ..	4,805	4,142	8,947	1,995	103	5	2,103
Norfolk Island ..	662	569	1,231	383	34	6	423
Papua ..	1,232	941	2,173	683	35	1	719
Territory of New Guinea (Mandate) ..	3,709	1,507	5,216	1,776	26	7	1,809
Nauru (Mandate) ..	1,037	64	1,101	81	13	..	94

Particulars concerning the indigenous populations of the Territories of the Commonwealth are included in Chapter XI, "The Territories of the Commonwealth."

A Census was taken in the Australian Capital Territory on 30th June, 1938, and the results were as follows:—

Population: Males, 6,286; Females, 5,276; Total, 11,562.

Occupied Dwellings: 2,477.

Since the 1933 Census the population had increased by 29 per cent. and the number of occupied dwellings by 24 per cent.

§ 15. The Aboriginal Population of Australia.

In Official Year Book No. 17, pp. 951-61, a brief account is given of the Australian aboriginal population, its origin, its numbers as estimated from time to time, and the steps taken for its protection. On pp. 914-16 of Official Year Book No. 22 particulars are 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 appears on pp. 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. At a Census of aboriginals taken on 30th June, 1939, the following particulars were disclosed:—

ABORIGINAL CENSUS, 30th June, 1939.

State or Territory.	Full-blood.					Half-caste.					Total Full-blood and Half-caste.
	Nomadic.	In Employment.	In Supervised Camps. (a)	Other.	Total.	Nomadic.	In Employment.	In Supervised Camps. (a)	Other.	Total.	
New South Wales	46	265	370	113	794	472	2,595	3,489	3,513	10,069	10,863
Victoria	..	22	25	34	81	7	230	237	245	719	800
Queensland	1,544	3,750	5,079	1,057	12,030	98	2,088	2,115	2,477	6,778	18,808
South Australia	1,578	441	384	281	2,684	691	422	811	273	2,197	4,881
Western Australia	15,235	3,844	2,036	763	21,878	797	1,052	1,723	1,116	4,688	26,566
Tasmania	1	..	..	..	1	53	6	204	10	273	274
Northern Territory	6,823	3,021	3,044	601	14,089	15	424	369	105	913	15,002
Australian Capital Territory	..	..	..	..	..	..	..	75	..	75	75
Australia	25,227	11,343	12,138	2,849	51,557	2,133	6,817	9,023	7,739	25,712	77,269

(a) This figure does not include those living in supervised camps who were in regular employment.

§ 16. The Chinese in Australia.

In Official Year Book No. 18, pp. 951-6, a brief historical sketch is given regarding "The Chinese in Australia."

§ 17. The Pacific Islanders in Australia.

In Official Year Book No. 19, pp. 902-3, a brief account is given of the introduction of Kanakas into Australia.

CHAPTER XXI. VITAL STATISTICS.

§ 1. Live Births.

1 Number in 1939.—The number of live births registered in Australia during the year ended 31st December, 1939, is shown in the table hereunder. The numerical relation which these births bear to the population, and various other associated features, are given in later tables.

LIVE BIRTHS, 1939.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A.C.T.	Australia.
MALES.									
Single births	24,042	15,421	10,141	4,894	4,557	2,530	65	129	61,779
Twins ..	501	302	196	88	92	65	..	3	1,247
Triplets ..	14	5	3	5	..	..	..	..	27
Total ..	24,557	15,728	10,340	4,987	4,649	2,595	65	132	63,053
FEMALES.									
Single births	22,932	14,441	9,819	4,548	4,304	2,367	73	114	58,598
Twins ..	506	323	186	82	83	42	..	5	1,227
Triplets ..	8	1	3	1	..	..	..	..	13
Total ..	23,446	14,765	10,008	4,631	4,387	2,409	73	119	59,838
TOTAL.									
Single births	46,974	29,862	19,960	9,442	8,861	4,897	138	243	120,377
Twins ..	(a)1,007	(b) 625	382	170	(c)175	(d)107	..	8	(e) 2,474
Triplets ..	(f) 22	(g) 6	6	6	..	..	..	..	(h) 40
Total ..	48,003	30,493	20,348	9,618	9,036	5,004	138	251	122,891
TOTAL CONFINEMENTS (LIVE BIRTHS).									
Mothers of Nuptial Children ..	45,531	29,048	19,156	9,258	8,622	4,725	113	244	116,697
Mothers of Ex-Nuptial Children ..	1,975	1,134	997	271	329	226	25	3	4,960
Total Mothers	47,506	30,182	20,153	9,529	8,951	4,951	138	247	121,657

(a) 41 still-born twins not included. (b) 9 still-born twins not included. (c) 5 still-born twins not included. (d) 1 still-born twin not included. (e) 56 still-born twins not included. (f) 2 still-born triplets not included. (g) 3 still-born triplets not included. (h) 5 still-born triplets not included.

A summary of the total number of live births in each State and Territory at intervals since 1901 is given in the following table :—

LIVE BIRTHS, 1901 to 1939.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	37,875	31,008	14,303	9,079	5,718	4,930	32	(a)	102,945
1911 ..	47,537	33,026	16,984	11,057	8,091	5,437	31	30	122,193
1921 ..	54,636	35,591	20,329	11,974	7,807	5,755	79	27	136,198
1931 ..	47,721	30,332	17,833	9,079	8,549	4,762	72	161	118,509
1934 ..	43,335	27,828	17,360	8,459	7,801	4,470	88	134	109,475
1935 ..	44,676	27,884	17,688	8,270	8,119	4,456	84	148	111,325
1936 ..	46,193	28,883	18,755	8,911	8,479	4,581	113	158	116,073
1937 ..	47,497	29,731	19,162	8,985	8,609	4,841	99	207	119,131
1938 ..	47,319	30,344	18,992	9,410	9,141	4,907	102	200	120,415
1939 ..	48,003	30,493	20,348	9,618	9,036	5,004	138	251	122,891

(a) Part of New South Wales.

2. Birth-rates.—The next table gives the crude birth-rates at intervals from 1901 to 1939 :—

CRUDE BIRTH-RATES.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1901 ..	27.78	25.77	28.52	25.41	30.39	28.58	6.72	(b)	27.16
1911 ..	28.58	25.01	27.63	28.86	28.22	28.60	9.36	16.84	27.20
1921 ..	25.91	23.16	26.68	24.09	23.37	26.97	20.18	10.86	24.95
1928 ..	22.27	19.69	22.36	19.98	21.36	21.77	18.61	14.64	21.27
1929 ..	21.04	18.98	20.60	18.63	21.51	22.03	11.86	17.91	20.25
1930 ..	20.59	18.55	20.80	17.42	21.44	21.66	14.26	18.30	19.86
1931 ..	18.67	16.86	19.28	15.77	19.77	21.18	14.52	18.29	18.16
1932 ..	17.40	15.19	18.56	14.74	18.31	19.78	16.07	16.92	16.86
1933 ..	16.99	15.60	18.14	15.32	17.95	19.93	15.23	(c)14.43	16.78
1934 ..	16.52	15.20	18.17	14.50	17.66	19.51	17.84	(c)14.20	16.39
1935 ..	16.89	15.16	18.31	14.14	18.23	19.41	16.47	(c)15.20	16.55
1936 ..	17.31	15.63	19.17	15.17	18.84	19.84	21.50	(c)15.35	17.13
1937 ..	17.63	16.02	19.36	15.25	18.95	20.69	18.30	(c)18.99	17.43
1938 ..	17.39	16.25	18.98	15.88	19.87	20.82	17.81	17.98	17.46
1939 ..	17.46	16.20	20.08	16.13	19.43	21.03	22.00	20.93	17.65

(a) Number of births per 1,000 of the mean population for the year. (b) Part of New South Wales. (c) Revised rates based on mean populations adjusted in accordance with the results of Census of 30th June, 1938. See footnote (c) to table on p. 521.

NOTE.—The birth-rates in the table above are based on live births registered in the respective States and Territories. Until recently 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, but with improved hospital facilities in the Territory the movement to outside hospitals rapidly diminished and was actually reversed in 1930. The following rates, based on births in respect of which the mother's usual residence is the Australian Capital Territory, are a fairer measure of birth-rates in the Australian Capital Territory :—

1928 ..	23.38	1932 ..	20.09	1936 ..	17.97
1929 ..	23.28	1933 ..	19.06	1937 ..	21.28
1930 ..	22.07	1934 ..	17.59	1938 ..	18.88
1931 ..	21.40	1935 ..	19.52	1939 ..	20.02

The variations similarly caused in the birth-rates for the States and 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 1939 :—New South Wales, 17.49; Victoria, 16.12; Queensland, 20.17; South Australia, 16.08; Western Australia, 19.45; Tasmania, 21.00; and Northern Territory, 24.87.

The preceding table shows a marked reduction in the birth-rate since 1901. In the earlier years of the century the rate fluctuated somewhat and 28.60 was recorded in 1912, but from that year onwards the rate dropped almost continuously to the very low figure of 16.39 in 1934. With the improvement in economic conditions the rate has risen slightly during each of the last five years.

The principal factor in determining the crude birth-rate is the proportion of married women of child-bearing age in the community, but as the fecundity of women varies with age, the birth-rate per 1,000 married women will vary according to the age composition of the group, and, other things being equal, the rate generally should be highest where the average age of married women is lowest. For the purposes of the following table the child-bearing age has been taken as from 15-44 years inclusive, and all births of which the mothers were stated to be over 45 years have been counted in the group 40-44. The calculations have been made for the last two Census periods and cover in each case the Census year together with the year immediately preceding and the year immediately following.

BIRTH-RATES, AND FACTORS AFFECTING THEM.

Particulars.	1932-34. (Age Distribution at Census of 1933.)							1920- 1922.
	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.	Aust.
Crude birth-rate per 1,000 persons	16.07	15.33	18.29	14.85	17.97	19.74	16.68	25.15
Birth-rate per 100 women 15-44 inclusive	7.25	6.46	7.93	6.31	8.05	8.71	7.14	10.74
Birth-rate per 100 married women 15-44 inclusive (a)	12.98	12.34	14.46	12.01	14.67	16.08	13.14	19.65
Ex-nuptial births—per cent. on all births	5.03	4.35	4.99	3.18	4.15	5.37	4.66	4.69
Ex-nuptial births per 100 unmarried women 15-44 inclusive	0.78	0.56	0.83	0.41	0.70	0.96	0.69	1.05
Women 15-44 inclusive—per cent. on all persons	23.41	23.73	23.05	23.54	22.34	22.66	23.35	23.41
Average age of all women 15-44 inclusive	20.06	29.42	28.88	29.12	28.62	28.54	29.10	28.54
Married women 15-44 inclusive—per cent. on all persons	12.41	11.88	12.02	11.97	11.74	11.51	12.10	12.20
Average age of married women 15-44 inclusive	33.38	34.00	33.41	33.08	33.21	32.98	33.58	32.48

(a) Nuptial births only.

The following figures give a comparison for Australia, based on data obtained at Census periods, of the total births per 1,000 women (married and unmarried) and of the nuptial births per 1,000 married women of ages 15-44 years inclusive:—

Particulars.	1880-82.	1890-92.	1900-02.	1910-12.	1920-22.	1932-34.
Births per 1,000 women aged 15-44	169.7	158.8	117.3	117.2	107.4	71.4
Nuptial births per 1,000 married women 15-44	321.0	332.0	235.8	236.0	196.5	137.4

3. *Birth-rates of Various Countries.*—(1) *Crude Rates.* A comparison with other countries for the year 1938, the latest year for which complete figures are available, shows that the Australian States occupy a midway position. The rates for the period 1908–1913 have been added for purposes of comparison :—

CRUDE BIRTH-RATES(a) : VARIOUS COUNTRIES.

Country.	1908 to 1913.	1938.	Country.	1908 to 1913.	1938.
Egypt	43.6	43.5(b)	Queensland	28.2	19.0
U.S.S.R. (Russia)	45.6	42.7(c)	Finland	29.5	18.9(b)
Ceylon	36.9	35.9	Denmark	27.1	18.1
Rumania	43.1	29.6	New Zealand	26.5	18.0
Portugal	34.6	26.9	U.S.A.	(d)	17.9
Japan	32.9	26.7	Scotland	26.2	17.8
Spain	32.1	25.6(e)	Czechoslovakia	31.1	17.6
Union of South Africa (Europeans)	(d)	25.1	Australia	27.4	17.5
Poland	37.4	24.4	New South Wales	28.2	17.4
Argentine Republic	37.1	24.1	Victoria	25.3	16.3
Italy	32.4	23.6	South Australia	27.1	15.9
Tasmania	29.6	20.8	Norway	26.0	15.8
Netherlands	29.1	20.6	Belgium	23.4	15.6
Northern Ireland	23.1	20.0	Great Britain and Northern Ireland	24.6	15.5
Western Australia	28.9	19.9	Switzerland	24.7	15.2
Canada	(d)	19.8(b)	England and Wales	24.9	15.1
Germany	29.5	19.7	Sweden	24.4	14.9
Eire	23.1	19.3	France	19.5	14.6

(a) Number of births per 1,000 of the mean population.

(b) For 1937.

(c) For 1932.

(d) Not available.

(e) For 1935.

(ii) *Nuptial Birth-rates at Child-bearing Ages.* The wide discrepancies between the crude birth-rates of the various countries are, to some extent, due to differences in sex and age constitution and in conjugal condition. If the birth-rates are calculated per 1,000 women of child-bearing ages, the comparison gives more reliable results. A table of results so calculated for the period 1906 to 1915 or thereabouts appears in Official Year Book No. 22, p. 941, and showed that Australia, with a rate of 198 nuptial births per 1,000 married women aged 15 to 49 years, was midway between the maximum and minimum of the countries for which these rates were obtained.

4. *Masculinity of Live Births.*—(i) *General.* The masculinity of live births, i.e., the number of males per 100 females, varies considerably from State to State and from year to year. For 1939 the figures ranged from 103.32 in Queensland to 107.72 in Tasmania. The averages for the last inter-censal period, 1921 to 1933, were as follows :— New South Wales 105.33, Victoria, 106.19, Queensland 105.34, South Australia 105.08, Western Australia 105.66, Tasmania 105.59, Australia 105.57. The following table shows the figures for Australia at intervals since 1901 :—

MASCULINITY(a) OF LIVE BIRTHS REGISTERED : AUSTRALIA.

Particulars.	1901.	1911.	1921.	1931.	1936.	1937.	1938.	1939.
Total Births	104.11	104.73	105.86	106.15	104.79	104.60	105.76	105.37
Ex-nuptial Births	105.50	103.10	106.09	102.60	101.81	103.83	104.08	109.88

(a) Number of male per 100 female births.

(ii) *Masculinity of Nuptial and Ex-nuptial Births—Various Countries.* A table showing the masculinity of nuptial and ex-nuptial births for various countries appears on p. 942 of Official Year Book No. 22.

5. *Ex-nuptial Live Births.*—(i) *General.* The number of ex-nuptial live births reached its maximum, 7,438, in 1913, but it has since fallen considerably. On the average during the five years 1910–1914 the number of ex-nuptial live births in Australia was 7,171, while for the period 1935–1939 it was only 5,050, a decline of 29.6 per cent., whereas the annual average total live births for the same period declined by 8.7 per cent., from 129,156 to 117,967; hence a comparison between the results for these two periods shows that the proportion of ex-nuptial births has fallen from 5.55 to 4.28 per cent. of all births.

The numbers of births and the rates at intervals from 1901 to 1939 are shown below:—

EX-NUPTIAL LIVE BIRTHS AND BIRTH-RATES: AUSTRALIA.

Particulars.	1901.	1911.	1921.	1931.	1936.	1937.	1938.	1939.
Number of Ex-Nuptial Births ..	6,165	7,074	6,463	5,841	5,126	5,163	5,049	5,012
Percentage of Total Births ..	5.99	5.79	4.75	4.93	4.42	4.33	4.19	4.08

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, and it is not unlikely that the majority of unregistered births are ex-nuptial.

The variations of the ex-nuptial birth-rates as between the individual States and Territories for 1939 are as follows:—

EX-NUPTIAL LIVE BIRTHS AND BIRTH-RATES, 1939.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
Number..	1,990	1,151	1,008	273	333	229	25	3	5,012
Percentage of Total Births	4.15	3.77	4.95	2.84	3.69	4.58	18.12	1.20	4.08

(ii) *Rate of Ex-nuptiality.* A further comparison is obtained by calculating the number of ex-nuptial births per thousand of the single and widowed female population between the ages of 15 and 45 years. The number of ex-nuptial births per 1,000 unmarried women of ages 15 to 45 has been found to be as follows:—1880–82, 14.49; 1890–92, 15.93; 1900–02, 13.30; 1910–12, 12.53; and 1920–22, 10.50. The estimated number for the years 1930–32 was 7.87. The comparative results for various countries given on p. 944 of Official Year Book No. 22 were taken from the *Annuaire International de Statistique*, Vols. II. and V., and showed that ex-nuptial births varied from 38 per 1,000 unmarried women aged 15 to 49 years in Hungary to 4 in Ireland and Bulgaria. The rate for Australia was 12 per thousand of the average for the years 1906–15.

(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 reduction in the ex-nuptial birth-rate than in the nuptial rate :—

CRUDE EX-NUPTIAL, NUPTIAL, AND TOTAL BIRTH-RATES(a) : AUSTRALIA.

Rates.	1901.	1911.	1921.	1931.	1936.	1937.	1938.	1939.
Ex-nuptial ..	1.63	1.57	1.18	0.90	0.76	0.75	0.73	0.72
Nuptial ..	25.53	25.63	23.77	17.26	16.37	16.68	16.73	16.93
Total ..	27.16	27.20	24.95	18.16	17.13	17.43	17.46	17.65

(a) Number of births per 1,000 of mean population.

6. *Legitimations.*—In the several States Acts have been passed 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 intentions, 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 1938 and 1939, 798 and 883 children respectively were legitimized in Australia.

7. *Multiple Births.*—Among the total number of 122,891 live births registered in Australia in 1939, there were 120,377 single births, 2,474 twins and 40 triplets. The number of cases of twins was 1,265 and of triplets 15, there being 56 still-born twins and 5 still-born triplets. The total number of mothers was, therefore, 121,657, the proportion of mothers of twins being one in every 96, of mothers of triplets one in every 8,110, and of mothers of all multiple births one in every 95 mothers. Multiple births occurred in 1.05 per cent. of confinements.

The proportion of multiple births to total births does not vary greatly from year to year and exhibits no tendency towards increase or decrease :—

MULTIPLE BIRTHS : AUSTRALIA.

Particulars.	1911.	1921.	1931.	1936.	1937.	1938.	1939.
Mothers of Multiple Births ..	1,236	1,465	1,271	1,229	1,304	1,248	1,280
Percentage on Total Mothers ..	1.02	1.09	1.08	1.07	1.11	1.05	1.05
Number of Mothers to each Multiple Birth	98	92	92	94	90	96	95

8. *Ages of Parents.*—The relative ages of the parents of children registered in 1939 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

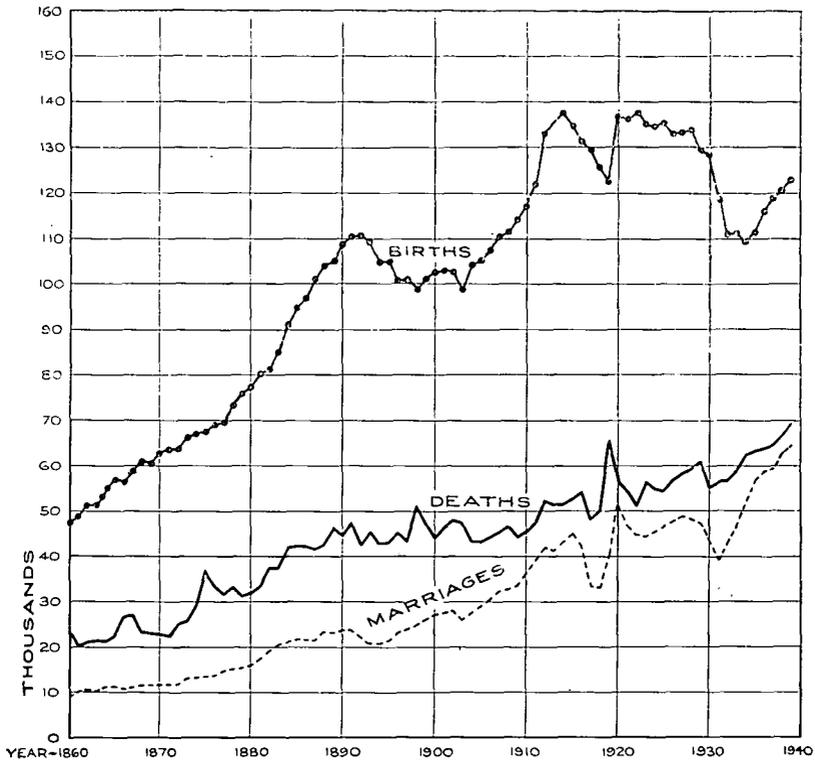
single ages of parents are shown in *Demography Bulletin* No. 57, published by this Bureau. In the present work the exigencies of space allow the insertion of a table showing the relative ages of parents of all births in groups of five years only :—

AGES OF PARENTS : AUSTRALIA, 1939.

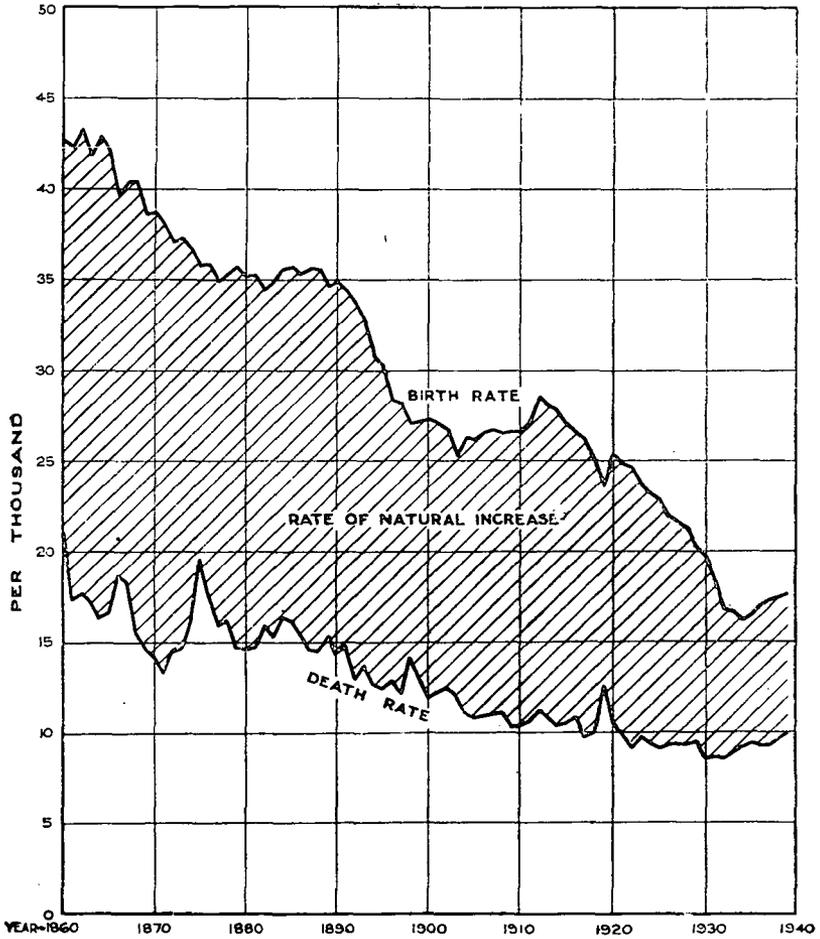
Ages of Fathers and Type of Birth.		Total.	Ages of Mothers.								
			Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.	Un-specified.
Under 20	Single	716	..	520	181	14	1
	Twins	6	..	4	2
20 to 24	Single	14,470	..	3,319	9,152	1,782	165	21	1	..	
	Twins	104	..	18	66	18	2	..	..	..
25 to 29	Single	33,801	1	1,623	14,211	15,511	2,316	208	21	..	
	Twins	273	..	10	91	145	24	2	1	..	
30 to 34	Single	31,298	1	431	5,244	13,650	10,412	1,460	97	3	
	Twins	350	..	4	35	143	139	27	2	..	
35 to 39	Single	19,764	..	138	1,448	4,750	7,587	5,267	554	20	
	Twins	260	..	2	6	54	103	86	8	1	
40 to 44	Single	9,006	..	26	347	1,108	2,473	3,373	1,620	59	
	Twins	121	..	..	2	10	40	49	20	..
45 to 49	Single	4,112	..	9	120	380	760	1,543	1,145	155	
	Twins	66	..	..	..	4	13	29	16	4
50 to 54	Single	1,509	..	5	42	122	259	502	475	104	
	Twins	23	..	..	1	2	4	10	6	..
55 to 59	Single	490	..	2	15	45	85	164	135	44	
	Twins	6	..	..	..	1	..	3	1	1
60 to 64	Single	141	..	1	7	16	25	34	44	14	
	Twins	1	..	..	..	1	..	..	..	..
65 and Upwards	Single	74	..	2	4	8	8	32	16	4	
	Twins	2	..	..	..	..	1	1	..	..
Unspecified	Single	..	..	..	..	..	..	..	..	..
Mothers of Nuptial Children	Single	115,471	2	6,106	30,771	37,386	24,091	12,604	4,108	403	
	Twins	1,212	..	38	203	378	326	207	54	6	
	Triplets	14	..	1	1	5	1	5	1	..	
Total	116,697	2	6,145	30,975	37,769	24,418	12,816	4,163	409	..	
Mothers of Ex-Nuptial Children	Single	4,906	18	1,381	1,681	853	504	330	111	21	
	Twins	55	4	10	17	10	9	6	1	..	
	Triplets	1	..	..	..	1	..	..	..	..
Total	4,960	18	1,391	1,698	864	513	336	112	21		
Total Mothers	Single	120,377	20	7,490	32,452	38,239	24,595	12,934	4,219	424	
	Twins	1,265	..	48	220	388	335	213	55	6	
	Triplets	15	..	1	1	6	1	5	1	..	
Total	121,657	20	7,539	32,673	38,633	24,931	13,152	4,275	430		

9. Birthplaces of Parents.—The birthplaces of the parents of children whose births were registered during the year 1939 appear in *Demography Bulletin* No. 57,

BIRTHS, DEATHS, AND MARRIAGES--AUSTRALIA, 1860 TO 1959.

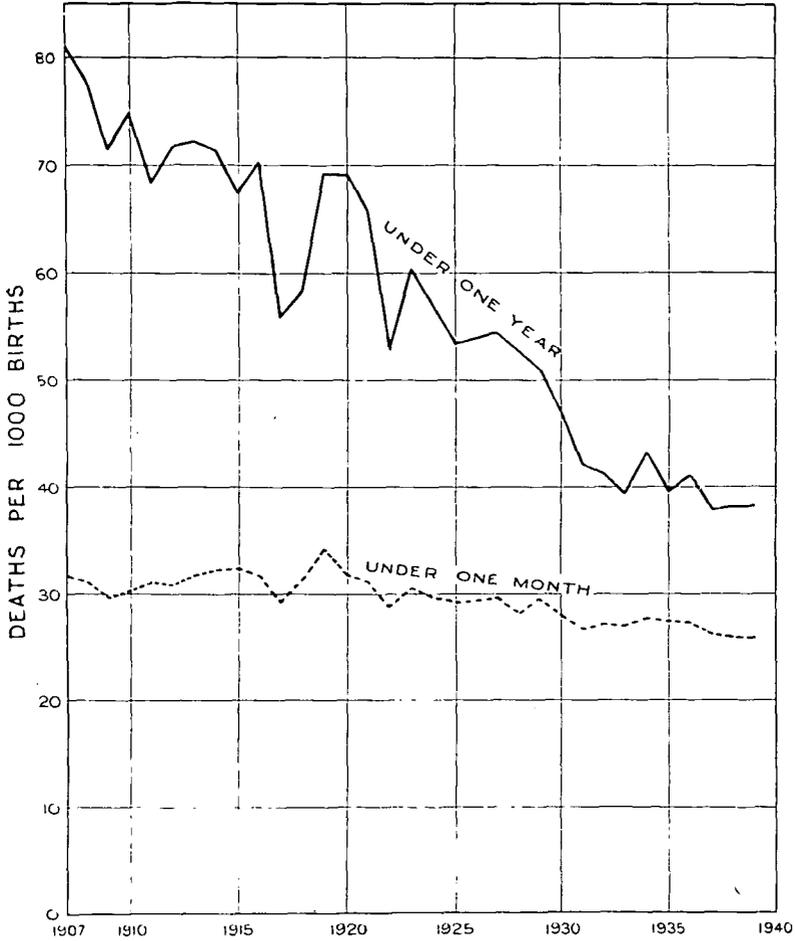


RATES OF BIRTHS, DEATHS, AND NATURAL INCREASE—AUSTRALIA, 1860 TO 1939.



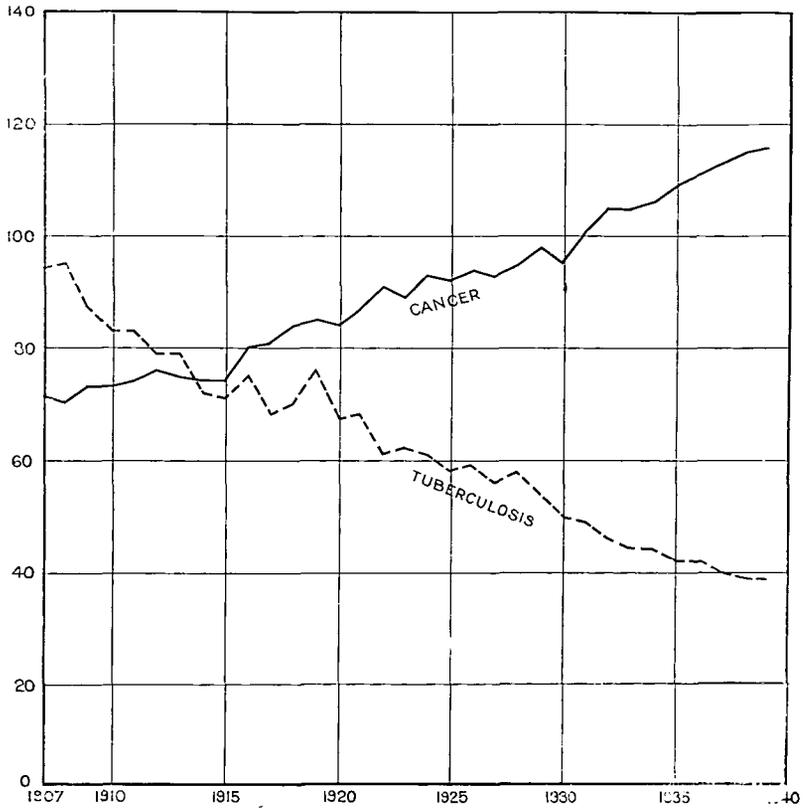
EXPLANATION.—The upper curve represents the number of births per 1,000 persons, while the lower curve represents the corresponding death-rate. The distance between the two curves is the rate of natural increase.

INFANTILE MORTALITY RATES—AUSTRALIA, 1907 TO 1939.



EXPLANATION.—This graph shows the marked improvement in infantile mortality rates over the past 30 years. The improvement has been confined mainly to children over one month, very little change having occurred in the first month of life (see page 600).

DEATH-RATES—CANCER AND TUBERCULOSIS—AUSTRALIA, 1907 TO 1939



(See page 624.)

EXPLANATION.—The vertical scale represents the number of deaths per 100,000 of the population.

published by this Bureau. A summary of the results of the tabulation with the addition of the corresponding figures for 1911 follows:—

BIRTHPLACES OF PARENTS : AUSTRALIA.

Birthplace.	Fathers.		Mothers of Nuptial Children.		Mothers of Ex-nuptial Children.	
	1911.	1939.	1911.	1939.	1911.	1939.
AUSTRALASIA—						
Australia	94,834	100,858	102,073	106,094	6,570	4,655
New Zealand	1,257	839	1,201	644	68	41
EUROPE—						
England and Wales	9,849	8,263	6,067	5,320	210	162
Scotland	2,289	2,269	1,486	1,628	46	45
Eire	2,138	800	1,374	423	46	7
Other British Possessions	49	156	20	84	1	1
Western Europe	607	192	165	79	9	3
Central Europe	1,185	410	606	243	8	3
Southern Europe	360	1,928	203	1,405	6	15
Eastern Europe	168	111	81	63	..	2
ASIA—						
British Possessions	217	184	114	121	2	2
Foreign Countries	317	151	139	117	3	8
AFRICA—						
British Possessions	111	196	116	146	2	5
Foreign Countries	11	25	13	14	..	..
AMERICA—						
Canada	59	102	34	75	3	..
Other British Possessions	8	5	5	1	..	..
United States of America	182	97	87	81	3	3
Other Foreign Countries	70	28	19	27	1	..
POLYNESIA—						
British	30	51	21	39	1	3
Foreign	39	17	13	21	6	..
AT SEA AND INDEFINITE	159	15	102	12	33	5
Total	113,939	116,697	113,939	116,697	7,018	4,960

10. Occupations of Fathers.—A summary of the main groups of occupations of the fathers of all nuptial children whose births were registered in 1921, 1931 and 1939, together with the percentage of each class on the total, is given in the following table:—

OCCUPATIONS OF FATHERS OF NUPTIAL CHILDREN : AUSTRALIA.

Occupation Group.	Number of Fathers.			Percentage of Total.		
	1921.	1931.	1939.	1921.	1931.	1939.
				%	%	%
Agricultural, Pastoral, Mining, etc.	32,405	24,760	23,326	25.25	22.21	19.99
Industrial	53,567	49,902	24,901	41.74	44.76	21.34
Transport and Communication	15,351	12,302	11,103	11.96	11.04	9.51
Commercial	18,298	16,030	12,691	14.26	14.38	10.88
Professional	6,204	5,991	6,973	4.84	5.37	5.97
Domestic	2,319	2,146	2,166	1.81	1.93	1.86
Indefinite	182	349	35,537	0.14	0.31	30.45
Total	128,326	111,480	116,697	100.00	100.00	100.00

(a) 35,206 (30.17 per cent.) clerks, labourers, etc., not specified as belonging to any industry, formerly included under "Commercial" or "Industrial", are included under "Indefinite".

11. *Mother's Age, Duration of Marriage, and Issue.*—(i) *General.* The total number of nuptial confinements resulting in live births in 1939 was 116,697, namely, 115,471 single births, 1,212 cases of twins, and 14 cases of triplets. Ex-nuptial children, if previous issue by the same father, are included as previous issue, but children by former marriages and still-born children are excluded. The tables cannot be given in detail but the following are their most salient features. The complete tabulations are shown in *Demography Bulletin* No. 57, issued by this Bureau.

(ii) *Duration of Marriage and Issue of Mothers.* The following table shows that the duration of marriage of mothers of nuptial children ranged from less than one year up to 32 years, and that the average family increased fairly regularly with the duration of marriage. The average issue of married mothers who bore children in 1939 was 2.48 compared with 2.54 in 1938, 2.60 in 1937, 2.65 in 1936, and 2.74 in 1935.

DURATION OF MARRIAGE AND ISSUE OF MOTHERS: AUSTRALIA, 1939.

Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.	Duration of Marriage.	Total Mothers.	Total Issue.	Average Number of Children.
Years.				Years.			
0-1 ..	19,743	19,905	1.01	18-19 ..	904	6,028	6.67
1-2 ..	16,347	19,550	1.20	19-20 ..	770	5,521	7.17
2-3 ..	13,866	22,729	1.64	20-21 ..	565	4,230	7.49
3-4 ..	11,598	22,665	1.95	21-22 ..	333	2,606	7.83
4-5 ..	9,476	21,411	2.26	22-23 ..	240	1,975	8.23
5-6 ..	7,625	19,515	2.56	23-24 ..	201	1,749	8.70
6-7 ..	6,037	17,359	2.88	24-25 ..	138	1,261	9.14
7-8 ..	4,573	14,726	3.22	25-26 ..	86	810	9.42
8-9 ..	3,967	13,747	3.47	26-27 ..	54	530	9.81
9-10 ..	3,811	14,225	3.73	27-28 ..	21	208	9.90
10-11 ..	3,408	13,704	4.02	28-29 ..	21	233	11.10
11-12 ..	2,873	12,376	4.31	29-30 ..	8	83	10.38
12-13 ..	2,345	10,608	4.52	30-31 ..	2	29	14.50
13-14 ..	2,165	10,600	4.90	31-32 ..	1	12	12.00
14-15 ..	1,762	9,305	5.28	33-34 ..	..	..	..
15-16 ..	1,439	8,047	5.59	Not Stated	4	20	5.00
16-17 ..	1,240	7,332	5.91				
17-18 ..	1,074	6,797	6.33				
				Total ..	116,697	289,896	2.48

(iii) *Ages of Mothers and Issue.* The following table shows the average number of children borne by mothers of different ages. In the younger ages there is, naturally, little difference in the average number of children to each mother, but with the increase

of the age of the mother the number of issue has fallen in comparison with past years. During the period 1911 to 1939 the average issue of mothers of all ages has fallen by 25.75 per cent.—from 3.34 in 1911 to 2.48 in 1939:—

AGES AND ISSUE OF MOTHERS: AUSTRALIA.

Ages of Mothers.	Average Number of Children.				Ages of Mothers.	Average Number of Children.			
	1911.	1921.	1931.	1939.		1911	1921.	1931.	1939.
Under 20 years ..	1.18	1.16	1.21	1.19	40-44 years ..	6.97	6.27	6.00	5.62
20-24 years ..	1.77	1.64	1.74	1.63	45 years and over..	8.52	8.04	7.48	6.97
25-29 ..	2.64	2.44	2.46	2.15					
30-34 ..	3.82	3.57	3.44	2.95	All Ages ..	3.34	3.08	2.95	2.48
35-39 ..	5.28	4.95	4.71	4.10					

(iv) *Previous Issue of Mothers, Various Ages.* A classification of mothers of various ages according to previous issue is given in the following table:—

MOTHERS OF VARIOUS AGES ACCORDING TO PREVIOUS ISSUE: AUSTRALIA, 1939.

Previous Issue.	Mothers' Ages.							Total.
	Under 20 Years.	20-24 Years.	25-29 Years.	30-34 Years.	35-39 Years.	40-44 Years.	45 Years and Over.	
0	5,075	17,478	14,960	5,818	1,849	337	27	45,544
1	966	9,026	11,431	6,606	2,242	390	31	30,692
2	101	3,256	5,937	4,661	2,220	483	23	16,681
3	5	948	2,924	2,877	1,801	491	35	9,081
4	..	218	1,546	1,829	1,367	518	40	5,518
5	..	45	646	1,189	1,096	451	39	3,466
6	..	4	224	766	794	393	30	2,211
7	..	..	81	382	597	299	44	1,403
8	..	..	12	180	397	283	35	907
9	..	..	6	70	200	194	32	502
10	..	..	1	25	122	142	20	310
11	..	..	1	13	93	72	23	202
12	..	..	..	2	27	62	12	103
13	..	..	..	..	5	16	9	30
14	..	..	..	..	1	20	6	27
15	..	..	..	..	2	9	1	12
16	..	..	..	..	2	2	1	5
17	..	..	..	..	1	1	..	2
18	..	..	..	..	..	..	..	..
19	..	..	..	..	..	..	1	1
20	..	..	..	..	..	..	..	..
Total Mothers	6,147	30,975	37,769	24,418	12,816	4,163	409	116,697

(v) *Previous Issue of Mothers of Twins and Triplets.* Figures regarding the previous issue of married mothers of twins show that 370 mothers had no previous issue either living or deceased, 296 had one child previously, while 190 had two previous issue, 122 three, 84 four, 48 five, 36 six, 21 seven, 26 eight, 4 nine, 7 ten, 7 eleven, and 1 fourteen previous issue.

Of the 14 cases of triplets registered during 1939, 6 mothers had no previous issue, 6 had three previous issue, 1 four, and 1 five previous issue.

12. *Interval between Marriage and First Birth.*—(i) *Interval.* The following table shows the interval between marriage and first birth for the years 1911, 1921, 1931 and 1939 respectively. Twins, triplets and quadruplets are included, the eldest only being enumerated :—

INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH : AUSTRALIA.

Interval.	Number of First Children.				Percentage of Total.			
	1911.	1921.	1931	1939.	1911.	1921.	1931.	1939.
Under 1 month ..	562	437	395	314	1.81	1.07	1.15	0.69
1 month ..	608	538	523	361	1.96	1.31	1.52	0.79
2 months ..	817	735	750	581	2.63	1.79	2.17	1.28
3 " ..	1,125	1,017	1,135	811	3.63	2.48	3.29	1.78
4 " ..	1,299	1,336	1,409	1,219	4.19	3.26	4.09	2.68
5 " ..	1,651	1,781	1,968	1,954	5.33	4.34	5.71	4.29
6 " ..	2,089	2,420	2,517	2,712	6.74	5.90	7.30	5.96
7 " ..	1,602	2,231	2,022	2,251	5.17	5.44	5.86	4.94
8 " ..	1,529	1,950	1,139	1,546	4.93	4.75	3.30	3.39
9 " ..	3,361	4,222	2,272	3,079	10.84	10.29	6.59	6.76
10 " ..	2,623	3,630	1,859	2,611	8.46	8.85	5.39	5.73
11 " ..	1,893	2,645	1,636	2,183	6.11	6.45	4.74	4.79
Total under 1 year	19,159	22,942	17,625	19,622	61.80	55.93	51.11	43.08
1-2 years ..	7,400	11,149	8,888	13,234	23.87	27.18	25.77	29.06
2-3 " ..	2,101	2,923	3,441	5,688	6.78	7.13	9.98	12.49
3-4 " ..	908	1,413	1,823	3,027	2.93	3.45	5.29	6.65
4-5 " ..	471	837	967	1,575	1.52	2.04	2.80	3.46
5-9 " ..	762	1,473	1,424	2,012	2.46	3.59	4.13	4.42
10-14 " ..	159	223	262	333	0.51	0.54	0.76	0.73
15-19 " ..	31	54	50	46	0.10	0.13	0.14	0.10
20 years and over	9	4	6	7	0.03	0.01	0.02	0.01
Total	31,000	41,018	34,486	45,544	100.00	100.00	100.00	100.00

The masculinity of first births was 105.07 compared with 105.37 for total births.

(ii) *Ages of Mothers and Interval.* The previous issue of mothers of ex-nuptial children is not recorded, but for the purposes of the following table all ex-nuptial births have been assumed to be first births. The table shows in a condensed form the ages of mothers in cases of ex-nuptial births, of nuptial first births occurring less than nine months after marriage, and of all ex-nuptial and nuptial first births. A comparison of the combined total of the first two columns with the total of nuptial children born nine months or more after marriage shows that for all ages the ratio was approximately 1 to 2. At all ages up to and including 21, however, there was a preponderance of ex-nuptial births and of births following on ante-nuptial conception. It must, of course, be understood that a certain number of premature births is necessarily included among the births which occurred less than nine months after marriage, but information in connexion therewith is not available, and the figures in the table must be accepted with this reservation. The tabulation in single ages of mothers appears in *Demography Bulletin* No. 57, published by this Bureau.

The last four columns show the percentage of births following ante-nuptial conception on the total nuptial first births and ex-nuptial births. These columns disclose the remarkable fact that the percentage of births due to ante-nuptial conception diminishes rapidly from about 79 per cent. among mothers under 20 years of age to a minimum of about 17.55 per cent. among mothers 25 to 34 years and then rises perceptibly for mothers of older ages.

AGES OF MOTHERS AND INTERVAL BETWEEN MARRIAGE AND FIRST BIRTH : AUSTRALIA.

Age of Mother at Birth of Child.	1939.				Percentage Column III. on Column IV.			
	Ex-nuptial Births.	Nuptial Births less than nine months after Marriage.	Total of two preceding columns.	Nuptial First Births and Ex-nuptial Births.	1911.	1921.	1931.	1939.
	I.	II.	III.	IV.	%	%	%	%
Under 20 years	1,412	3,605	5,017	6,487	83.12	79.23	82.60	77.34
20 to 24 years	1,698	5,554	7,252	19,176	53.91	45.82	48.43	37.82
25 to 29 "	864	1,872	2,736	15,824	32.50	25.60	21.89	17.29
30 to 34 "	513	508	1,021	6,331	28.06	23.05	22.20	16.13
35 to 39 "	336	164	500	2,185	32.64	29.43	30.86	22.88
40 to 44 "	112	43	155	449	36.56	35.31	38.95	34.52
45 and over ..	25	3	28	52	60.47	54.84	48.89	53.85
Total ..	4,960	11,749	16,709	50,504	48.14	39.74	43.80	33.08

13. Interval between Birth and Registration of Birth.—Detailed information for the years 1911 to 1921 regarding the period which elapsed between birth and registration of birth is contained in *Demography Bulletins* issued by this Bureau for those years. The average interval for 1921 was 14.22 days for all children.

§ 2. Still-births.

Reliable statistics of the number of children born dead in Australia are not available as registration of these births is not compulsory in all the Australian States. Based on such information as is available the estimated number of still-births in Australia during 1939 was approximately 3,400.

§ 3. Marriages.

1. Marriages, 1939.—The number of marriages registered in Australia during the year ended 31st December, 1939, was 64,249, giving a rate of 9.23 per 1,000 of the mean population for the year. A summary of the number of marriages in each State and Territory at intervals since 1901 is given in the following table:—

MARRIAGES, 1901 to 1939.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	10,538	8,406	3,341	2,304	1,821	1,338	5	(a)	27,753
1911 ..	15,278	11,088	5,167	4,036	2,421	1,477	10	5	39,482
1921 ..	18,506	13,676	5,963	4,383	2,656	1,668	15	2	46,869
1931 ..	15,377	10,182	5,951	3,069	2,741	1,501	25	36	38,882
1934 ..	20,210	13,862	7,635	4,310	3,682	1,678	30	58	51,465
1935 ..	22,361	15,409	8,280	4,845	3,940	1,875	42	74	56,826
1936 ..	22,873	15,915	8,306	5,182	4,242	2,073	41	77	58,709
1937 ..	23,188	16,226	8,353	5,340	4,169	2,042	69	61	59,448
1938 ..	24,579	17,113	8,853	5,489	4,153	2,082	67	75	62,411
1939 ..	25,471	17,368	9,108	5,670	4,195	2,264	85	88	64,249

(a) Part of New South Wales.

2. Crude Marriage-rates.—The crude marriage-rates for each State and Territory for a series of years are given hereunder:—

CRUDE MARRIAGE-RATES.(a)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901	7.73	6.99	6.66	6.45	9.68	7.76	1.05	..	7.32
1911	9.19	8.40	8.41	9.80	8.44	7.77	3.02	2.81	8.79
1921	8.78	8.90	7.82	8.82	7.95	7.82	3.83	0.80	8.59
1928	8.16	7.53	7.14	7.26	8.12	6.97	5.16	3.54	7.71
1929	7.80	7.31	6.87	6.50	8.00	7.86	4.48	5.03	7.43
1930	6.86	6.52	6.81	5.78	7.47	6.56	6.23	3.79	6.69
1931	6.02	5.66	6.43	5.33	6.34	6.68	5.04	4.09	5.96
1932	6.73	6.49	6.86	6.29	6.68	6.64	4.47	4.82	6.63
1933	7.07	6.96	6.84	6.84	7.69	7.13	5.76	(b)5.84	7.03
1934	7.70	7.57	7.99	7.39	8.34	7.32	6.08	(b)6.15	7.71
1935	8.45	8.38	8.57	8.28	8.85	8.17	8.23	(b)7.60	8.45
1936	8.57	8.61	8.49	8.82	9.43	8.98	7.80	(b)7.48	8.66
1937	8.61	8.74	8.44	9.06	9.18	8.73	12.75	(b)5.60	8.70
1938	9.03	9.16	8.85	9.26	9.03	8.83	11.70	6.74	9.05
1939	9.27	9.23	8.99	9.51	9.02	9.51	13.55	7.34	9.23

(a) Number of marriages (not persons married) per 1,000 of mean annual population. (b) Revised rates based on mean populations adjusted in accordance with the results of the Census of 30th June, 1938. See footnote () to table on p. 521.

As in some international tabulations the marriage-rates are calculated per 1,000 of the unmarried population of 15 years and over, the corresponding rates have been worked out for Australia for the last six census periods for which the particulars are available. The figures comprise in each case the census year with the year immediately preceding and the year immediately following, and are as follows:—Years 1880–82, 48.98; years 1890–92, 45.74; years 1900–02, 42.14; years 1910–12, 50.44; years 1920–22, 56.02; and years 1932–34, 42.88. These rates refer, of course, to persons married, and not to marriages as is the case in the preceding table.

3. Marriage-rates in Various Countries.—The following table shows the marriage-rate for Australia for the year 1938, in comparison with the rates for various other countries:—

CRUDE MARRIAGE-RATES(a) : VARIOUS COUNTRIES.

Country.	1908 to 1913.	1938.	Country.	1908 to 1913.	1938.
Union of South Africa(b)	(c)	11.3(d)	Finland	6.1	8.5(d)
U.S.A.	(c)	11.0(d)	Norway	6.2	8.3
U.S.S.R. (Russia) ..	8.6	10.6(e)	Poland	7.0	8.0
New Zealand	8.5	10.3	Canada	(c)	7.9(d)
Germany	7.8	9.4	Scotland	6.7	7.8
South Australia ..	9.1	9.3	Netherlands ..	7.5	7.7
Victoria	8.0	9.2	Japan	9.3	7.5
Australia	8.4	9.1	Italy	7.7	7.4
New South Wales ..	8.8	9.0	Switzerland ..	7.3	7.4
Western Australia ..	8.1	9.0	Belgium	7.9	7.3
Sweden	6.0	9.0	Czechoslovakia ..	7.7	7.2
Queensland	8.2	8.9	Argentine Republic ..	6.8	7.0
Denmark	7.3	8.9	Northern Ireland ..	5.2	6.7
Tasmania	7.9	8.8	Portugal	6.9	6.6
Rumania	9.5	8.8	France	7.9	6.5
England and Wales ..	7.6	8.7	Spain	7.0	6.1(f)
Great Britain and Northern Ireland ..	7.3	8.6	Ceylon	5.2	5.8
			Eire	5.2	5.1

(a) Number of marriages per 1,000 of mean population. (b) European population only.
(c) Not available. (d) For 1937. (e) For 1929. (f) For 1935.

4. Ages and Conjugal Condition at Marriage.—(i) *General.* The ages at marriage of bridegrooms and brides will be found in *Demography Bulletin*, No. 57, published by this Bureau. A summary in age-groups is given in the table hereunder, which also shows the previous conjugal condition of the contracting parties. There were 2,721 males who were less than twenty-one years of age married during 1939, while the corresponding number of females was 12,876. At the other extreme there were 68 men of sixty-five years and upwards who described themselves as bachelors, and 25 spinsters of corresponding age.

Information regarding the percentage distribution of bridegrooms and brides is shown in the last five lines of the table for the years 1911, 1921, 1931, 1938 and 1939.

AGES AND CONJUGAL CONDITION OF PERSONS MARRIED : AUSTRALIA, 1939.

Ages at Marriage.	Bridegrooms.				Brides.			
	Bachelors.	Widowers.	Divorced.	Total.	Spinsters.	Widows.	Divorced.	Total.
Under 20	1,260	..	..	1,260	8,720	..	3	8,723
20-24 years	19,423	24	8	19,455	27,997	76	109	28,182
25-29 "	22,550	126	182	22,858	15,612	199	422	16,233
30-34 "	9,617	290	422	10,329	4,738	244	466	5,448
35-39 "	3,727	369	434	4,530	1,763	300	337	2,400
40-44 "	1,385	390	298	2,073	738	303	225	1,266
45-49 "	747	421	216	1,384	396	328	129	853
50-54 "	321	455	143	919	150	250	81	481
55-59 "	155	375	64	594	96	193	23	312
60-64 "	85	246	31	362	37	137	6	180
65 years and over ..	68	405	12	485	25	141	5	171
Total ..	59,338	3,101	1,810	64,249	60,272	2,171	1,806	64,249
Percentage on Total	%	%	%	%	%	%	%	%
1911 ..	93.70	5.84	0.46	100.00	94.60	4.68	0.72	100.00
1921 ..	92.43	6.37	1.20	100.00	92.85	5.91	1.24	100.00
1931 ..	92.04	6.09	1.87	100.00	93.89	4.02	2.09	100.00
1938 ..	92.17	5.12	2.71	100.00	93.78	3.46	2.76	100.00
1939 ..	92.35	4.83	2.82	100.00	93.82	3.37	2.81	100.00

(ii) *Relative Ages, Bridegrooms and Brides.* The relative ages of bridegrooms and brides are shown for single years in *Demography Bulletin*, No. 57. A condensation into age-groups of five years is given below :—

RELATIVE AGES OF PERSONS MARRIED : AUSTRALIA, 1939.

Ages of Bridegrooms.	Total Bridegrooms.	Ages of Brides.							
		Under 15.	15 to 19.	20 to 24.	25 to 29.	30 to 34.	35 to 39.	40 to 44.	45 and upwards.
Under 20 years	1,260	3	916	318	21	2	..	..	..
20 to 24 "	19,455	11	4,976	11,911	2,329	200	24	3	1
25 to 29 "	22,858	5	2,117	11,614	7,784	1,130	172	28	8
30 to 34 "	10,329	2	517	3,227	3,972	2,004	478	102	27
35 to 39 "	4,530	..	119	808	1,462	1,135	719	198	89
40 to 44 "	2,073	1	35	188	422	550	449	279	149
45 to 49 "	1,384	..	12	71	149	241	298	303	310
50 to 54 "	919	..	5	28	56	114	150	176	390
55 to 59 "	594	..	..	10	17	40	63	88	376
60 to 64 "	362	..	2	3	13	21	24	55	244
65 years and over ..	485	..	2	4	8	11	23	34	403
Total Brides	64,249	22	8,701	28,182	16,233	5,448	2,400	1,266	1,997

(iii) *Average Ages, Bridegrooms and Brides.* The age at marriage of brides declined slightly during recent years to an average of about 25½ years, although in 1937 and 1938 this decline was temporarily arrested and the average rose to almost 26 years. The figures for the past five years are :—1935, 25.70; 1936, 25.23; 1937, 25.86; 1938, 25.92; and 1939, 25.37. For the five years 1907–11 the average age was 25.70 years compared with 25.92 years for the five years 1912–16, 26.07 years for the five years 1917–21, and 25.76 years for the five years 1925–29. The average age of bridegrooms was in 1935, 29.25; in 1936, 28.76; in 1937, 29.41; in 1938, 29.52; and in 1939, 28.89 years. It follows, therefore, that brides are, generally speaking, three and one-half years younger than bridegrooms.

5. *Previous Conjugal Condition.*—The number of bachelors and spinsters, widowed and divorced persons, who were married during 1939, has already been given. The following table shows the conjugal condition of the contracting parties :—

PREVIOUS CONJUGAL CONDITION OF PERSONS MARRIED : AUSTRALIA, 1939.

Conjugal Condition of Bridegrooms.	Total Bridegrooms.	Brides.		
		Spinsters.	Widows.	Divorced.
Bachelors	59,338	56,984	1,117	1,237
Widowers	3,101	1,932	871	298
Divorced	1,810	1,356	183	271
Total Brides	64,249	60,272	2,171	1,806

6. *Birthplaces of Persons Married.*—The following table shows the birthplaces of persons who were married in 1911, 1921 and 1939. In *Demography Bulletin*, No. 57, the relative birthplaces of bridegrooms and brides married in 1939 will be found tabulated in detail :—

BIRTHPLACES OF PERSONS MARRIED : AUSTRALIA.

Birthplace.	Bridegrooms.			Brides.		
	1911.	1921.	1939.	1911.	1921.	1939.
AUSTRALASIA—						
Australia	31,298	37,925	56,087	33,922	40,137	59,474
New Zealand	450	405	583	303	280	422
EUROPE—						
England and Wales	3,023	3,590	4,348	1,675	2,488	2,462
Scotland	739	867	1,187	460	656	733
Eire	494	470	393	363	281	184
Other British Possessions	16	30	50	9	14	20
Western Europe	205	175	129	45	45	47
Central Europe	311	149	277	92	61	185
Southern Europe	62	139	590	21	56	363
Eastern Europe	47	83	73	18	21	39
ASIA—						
British Possessions	59	59	99	27	24	62
Foreign Countries	83	57	57	16	12	41
AFRICA—						
British Possessions	42	58	95	20	39	70
Foreign Countries	1	3	12	2	5	12
AMERICA—						
Canada	44	45	83	6	11	31
Other British Possessions	6	8	3	..	5	2
United States of America	58	90	110	16	25	40
Other Foreign Countries	44	11	19	15	10	10
POLYNESIA—						
British	13	9	27	7	11	30
Foreign	25	18	18	7	13	9
AT SEA AND INDEFINITE	41	22	9	37	19	13
Total	37,061	44,213	64,249	37,061	44,213	64,249

7. Occupations and Ages of Bridegrooms.—On the experience of 1931 the average ages at marriage of bridegrooms in the larger classes of occupations were as follows:—Professional, 30.01 years; Domestic, 30.47 years; Commercial, 29.20 years; Transport, 28.71 years; Industrial, 28.08 years; and Primary Producers, 30.15 years.

8. Fertility of Marriages.—The quotient obtained by division of the nuptial births registered, e.g., during the five years 1935 to 1939, by the number of marriages registered during the five years 1930 to 1934, i.e., the period antecedent by five years to the period of the births, has been called the "fertility of marriages." The quotient for this period is 2.52—in other words, the number of children to be expected from every marriage in Australia is under three. This method, while not absolutely accurate, generally furnishes results which agree fairly well with those found by more elaborate and careful investigation. For the following five-yearly periods the results were:—1929-33, 2.39; 1930-34, 2.30; 1931-35, 2.27; 1932-36, 2.35; 1933-37, 2.44; 1934-38, 2.51; and 1935-39, 2.52.

9. Celebration of Marriages.—In all the States marriages may be celebrated either by ministers of religion whose names are registered for that purpose with the Registrar-General, or by certain civil officers—in most cases district registrars. Most of the marriages are celebrated by ministers of religion. The registered ministers in 1939 belonged to more than forty different denominations, some of which, however, can hardly be regarded as having any valid existence. A number of these have been omitted from the tabulation and are bracketed under the heading "Other Christian." The figures for 1939 are shown in the following table:—

MARRIAGES IN EACH DENOMINATION, 1939.

Denomination.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Australia.	
									No.	Per Cent.
Church of England ..	10,019	5,088	2,796	1,448	1,547	908	19	41	21,866	34.03
Roman Catholic ..	5,310	3,373	1,966	661	662	341	14	18	12,345	19.21
Methodist ..	2,838	2,600	1,415	1,687	583	360	29	10	9,522	14.82
Presbyterian ..	3,060	3,193	1,587	275	356	165	..	6	8,642	13.45
Baptist ..	451	709	196	221	71	98	..	2	1,748	2.72
Congregational ..	516	364	123	267	113	66	..	..	1,449	2.25
Church of Christ ..	120	466	68	242	71	15	5	..	987	1.54
Lutheran ..	56	73	233	273	8	..	..	..	643	1.00
Salvation Army ..	108	200	85	41	21	24	..	..	479	0.75
Seventh-Day Adventist ..	84	26	27	9	16	7	..	..	169	0.26
Greek Catholic ..	49	13	7	10	13	1	..	..	93	0.15
Unitarian ..	1	43	..	13	..	..	..	..	57	0.09
Other Christian ..	129	119	184	34	29	31	..	..	526	0.82
Hebrew ..	108	113	4	3	11	..	..	..	239	0.37
Registrar's Office ..	2,622	988	417	486	694	248	18	11	5,484	8.54
Total ..	25,471	17,368	9,108	5,670	4,195	2,264	85	88	64,249	100.00
Marriages celebrated by Ministers of Religion per cent.	89.71	94.31	95.42	91.43	83.46	89.05	78.82	87.50	91.47	..
Marriages celebrated by Civil Officers per cent.	10.29	5.69	4.58	8.57	16.54	10.95	21.18	12.50	8.53	..

§ 4. Deaths.

1. Deaths, 1939.—The following table shows the number of deaths, male and female, registered in each State during the year:—

DEATHS, 1939.

Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
Male ..	15,116	10,779	5,724	3,116	2,664	1,348	65	25	38,837
Female ..	11,699	9,390	3,806	2,623	1,672	1,078	23	19	30,310
Total ..	26,815	20,169	9,530	5,739	4,336	2,426	88	44	69,147

A summary of the total number of deaths in each State and Territory at intervals since 1901 is given in the following table:—

DEATHS, 1901 to 1939.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Australia.
1901 ..	16,021	15,904	6,007	3,974	2,519	1,814	91	(a)	46,330
1911 ..	17,146	15,216	6,544	4,038	2,923	1,927	65	10	47,809
1921 ..	20,026	16,165	7,142	4,982	3,480	2,197	80	4	54,076
1931 ..	21,270	17,033	7,525	4,888	3,681	2,057	70	36	56,560
1934 ..	23,474	18,648	8,192	5,403	4,076	2,345	60	31	62,229
1935 ..	24,547	18,456	8,851	5,163	4,118	2,353	70	41	63,599
1936 ..	24,376	18,778	8,593	5,464	4,230	2,387	60	44	63,932
1937 ..	25,235	18,613	9,006	5,247	4,065	2,225	63	42	64,496
1938 ..	26,105	18,955	9,201	5,539	4,234	2,288	69	60	66,451
1939 ..	26,815	20,169	9,530	5,739	4,336	2,426	88	44	69,147

(a) Part of New South Wales prior to 1911.

2. Crude Death-rates.—The crude death-rates at intervals from 1901 to 1939 are shown in the following table:—

CRUDE DEATH-RATES.(a)

Year and Sex.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901 ..	11.75	13.22	11.98	11.12	13.39	10.51	19.10	(b)	12.22
1911 ..	10.31	11.52	10.65	9.81	10.19	10.14	19.63	5.61	10.66
1921 ..	9.50	10.52	9.37	10.02	10.42	10.30	20.44	1.61	9.91
1928 ..	9.21	10.11	9.01	9.02	8.93	9.89	15.92	5.73	9.42
1929 ..	9.82	9.44	9.26	8.80	9.34	9.99	14.55	4.57	9.52
1930 ..	8.39	8.93	8.19	8.46	8.80	8.82	15.46	3.57	8.56
1931 ..	8.32	9.47	8.14	8.49	8.51	9.15	14.12	4.09	8.67
1932 ..	8.27	9.29	8.35	8.58	8.54	8.90	14.85	3.25	8.63
1933 ..	8.58	9.59	8.84	8.44	8.64	9.60	12.55	(c)4.19	8.92
1934 ..	8.95	10.19	8.57	9.26	9.23	10.23	12.16	(c)3.29	9.32
1935 ..	9.28	10.03	9.16	8.83	9.25	10.25	13.72	(c)4.21	9.46
1936 ..	9.14	10.16	8.78	9.30	9.40	10.33	11.42	(c)4.27	9.43
1937 ..	9.36	10.03	9.10	8.91	8.95	9.51	11.64	(c)3.85	9.44
1938 ..	9.59	10.15	9.19	9.35	9.20	9.71	12.05	5.39	9.64
1939—									
Male ..	10.91	11.60	10.80	10.46	10.90	11.16	15.04	3.83	11.04
Female ..	8.58	9.86	7.87	8.80	7.58	9.20	11.78	3.48	8.80
Total ..	9.75	10.72	9.40	9.63	9.32	10.19	14.03	3.67	9.93

(a) Number of deaths per 1,000 of annual mean population. (b) Part of New South Wales prior to 1911. (c) Revised rates based on mean populations adjusted in accordance with the results of Census of 30th June, 1938. See footnote (c) to table on p. 521.

3. *Index of Mortality.*—(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 the age constitution into consideration. Other conditions being equal, however, the death-rate of a country will be low if it contains a large percentage of young people (not infants). In order to obtain a comparison of the mortality of various countries on a uniform basis so far as sex and age constitution are concerned, the standard population compiled by the International Institute of Statistics according to age distribution (eleven age-groups) of the population of nineteen European countries at their censuses nearest to the year 1900 is used in the computation of the "Index of Mortality" as distinguished from the crude death-rate. Full details of the "Standard Population" will be found in Official Year Book No. 22, p. 962.

(ii) *Comparison of Rates.* For the year 1939 on the basis of the crude rates there is a range of 1.40 per 1,000 persons between the lowest rate in Western Australia (9.32) and the highest rate in Victoria (10.72). On the standardized rates the range was 1.05 per 1,000, i.e., between 8.63 in South Australia and 9.68 in New South Wales. In its application to the figures for 1939 the process of adjustment altered the relative positions of all the States from those determined by the crude rates. The most noticeable alterations were the reversal of the position of Western Australia from the lowest on the crude basis to the highest on the standardized basis, and the very low positions occupied by Victoria and Tasmania, the two highest States on the crude basis. The index of mortality for each State for 1921, 1931, 1938 and 1939 is shown in the following table:—

INDEX OF MORTALITY.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1921	10.35	10.79	10.24	10.38	11.88	10.83	13.71	1.89	10.58
1931	8.41	8.78	8.36	7.85	8.66	8.58	16.37	5.27	8.49
1938	9.52	9.07	9.51	8.34	9.47	8.90	14.68	8.16	9.28
1939	9.68	9.55	9.65	8.63	9.71	9.28	20.83	7.22	9.54

(a) See letterpress below.

In view of the changing age constitution of the population, comparisons by means of the indexes of mortality published for years other than the Census and immediately adjoining years need to be made with caution. For the purpose of computing the indexes for each State and the Commonwealth, the ages of the people are estimated for each year on the basis of the proportions ascertained at the previous Census, and hence the results obtained represent the position as it would have been had the age constitution remained constant since the Census. Actually considerable variations in ages have occurred during recent years which make this assumption misleading, but owing to lack of data it is impracticable to measure the effects in the States individually. For the Commonwealth as a whole, however, the changes in the ages of the population since the Census of 1933 have been measured from year to year by applying to the age distribution at the Census the experience of births, deaths and migration, and on re-calculating the indexes of mortality for the Commonwealth for each year since the Census on the basis of the new age composition so ascertained the more reliable results of 8.92 for 1934, 8.83 for 1935, 8.70 for 1936, 8.58 for 1937, 8.59 for 1938 and 8.73 for 1939 are obtained. These rates are considerably lower than the indexes previously calculated, the difference being due to the ageing of the Australian population. Unfortunately, it is not possible to indicate with accuracy the corresponding variations in the indexes for individual States.

4. Crude Death-rates of Various Countries.—The following table gives the crude death-rate for Australia in comparison with the rates for various other countries :—

CRUDE DEATH-RATES(a) : VARIOUS COUNTRIES.

Country.	1908-13.	1938.	Country.	1908-13.	1938.
Netherlands ..	13.9	8.5	Great Britain and Northern Ireland ..	14.5	11.8
Queensland ..	10.3	9.2	Argentine Republic ..	17.5	12.0
Western Australia ..	10.3	9.2	Scotland ..	15.5	12.6
Union of South Africa (Europeans) ..	(b)	9.4	Finland ..	16.4	12.9
South Australia ..	10.1	9.4	Belgium ..	15.7	13.0
New South Wales ..	10.3	9.6	Czechoslovakia ..	21.0	13.5
Australia ..	10.7	9.6	Eire ..	16.9	13.6
New Zealand ..	9.3	9.7	Northern Ireland ..	16.9	13.7
Tasmania ..	10.7	9.7	Poland ..	21.0	13.8
Norway ..	13.6	10.0	Italy ..	20.4	14.0
Canada ..	(b)	10.2(c)	Spain ..	22.8	15.3(d)
Victoria ..	11.7	10.2	France ..	18.6	15.4
Denmark ..	13.2	10.3	Japan ..	20.5	17.4
U.S.A. ..	(b)	10.7	U.S.S.R. (Russia) ..	28.9	18.8(e)
Sweden ..	14.0	11.5	Rumania ..	24.7	19.2
Switzerland ..	15.2	11.6	Ceylon ..	31.4	21.0
England and Wales ..	14.1	11.6	Egypt ..	25.8	27.2(c)
Germany ..	16.5	11.7			

(a) Number of deaths per 1,000 of mean population.

(b) Not available.

(c) For 1937.

(d) For 1935.

(e) For 1928.

5. Infantile Deaths and Death-rates.—(i) *Australia, 1901 to 1939.* 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 302,136 male infants born from 1935 to 1939, 13,165 (43.57 per 1,000) died during their first year of life, while of 287,699 female infants only 9,881 (34.34 per 1,000) died during the first year. Still-births are not included in any of the tables relating to deaths.

INFANTILE DEATHS AND DEATH-RATES : AUSTRALIA.

Year.	Registered deaths under one year.			Rate of Infantile Mortality.(a)		
	Males.	Females.	Total.	Males.	Females.	Total.
1901 ..	5,888	4,778	10,666	112.13	94.73	103.61
1911 ..	4,745	3,624	8,369	75.91	60.72	68.49
1921 ..	5,111	3,841	8,952	72.97	58.06	65.73
1931 ..	2,889	2,105	4,994	47.34	36.62	42.14
1935 ..	2,537	1,892	4,429	44.59	34.76	39.78
1936 ..	2,668	2,110	4,778	44.92	37.23	41.16
1937 ..	2,565	1,969	4,534	42.11	33.82	38.06
1938 ..	2,684	1,923	4,607	43.37	32.86	38.26
1939 ..	2,711	1,987	4,698	43.00	33.21	38.23

(a) Number of deaths under 1 year per 1,000 live births registered

(ii) *States, 1901 to 1939.* For the States and Territories the rates of infantile mortality during the period 1901 to 1939 were as follows:—

INFANTILE MORTALITY RATES.(a)

Period.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	N.T.	A.C.T.	Aust.
1901-05..	97.02	95.91	94.35	86.60	124.79	90.00	149.35	(b)	96.91
1906-10..	77.30	79.90	71.27	68.38	89.80	83.18	143.79	(b)	77.61
1911-15..	71.05	72.23	65.68	67.26	72.43	70.91	85.11	32.56	70.32
1916-20..	64.82	67.18	63.04	61.93	61.73	63.84	67.15	40.40	64.67
1921-25..	58.11	61.93	50.99	54.19	59.14	60.44	40.82	60.24	57.88
1926-30..	54.74	52.34	47.41	46.95	49.27	53.37	66.09	71.31	51.99
1931-35..	41.92	42.76	39.46	35.12	40.81	44.47	80.60	(c)34.48	41.27
1935 ..	39.44	41.17	37.26	34.95	40.15	51.84	83.33	47.30	39.78
1936 ..	43.47	42.31	36.20	31.09	42.22	49.55	26.55	25.32	41.16
1937 ..	40.68	36.70	35.64	33.06	37.52	41.73	30.30	14.49	38.06
1938 ..	41.84	34.21	41.28	30.50	33.80	39.74	58.82	40.00	38.26
1939 ..	41.02	35.58	35.48	34.93	40.84	40.57	57.97	23.90	38.23

(a) Number of deaths under 1 year per 1,000 live births registered. (b) Part of New South Wales prior to 1911. (c) Based on deaths of infants born in the Australian Capital Territory.

INFANTILE MORTALITY RATES : UNDER ONE MONTH AND UNDER ONE YEAR.

State.	Under one month.				One month and under one year.			
	1911-15.	1921-25.	1931-35.	1939.	1911-15.	1921-25.	1931-35.	1939.
New South Wales ..	31.75	29.97	27.64	27.19	39.30	28.14	14.28	13.83
Victoria ..	33.07	32.19	27.76	25.94	39.16	29.74	14.98	9.64
Queensland ..	30.73	27.44	28.02	27.08	34.95	23.55	11.47	8.40
South Australia ..	29.07	27.83	23.00	19.86	38.19	26.36	12.13	15.07
Western Australia..	30.87	27.56	25.11	20.14	41.56	31.58	15.68	20.70
Tasmania ..	32.68	31.73	30.07	28.58	38.23	28.71	14.40	11.99
Australia ..	31.69	29.91	27.28	25.84	38.63	27.97	13.99	12.39

These tables disclose the striking decrease in infantile mortality, the rate for 1939 being much less than half that of 1901-05. The second table reveals the fact that relatively little improvement has taken place in the first month of life, but that the principal decrease has occurred among the older children and has been due to the decline in preventable diseases.

The deaths of infants under one year of age during 1939 numbered 4,698, the mortality rate being 38.23. Among the States, South Australia had the lowest and New South Wales the highest rate.

(iii) *Districts.* The total number of births and of deaths of children under one year of age for 1939 are shown in *Demography Bulletin*, No. 57, for each of the sixty-four districts for which vital statistics have been tabulated.

(iv) *Various Countries and Cities.* Compared with other countries the States of Australia occupy a very favourable position, the lowest rates recorded in 1938, the latest year for which comparable figures are available, being in South Australia, Western Australia and Victoria in that order. The Australian cities Adelaide, Perth and Melbourne are among the ten cities having the lowest rates in the list shown on the next page. The list is headed by Adelaide (27), San Francisco (29) and Perth (30), the next seven cities being Amsterdam, Christchurch, Melbourne, Chicago, Oslo, Auckland and Stockholm. The highest rate recorded of the cities named in the table was 267 in Bombay. A study

of the respective rates shows that a high birth-rate is often though not invariably accompanied by a high infantile death-rate :—

INFANTILE MORTALITY RATES(a) : VARIOUS COUNTRIES.

Country.	Infantile Mortality Rate. (a)		Crude Birth-rate, (b) 1938.	Country.	Infantile Mortality Rate. (a)		Crude Birth-rate, (b) 1938.
	1906-15.	1938.			1906-15.	1938.	
South Australia ..	68	31	15.9	Denmark ..	103	59	18.1
Western Australia	81	34	19.9	Germany ..	168	60	19.7
Victoria ..	76	34	16.3	France.. ..	122	66	14.6
New Zealand ..	61	36	18.0	Eire	92	66	19.3
Netherlands ..	115	36	20.6	Scotland ..	113	70	17.8
Australia ..	74	38	17.5	Northern Ireland	92	75	20.0
Tasmania ..	77	40	20.8	Belgium ..	139	75	15.6
Queensland ..	68	41	19.0	Canada ..	(c)	76 (d)	19.8(d)
Norway ..	68	41 (d)	15.8	Japan	151	106 (d)	26.7
Sweden ..	74	41	14.9	Italy	144	106	23.6
New South Wales	74	42	17.4	Spain	156	110 (e)	25.6(e)
Switzerland ..	108	43	15.2	Czechoslovakia ..	(c)	122 (d)	17.6
England and Wales ..	113	52	15.1	Ceylon	(c)	161	35.9
Great Britain and Nthn. Ireland..	..	55	15.5	Egypt	(c)	165 (d)	43.5(d)
Union of South Africa (Europeans) ..	(c)	58 (d)	25.1	U.S.S.R. (Russia)	(c)	173 (f)	42.7(g)
				Rumania ..	(c)	183	29.6

(a) Number of deaths under 1 year per 1,000 births registered. mean population. (c) Not available. (d) For year 1937.

(b) Number of births per 1,000. (e) For year 1935. (f) For year 1930. (g) For year 1932.

INFANTILE MORTALITY RATES(a) : VARIOUS CITIES.

City	Rate of Infantile Mortality (a)		City	Rate of Infantile Mortality (a)	
	1921.	1938.		1921.	1938.
Adelaide ..	74	27	Sheffield ..	99	50
San Francisco ..	50	29	Leipzig ..	136	50
Perth ..	81	30	Johannesburg ..	101	53
Amsterdam ..	54	31	London ..	80	57
Christchurch ..	54	34	Berlin ..	135	58
Melbourne ..	74	34	Breslau ..	170	58
Chicago ..	84	34	Birmingham ..	82	61
Oslo ..	54	35	Antwerp ..	98	61
Auckland ..	54	35	Edinburgh ..	96	61
Stockholm ..	61	35	Leeds ..	98	64
Wellington ..	61	38	Munich ..	126	64
Sydney ..	62	38	Paris ..	95	66
New York City ..	72	38	Cologne ..	140	66
Copenhagen ..	67	38	Manchester ..	94	69
Hobart ..	75	40	Aberdeen ..	108	71
Detroit ..	83	41	Liverpool ..	105	74
Philadelphia ..	78	41	Rome ..	..	79
Brisbane ..	62	42	Montreal ..	158	80
Los Angeles ..	68	43	Glasgow ..	106	87
Toronto ..	91	45	Belfast ..	115	96
Cape Town ..	82	47	Dublin ..	123	98
Dresden ..	115	48	Cairo ..	..	204
Washington ..	83	48	Madras ..	281	223
Hamburg ..	95	50	Bombay ..	402	267

(a) Number of deaths under 1 year per 1,000 births registered.

CAUSES OF DEATHS OF CHILDREN UNDER ONE YEAR: AUSTRALIA, 1939.

Age at Death.	Measles.	Whooping Cough.	Diphtheria.	Erysipelas.	Meningococcal Meningitis.	Respiratory Tuberculosis.	Tubercular Meningitis.	Tuberculosis, other forms.	Syphilis.	Moningitis.	Convulsions.	Acute Bronchitis.
Under 1 week	1	..	..	..	..	..	..	..	..	..	11	2
1 week and under 2 weeks ..	2	..	..	1	..	..	..	..	2	2	1	..
2 weeks .. 3 ..	1	..	..	1	..	..	..	1	1	2	1	..
3 .. 1 month ..	..	..	1	1	..	..	..	..	..	2	..	..
1 month .. 2 months ..	3	13	2	..	1	..	..	3	4	4	1	1
2 months .. 3 ..	..	7	1	1	..	1	..	2	2	2	2	..
3 .. 4 ..	..	5	1	..	3	..	..	1	1	6	1	2
4 .. 5 ..	1	5	..	..	..	..	..	..	..	7	1	..
5 .. 6 ..	1	5	..	1	..	..	..	..	..	2	2	2
6 .. 7 ..	2	2	..	..	..	..	..	..	..	2	2	2
7 .. 8 ..	3	2	..	..	..	..	..	..	..	3	1	1
8 .. 9 ..	1	1	2	..	1	..	..	1	..	4	..	2
9 .. 10 ..	7	6	3	1	..	1	1	..	..	4	1	..
10 .. 11 ..	7	1	4	..	..	..	1	..	..	1	..	..
11 .. 1 year ..	4	2	6	..	..	..	1	..	..	3	3	..
Total under 1 year ..	32	58	25	6	9	2	7	6	11	43	23	10
Infantile Mortality (a)—												
1911	0.34	1.57	0.25	0.16	..	0.08	0.31	0.22	0.85	1.83	2.55	2.34
1921	0.15	1.97	0.59	0.24	0.03	0.07	0.18	0.08	0.56	1.10	1.45	1.50
1931	0.10	1.58	0.25	0.11	0.08	0.03	0.22	0.04	0.20	0.32	0.39	0.32
1939	0.26	0.47	0.26	0.05	0.07	0.02	0.06	0.05	0.09	0.35	0.19	0.08
Ex-nuptial deaths under 1 year included in above, 1939	4	3	2	2	1	1	..	..	4	3	2	..
Infantile Mortality (b)—												
1925	0.16	2.06	0.32	0.16	0.48	..	0.32	..	1.27	0.32	2.38	0.48
1931	0.51	1.71	0.34	..	0.17	..	0.34	..	0.51	0.5	0.51	0.86
1939	0.80	0.60	0.40	0.10	0.20	0.20	..	..	0.50	0.5	0.5	..

Age at Death.	Broncho-Pneumonia.	Pneumonia.	Other Diseases of the Stomach.	Diarrhea and Enteritis.	Hernia and Intestinal Obstruction.	Malformation.	Congenital Debility. (c)	Premature Birth.	Injury at Birth.	Icterus, Sclerema and other Diseases of Early Infancy.	Other Causes.	Total.
Under 1 week	23	11	..	1	2	299	134	1,345	439	329	63	2,660
1 week and under 2 weeks ..	11	11	1	7	2	50	10	73	26	49	23	276
2 weeks .. 3 ..	17	8	..	..	..	28	15	41	9	16	20	156
3 .. 1 month ..	10	6	1	6	1	13	5	10	8	7	10	83
1 month .. 2 mths. ..	29	12	4	27	5	37	17	21	1	11	36	227
2 months .. 3 ..	21	7	2	17	2	30	12	7	..	..	32	150
3 .. 4 ..	24	16	1	33	2	19	8	..	..	..	37	164
4 .. 5 ..	19	11	2	28	6	15	3	..	..	..	29	136
5 .. 6 ..	17	8	2	25	6	9	5	..	..	2	29	130
6 .. 7 ..	26	13	1	32	6	6	2	2	..	..	31	138
7 .. 8 ..	20	10	1	36	2	14	5	..	1	..	19	121
8 .. 9 ..	17	16	1	33	5	6	1	..	..	1	26	118
9 .. 10 ..	22	14	1	33	1	5	1	..	..	..	40	142
10 .. 11 ..	15	15	..	19	1	7	..	..	..	..	30	102
11 .. 1 year ..	20	14	1	20	3	8	1	..	..	..	32	118
Total under 1 year ..	291	172	18	322	43	546	219	1,509	488	416	442	1,696
Infantile Mortality (a)												
1911	2.86	1.90	0.47	16.99	1.72	2.99	22.41	..	..	..	5.58	68.49
1921	3.08	2.08	0.71	15.11	0.57	3.74	7.64	15.29	4.07	5.53	4.16	65.73
1931	2.82	1.62	0.13	3.26	0.41	4.23	2.66	14.04	2.81	3.29	3.29	42.14
1939	2.37	1.40	0.15	2.62	0.35	4.44	1.78	12.28	3.97	3.39	3.59	38.23
Ex-nuptial deaths under 1 year included in above, 1939	28	16	1	29	4	21	25	123	27	12	33	341
Infantile Mortality (b)—												
1925	8.09	2.38	1.11	19.18	0.47	3.64	9.51	20.93	1.90	2.69	6.98	84.83
1931	5.31	3.43	0.34	8.39	0.17	4.28	7.19	21.92	3.68	3.77	5.82	68.65
1939	5.63	3.22	0.26	5.81	0.80	4.22	5.02	24.71	5.43	2.41	6.63	68.50

(a) Rate per 1,000 total births. (b) Rate per 1,000 ex-nuptial births. (c) Including Icterus and Sclerema prior to 1931.

(v) *Causes of Deaths of Children under one Year.* The preceding table gives for twenty-three causes the ages of all children who died under one year of age during 1939. The infantile mortality rates for 1911, 1921, 1931 and 1939 have been added for all births, and for 1925, 1931 and 1939 for ex-nuptial births. Particulars for males and females for 1939 appear in *Demography Bulletin*, No. 57.

Pre-natal influences, such as malformation, congenital debility and premature birth, together with injuries at birth, accounted for 2,762 or 59 per cent. of all deaths under one year; and of these 2,762 deaths, 2,217 or 80 per cent., occurred less than a week after birth. Among the survivors of the first week, diarrhœa and enteritis caused the greatest number of deaths. This disease was responsible for 322 deaths, representing 7 per cent. of all deaths under one year, or 2.62 per 1,000 births. Broncho-pneumonia caused 291 deaths, pneumonia of unspecified nature 172 deaths and whooping cough 58 deaths.

(vi) *Deaths of Ex-nuptial Children under one Year.* The deaths of ex-nuptial children were tabulated by this Bureau for the first time in 1925. The causes of death of these children in 1939 and the rates in respect of 1925, 1931 and 1939 are shown as an addendum to the preceding table.

Pre-natal influences such as malformation, congenital debility, premature birth and injuries at birth accounted for 196, or 57 per cent., and diarrhœa and enteritis for 29, or 9 per cent., of the total deaths of ex-nuptial children under 1 year.

6. *Deaths in Age-groups.*—A distribution into age-groups has been made of the 327,625 deaths which occurred in Australia during the past five years, and the results are shown in the following table.

A table giving the corresponding percentages for earlier periods from the year 1901 has been added to show the movement over a longer term. The most striking change is the substantial decrease in the group "under 1 year". At the other end of the table, the group "65 years and over" has increased by a similar amount. The percentages in all age-groups under 40 have fallen and those in all age-groups from 40 onwards have risen. These changes are due partly to improvement in the efficiency of medical science and partly to changes in the age distribution of the population. The latter changes are themselves in part due to increased length of life made possible by medical science and in part to changes in the volume of migration and the falling birth-rate:—

DEATHS IN AGE-GROUPS: AUSTRALIA, 1935 TO 1939.

Age-group.	Males.	Females.	Total.	Percentage of Total Males.	Percentage of Total Females.	Percentage of Total.
				%	%	%
Under 1 year ..	13,165	9,881	23,046	7.18	6.85	7.03
1 year and under 5 ..	4,063	3,496	7,559	2.21	2.43	2.31
5 years ..	7,131	4,859	11,990	3.89	3.37	3.66
20 ..	15,795	14,041	29,836	8.61	9.74	9.11
40 ..	39,927	27,288	67,215	21.76	18.93	20.52
60 ..	16,212	10,766	26,978	8.84	7.47	8.23
65 .. over	87,101	73,817	160,918	47.47	51.21	49.12
Age unspecified ..	77	6	83	0.04	..	0.02
Total ..	183,471	144,154	327,625	100.00	100.00	100.00

DEATHS IN AGE-GROUPS : PERCENTAGES, AUSTRALIA.

Age-group. (Years.)	Males.			Females.			Persons.		
	1901-10.	1916-20.	1921-30.	1901-10.	1916-20.	1921-30.	1901-10.	1916-20.	1921-30.
	%	%	%	%	%	%	%	%	%
Under 1 ..	19.80	15.16	13.18	21.47	15.27	12.98	20.51	15.20	13.10
1-4 ..	5.84	5.61	4.35	7.28	6.58	4.72	6.45	6.03	4.51
5-19 ..	5.84	5.18	4.86	7.08	5.73	4.85	6.37	5.42	4.85
20-39 ..	13.85	13.57	11.00	16.54	16.34	13.59	14.99	14.76	12.12
40-59 ..	19.70	22.55	21.76	15.67	18.41	18.96	17.99	20.77	20.55
60-64 ..	5.71	7.58	9.01	4.77	5.86	7.27	5.31	6.84	8.26
65 and over ..	29.08	30.18	35.71	27.15	31.77	37.61	28.26	30.86	36.53
Age unspecified	0.18	0.17	0.13	0.04	0.04	0.02	0.12	0.12	0.08
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00	100.00

7. Deaths at Single Ages and in Age-groups.—(i) *General.* The 69,147 deaths registered in Australia in 1939 will be found tabulated in groups of five years for each State and Territory and in single ages for the Commonwealth in the latest *Demography Bulletin*. The deaths during the first fifteen years of life have been tabulated in single ages and for the first year of life in shorter periods. A summary for Australia is given in the following table :—

DEATHS AT SINGLE AGES AND IN AGE-GROUPS : AUSTRALIA, 1939.

Ages.	Males.	Fe- males.	Total.	Ages.	Males.	Fe- males.	Total.
Under 1 week ..	1,532	1,123	2,660	Total 5-9 years ..	410	276	686
1 week and under 2 ..	162	114	276	" 10-14 ..	340	234	574
2 weeks and under 3 ..	104	52	156	" 15-19 ..	640	360	1,000
3 weeks and under 1 month ..	48	35	83				
Total under 1 month	1,846	1,329	3,175	" 20-24 ..	713	532	1,245
				" 25-29 ..	759	637	1,396
				" 30-34 ..	710	639	1,349
				" 35-39 ..	929	868	1,737
				" 40-44 ..	1,129	888	2,017
				" 45-49 ..	1,729	1,293	3,022
1 month and under 3 ..	233	144	377				
3 months and under 6 ..	216	191	407	" 50-54 ..	2,435	1,573	4,008
6 months and under 12	416	323	739	" 55-59 ..	2,954	1,766	4,720
				" 60-64 ..	3,416	2,292	5,708
Total under 1 year..	2,711	1,987	4,698	" 65-69 ..	4,103	3,090	7,193
				" 70-74 ..	4,704	3,553	8,257
				" 75-79 ..	4,807	4,079	8,976
				" 80-84 ..	3,366	3,078	6,444
1 year and under 2 ..	365	320	685	" 85-89 ..	1,514	1,723	3,237
2 years ..	178	157	335	" 90-94 ..	435	632	1,067
3 ..	139	104	243	" 95-99 ..	110	177	287
4 ..	117	97	214	" 100 and over	17	14	31
				Age Unspecified	17	1	18
Total under 5 years ..	3,510	2,665	6,175	Total All Ages ..	38,837	30,310	69,147

(ii) *Rates.* The following table gives the average annual death-rates per 1,000 living in age-groups for the period 1932 to 1934, i.e., the Census year 1933 and the years immediately preceding and following. Deaths in the Northern Territory and the Australian Capital Territory are included in the total for Australia but not in any of the States. Similar details for the years 1920 to 1922 may be found in Official Year Book, No. 22, p. 975.

AVERAGE ANNUAL DEATH-RATES: AGE-GROUPS, 1932 TO 1934.

Age-group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
MALES.							
Years.							
0-4 ..	12.51	12.65	12.21	9.91	12.81	12.77	12.33
5-9 ..	1.41	1.72	1.56	1.21	1.56	2.08	1.53
10-14 ..	1.23	1.38	1.08	1.04	1.40	1.27	1.24
15-19 ..	1.69	1.76	1.93	1.71	1.76	2.05	1.76
20-24 ..	2.28	2.31	2.81	2.31	2.52	2.73	2.41
25-29 ..	2.21	2.58	2.93	2.50	2.85	2.98	2.52
30-34 ..	2.81	2.82	3.50	2.53	3.10	3.78	2.96
35-39 ..	3.76	3.85	4.61	3.26	4.01	4.71	3.92
40-44 ..	5.34	4.93	6.04	4.71	5.69	4.85	5.28
45-49 ..	7.91	7.61	7.98	6.80	8.81	6.90	7.76
50-54 ..	11.62	11.25	11.82	9.81	13.48	9.96	11.45
55-59 ..	17.70	18.68	17.58	15.15	21.43	14.47	17.89
60-64 ..	25.74	26.66	26.02	25.08	28.26	23.92	26.27
65-69 ..	39.99	41.17	39.94	36.14	42.40	35.11	40.03
70-74 ..	62.28	63.96	58.90	57.29	63.40	59.22	61.85
75-79 ..	95.52	98.12	94.59	92.66	105.14	94.23	96.26
80-84 ..	156.44	157.81	168.61	146.83	176.82	160.80	158.70
85-89 ..	231.04	233.33	218.42	239.45	264.96	204.45	230.75
90 and over	313.38	348.76	314.86	303.07	380.77	401.97	327.55
FEMALES.							
Years.							
0-4 ..	10.05	7.04	10.72	8.30	8.64	10.42	10.00
5-9 ..	1.17	1.30	1.03	1.03	1.27	1.54	1.19
10-14 ..	0.83	0.97	0.93	0.90	0.99	0.91	0.90
15-19 ..	1.36	1.39	1.50	1.23	1.26	2.22	1.39
20-24 ..	2.03	2.00	2.77	2.35	1.94	2.58	2.11
25-29 ..	2.44	2.50	2.81	2.74	2.75	3.74	2.60
30-34 ..	2.88	2.87	3.44	2.64	3.13	3.03	2.97
35-39 ..	3.75	3.37	4.05	3.88	4.24	4.43	3.74
40-44 ..	4.24	4.32	4.89	4.10	5.79	4.88	4.37
45-49 ..	6.02	6.11	6.14	5.78	6.35	5.44	6.03
50-54 ..	8.27	8.81	8.61	8.07	9.08	10.08	8.56
55-59 ..	11.62	12.49	12.02	11.26	10.69	11.62	15.54
60-64 ..	17.27	18.73	17.19	17.78	17.32	16.87	17.77
65-69 ..	29.55	29.91	27.01	27.13	29.81	30.46	29.21
70-74 ..	45.95	48.18	49.03	42.31	44.10	48.31	46.70
75-79 ..	74.78	81.13	76.29	75.65	74.42	83.58	77.47
80-84 ..	125.55	127.91	126.63	120.74	120.99	125.15	125.68
85-89 ..	119.40	204.57	208.19	207.40	192.39	195.28	199.94
90 and over	292.10	327.19	370.23	233.58	397.20	363.63	306.24

AVERAGE ANNUAL DEATH-RATES : AGE-GROUPS, 1932 TO 1934—*continued.*

Age-group.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
PERSONS.							
Years.							
0-4 ..	11.31	11.37	11.48	9.12	11.35	11.62	11.19
5-9 ..	1.29	1.51	1.30	1.12	1.41	1.81	1.36
10-14 ..	1.03	1.18	1.01	0.97	1.20	1.09	1.07
15-19 ..	1.52	1.57	1.72	1.47	1.51	2.14	1.58
20-24 ..	2.16	2.16	2.60	2.35	2.24	2.66	2.26
25-29 ..	2.32	2.54	2.87	2.61	2.80	3.35	2.56
30-34 ..	2.85	2.85	3.47	2.59	3.12	3.71	2.96
35-39 ..	3.76	3.61	4.34	3.57	4.12	4.56	3.83
40-44 ..	4.79	4.62	5.50	4.40	5.15	4.86	4.83
45-49 ..	6.99	6.84	7.14	6.29	7.67	6.19	6.92
50-54 ..	10.00	10.00	10.37	8.93	11.47	10.02	10.04
55-59 ..	14.70	15.46	14.86	13.19	16.63	13.09	14.88
60-64 ..	21.56	22.46	22.41	21.35	23.44	20.52	22.04
65-69 ..	34.90	35.29	34.06	31.39	37.01	32.87	34.69
70-74 ..	54.31	55.68	54.55	49.43	55.28	53.89	54.38
75-79 ..	85.18	89.06	86.33	83.92	91.08	88.97	86.82
80-84 ..	140.43	140.48	148.56	132.56	149.72	142.64	141.13
85-89 ..	209.89	215.56	213.10	220.66	222.90	199.07	214.17
90 and over	301.13	334.60	341.25	253.61	389.21	376.36	314.41

8. Deaths of Centenarians.—Particulars concerning the 31 persons—17 males and 14 females—aged 100 years and upwards, who died in 1939 are given in the following table. While the Registrars-General of the various States verify the figures as far as possible, absolute reliance cannot be placed on their accuracy, owing to the well-known tendency of very old people to overstate their ages. In connexion with this question it may be noted that while parish registers in the United Kingdom often date very far back, compulsory registration of births dates practically from 1874 only, the Act of 1836 having left many loopholes for those unwilling to register the births of their children.

DEATHS OF CENTENARIANS : AUSTRALIA, 1939.

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Australia	Conjugal Condition.
100	Lake Macquarie	N.S.W. ..	Chronic myocarditis, Arterio sclerosis	Unknown	Unknown	Unknown	Unknown
100	Toowoomba	Queensland	Morbus cordis, Arterio sclerosis, Senility	Pensioner	Not stated	Not stated	Not stated
100	Adelaide ..	Sth. Aust.	Acute bronchitis, Cardiac failure, Senility	Contractor	England, ..	90 years ..	Married
100	Perth ..	West. Aust.	Senility	Orchardist	.. ..	84 years ..	..
101	Bendigo ..	Victoria ..	Chronic bronchitis	Farmer ..	Ireland ..	86 years ..	..
102	Tweedshire	N.S.W. ..	Pneumonia	Labourer ..	Sandwich Is.	80 years ..	..
102	Manning ..	.. ..	Coronary thrombosis, Senile decay	Grazier ..	England ..	97 years ..	..

DEATHS OF CENTENARIANS : AUSTRALIA, 1939—*continued.*

Age.	Locality where Death occurred.	State.	Cause of Death.	Occupation.	Birthplace.	Length of Residence in Australia.	Conjugal Condition.
MALES—<i>continued.</i>							
102	Gilgandra	N.S.W. ..	Cardiac failure, Myocardial degeneration,	Storekeeper	Ireland ..	88 years ..	Married
102	Colo ..	.. ..	Senility Cerebral softening, Senile arterio sclerosis	Farmer ..	England ..	40 years ..	..
102	Prospect ..	Sth. Aust.	Senility ..	Seaman ..	.. ..	92 years ..	..
103	Lismore ..	N.S.W. ..	.. ..	Labourer ..	Ireland ..	Unknown	Single
103	Condobolin Lake	.. ..	Myocardial degeneration, Bronchitis, Senilit,	.. ..	N.S.W. ..	Native ..	Married
103	Lidcombe	.. ..	Senility ..	.. ..	Canada ..	62 years ..	Single
105	Kyeamba ..	.. ..	Myocardial degeneration, Senility	Gardener..	China ..	65 years ..	Married
105	Frome ..	Sth. Aust.	Cardiac failure, Senile decay	Pensioner	India ..	53 years ..	..
106	Burnside ..	.. ..	Senility ..	Gardener	England ..	84 years ..	..
FEMALES.							
100	Warrnambool	Victoria ..	Coronary thrombosis, Myocarditis	.. ..	Victoria ..	Native ..	Married
100	Prahran ..	.. ..	Broncho pneumonia	.. ..	England ..	43 years ..	Single
100	Brisbane ..	Queensland	Hæmatemesis, Chronic ulceration of stomach, Old age	.. ..	Ireland ..	74 years ..	Married
100	Perth ..	West. Aust.	Cerebral hæmorrhage	.. ..	England ..	40 years ..	..
100	Perth ..	.. ..	Myocardial degeneration, Influenza	.. ..	Ireland ..	80 years ..	..
101	Burwood ..	N.S.W. ..	Carcinoma of stomach	.. ..	England ..	72 years ..	..
101	Chiltern ..	Victoria ..	Cardiac degeneration	.. ..	.. ..	84 years ..	..
103	Norwood ..	Sth. Aust.	Myocardial degeneration	.. ..	.. ..	85 years ..	..
103	Woodville	.. ..	Heat prostration, Senility	.. ..	.. ..	85 years ..	Single
104	Walcha ..	N.S.W. ..	Chronic myocarditis, Senility	.. ..	N.S.W. ..	Native ..	Married
104	Hamilton ..	Victoria ..	Senility ..	.. ..	Tasmania	.. ..	..
104	Kyneton ..	.. ..	Arterio sclerosis	.. ..	Ireland ..	86 years ..	..
104	Hobart ..	Tasmania	Senility ..	.. ..	Tasmania	Native ..	..
106	Norwood ..	Sth. Aust.	Senile decay, Broken femur	.. ..	Ireland ..	85 years ..	..

NOTE.—The particulars shown in this table are those given in the death registers, and no attempt has been made by this Bureau to verify them.

9. Length of Residence in Australia of Persons who Died.—The length of residence in Australia of all persons whose deaths were registered in 1939 is shown in the following table :—

LENGTH OF RESIDENCE IN AUSTRALIA OF PERSONS WHO DIED IN 1939.

Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.	Length of Residence.	Male Deaths.	Female Deaths.	Total Deaths.
Born in Australia ..	27,723	23,249	50,972	Resident 25 to 29 years	1,256	750	2,006
Resident under 1 year	48	19	67	" 30 to 34 " ..	659	261	920
" 1 year ..	28	19	47	" 35 to 39 " ..	320	140	460
" 2 years ..	16	19	35	" 40 to 44 " ..	591	261	852
" 3 " ..	18	7	25	" 45 to 49 " ..	469	289	758
" 4 " ..	8	10	18	" 50 to 54 " ..	1,547	993	2,510
" 5 " ..	21	11	32	" 55 to 59 " ..	1,116	764	1,880
" 6 " ..	14	8	22	" 60 to 64 " ..	932	686	1,612
" 7 " ..	12	7	19	65 yrs. and over	1,235	1,403	2,638
" 8 " ..	17	10	27	Length of residence not stated	..	..	..
" 9 " ..	21	16	37	" ..	1,521	492	2,013
" 10 to 14 years	464	329	793	Total ..	38,837	30,310	69,147
" 15 to 19 " ..	510	381	891				
" 20 to 24 " ..	291	222	513				

10. Birthplaces of Persons who Died.—The following table provides a summary of birthplaces of persons whose deaths were registered in 1911 and 1939. More detailed information in respect of 1939 will be found in *Demography Bulletin*, No. 57 :—

BIRTHPLACES OF PERSONS WHO DIED: AUSTRALIA.

Birthplace.	1911.			1939.		
	Males.	Females.	Total.	Males.	Females.	Total.
AUSTRALASIA—						
Australia	14,476	12,279	26,755	27,723	23,249	50,972
New Zealand	126	79	205	379	257	636
EUROPE—						
England and Wales	5,639	3,541	9,180	5,347	3,708	9,055
Scotland	1,666	1,112	2,778	1,474	936	2,410
Eire	2,837	2,528	5,365	1,369	1,294	2,663
Other British Possessions	40	26	66	53	30	83
Western Europe	365	62	427	368	92	460
Central Europe	678	292	970	527	263	790
Southern Europe	122	15	137	274	78	352
Eastern Europe	71	6	77	88	10	98
ASIA—						
British Possessions	102	28	130	133	34	167
Foreign Countries	470	8	478	291	32	323
AFRICA—						
British Possessions	29	18	47	51	36	87
Foreign Countries	2	1	3	8	2	10
AMERICA—						
Canada	73	15	88	45	16	61
Other British Possessions	5	6	11	16	5	21
United States of America	72	18	90	81	32	113
Other Foreign Countries	35	12	47	5	8	13
POLYNESIA—						
British	47	4	51	23	13	36
Foreign	44	10	54	28	8	36
AT SEA AND INDEFINITE	692	218	910	554	207	761
Total	27,591	20,278	47,869	38,837	30,310	69,147

11. Occupations of Males who Died.—Information as to the main groups of the occupations of the 38,837 males who died in Australia in 1939 is contained in the following table. Corresponding data for 1921 and 1931 have been added for purposes of comparison.

OCUPATIONS OF MALES WHO DIED : AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage of Total.		
	1921.	1931.	1939.	1921.	1931.	1939.
				%	%	%
Professional	1,307	1,534	2,223	4.26	4.82	5.73
Domestic	830	846	982	2.71	2.66	2.53
Commercial	2,739	3,727	(a)3,349	8.94	11.72	(a) 8.62
Transport and Communica- tion	1,841	2,189	3,007	6.01	6.89	7.74
Industrial	8,613	10,330	(a)6,642	28.10	32.49	a17.10
Agricultural, Pastoral and Mining, &c.	5,711	6,157	8,027	18.63	19.36	20.67
Indefinite	1,436	1,802	a10,210	4.68	5.67	a26.29
Dependent	8,175	5,211	4,397	26.67	16.39	11.32
Total Male Deaths ..	30,652	31,796	38,837	100.00	100.00	100.00

(a) 7,293 (18.78 per cent.) clerks, labourers, etc., not specified as belonging to any industry, formerly included under "Commercial" or "Industrial", are included under "Indefinite".

12. Causes of Death.—(i) *General*. The classification adopted by this Bureau is that of the International Institute of Statistics, as amended by the Committees of Revision which met in Paris in 1909, 1920 and 1929. The last meeting was held in 1938, and the consequent amendments will be adopted in 1940.

(ii) *Mortality Statistics for 1907 and Subsequent Years*. The statistics relating to causes of death in Australia from 1907 onward have been tabulated in this Bureau in accordance with the above-mentioned classification, and the system is being employed also in the various State statistical offices.

(iii) *Classification of Causes of Death, according to the Intermediate and the Abridged International Classifications*. An abridged classification, which enumerates forty-three diseases and groups of diseases according to the revised classification, has been in use in many European countries and American States until recently, and a table has been prepared in past issues of the Official Year Book showing the causes of death according to the abridged classification, so that the results may be compared with those of other countries which used the abridged index.

As the result of an international treaty signed in London in 1934, the intermediate classification of causes of death, or the "minimum nomenclature," covering 85 main causes or groups of causes, has now been adopted in most countries for the purpose of making international comparisons. This classification appears in the pages following and shows the number of deaths during 1939 in Australia for each cause enumerated. To preserve continuity with former statistics, particulars for 1939 have been compiled in the abridged form also and are shown on p. 617 in conjunction with those for the previous four years, while averages over quinquennial periods to 1931-35 are shown in the same form on p. 618.

The compilations for the years 1935 to 1939 will be found in full detail in *Demography Bulletins*, Nos. 53 to 57. In the following tables in which the intermediate classification has been employed, tables A, B and C show deaths of males, females and persons for the year 1939. Table D shows in the abridged form the number of persons who died in each of the years 1935 to 1939 and gives the rate per million of population for the last-named year.

Since death-rates are subject to continual fluctuation, it is unsafe to base deductions on the figures relating to a single year. In order, therefore, to furnish a valid basis for comparison, Table E giving the number of deaths and the rates per 1,000,000 persons for three quinquennial periods has been prepared. While the absolute number of deaths has increased, the death-rate has shown a very satisfactory decrease, which is reflected in the great majority of the causes specified in the table.

A.—CAUSES OF DEATH : MALES, 1939.

INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
1. Typhoid and Paratyphoid Fever (1)	1, 2	10	5	3	..	5	1	..	..	24
2. Typhus Fever (2)	3	..	..	6	..	1	..	..	..	7
3. Small-pox (3)	6	..	..	..	..	..	..	..	..	..
4. Measles (4)	7	55	28	7	5	..	..	..	..	98
5. Scarlet Fever (5)	8	3	2	3	1	..	3	..	..	10
6. Whooping Cough (6)	9	6	..	3	11	13	..	..	I	33
7. Diphtheria (7)	10	97	22	21	14	13	8	..	..	175
8a. Influenza—Pneumonic (8a)	11 (a)	119	70	100	7	35	9	..	I	341
8b. Influenza—Other (8b)	11 (b)	47	29	31	5	9	5	..	..	126
9. Dysentery (14)	13	7	6	3	..	3	..	..	..	19
10. Plague (9)	14	..	..	..	..	..	..	..	..	..
11. Tuberculosis of the Respiratory System (10)	23	592	433	210	111	125	61	2	..	1,534
12a. Tubercular Meningitis (11a)	24	23	16	1	2	2	6	..	..	50
12b. Other forms of Tuberculosis (11b)	25-32	32	35	5	10	7	4	..	..	93
13. Syphilis (12)	34	44	58	22	14	12	5	..	I	156
14. Purulent Infection, Septicæmia (non-puerperal) (14)	36	17	11	7	1	3	1	1	..	41
15. Malaria (13)	38	..	6	7	..	..	..	..	..	13
16. Diseases due to other Protozoal Parasites or Helminths (14)	39-42	10	18	4	5	3	1	..	..	41
17. Other Infectious and Parasitic Diseases (14)	*	47	23	49	19	16	5	2	..	161
18. Cancer and other Malignant Tumours (15)	45-53	1,590	1,180	577	348	276	148	2	I	4,122
19. Tumour, Non-malignant or of which the nature is not specified (16)	54, 55	83	61	24	17	13	5	..	..	203
20. Acute Rheumatic Fever (20)	56	39	47	12	10	7	..	..	..	115
21. Chronic Rheumatism and Gout (17)	57, 58	18	22	8	6	3	2	..	..	59
22. Diabetes Mellitus (18)	59	167	152	54	54	21	15	..	I	464
23. Nutritional Diseases (20)	60-64	..	..	1	..	1	..	..	..	2
24. Diseases of the Thyroid and Parathyroid Glands (20)	66	23	15	2	5	3	5	..	..	53
25. Other General Diseases (20)	65, 67-69	9	14	7	8	3	6	..	..	47
26. Anæmias (20)	71	29	25	16	7	4	2	2	..	85
27. Leucæmias, Pseudoleucæmias, and other Diseases of the Blood and Blood-making Organs (20)	70, 72-74	76	51	23	17	12	3	..	..	182
28. Alcoholism (acute or chronic) (10)	75	17	6	14	8	3	2	1	..	51
29. Other Chronic Poisonings (20)	76, 77	3	..	5	1	..	..	..	..	9
30. Meningitis (23)	79	32	21	13	9	9	3	..	..	87
31. Progressive Locomotor Ataxia (21) (tabes dorsalis)	80	23	14	3	2	4	..	..	..	46
32. Cerebral Hemorrhage, Cerebral Embolism and Thrombosis (22)	82	483	302	160	153	100	52	..	..	1,750
33. General Paralysis of the Insane (21)	83	39	28	11	8	2	4	..	..	92
34. Dementia Præcox and other Psychoses (23)	84	19	12	8	6	2	2	..	..	49
35. Epilepsy (23)	85	41	28	17	9	5	2	..	..	102
36. Other Diseases of the Nervous System (23)	*	154	82	50	32	25	12	..	..	355
37. Diseases of the Eye, Ear and their Annexa (23)	88, 89	27	10	4	4	1	..	..	..	46
38. Pericarditis (24)	90	9	10	5	..	1	2	..	..	27
39. Acute Endocarditis (24)	91	28	18	10	5	5	3	..	..	69
40. Chronic Endocarditis, Valvular Diseases (24)	92	353	282	166	91	55	48	1	..	996
41. Diseases of the Myocardium (24)	93	2,426	1,592	834	393	303	171	1	5	5,725
42. Diseases of the Coronary Arteries and Aorta Pectoris (24)	94	1,145	708	360	188	168	73	1	..	2,643
43. Other Diseases of the Heart (24)	95	234	168	108	67	45	35	1	..	658
44. Aneurysm (except of the Heart) (25)	96	59	46	24	5	12	7	..	..	153
45. Arteriosclerosis and Gangrene (25)	97, 98	759	683	199	157	99	52	1	..	1,950

* No. 17:—4, 5, 12, 15-22, 33, 35, 37, 43, 44; No. 36.—78, 81, 86, 87.

A.—CAUSES OF DEATH: MALES, 1939—continued.

INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
46. Other Diseases of the Circulatory System (25)	99-103	58	19	22	12	11	4	2	..	128
47a. Acute Bronchitis (26a)	106 (a) (r)	42	13	15	9	11	12	..	..	101
47b. Chronic Bronchitis (26b)	106 (b) (r)	121	130	48	27	21	17	1	..	365
48. Pneumonias (27)	107-109	935	656	324	147	193	130	2	..	2,387
49. Pleurisy (28)	110	37	35	19	12	9	4	..	..	116
50. Other Diseases of the Respiratory System (28) (Tuberculosis excepted)	104, 105, 111-114	150	113	108	62	68	31	..	..	532
51. Ulcer of the Stomach and Duodenum (32b)	117	173	129	58	42	29	13	..	1	445
52. Diarrhoea and Enteritis (under 2 years of age) (29a)	119	119	43	16	17	45	2	..	..	242
53. Diarrhoea and Enteritis (2 years and over) (29b)	120	53	33	18	9	17	5	..	1	136
54. Appendicitis (30)	121	164	87	65	22	24	9	1	1	373
55. Hernia, Intestinal Obstruction (32a)	122	116	91	56	29	19	19	..	..	330
56. Cirrhosis of the Liver (31a)	124	82	53	37	13	10	5	..	..	205
57. Other Diseases of the Liver and Biliary Passages, including Biliary Calculi (31b)	125-127	57	39	31	13	13	2	..	..	155
58. Other Diseases of the Digestive System (32b)	*	93	70	46	18	16	16	..	..	259
59. Nephritis (33)	130-132	783	672	335	151	108	52	3	2	2,127
60. Other Diseases of the Kidneys and Ureters (34)	133	51	47	18	12	18	6	..	1	153
61. Calculi of the Urinary Passages (34)	134	28	19	14	11	3	1	..	..	76
62. Diseases of the Bladder (tumors excepted) (34)	135	12	17	6	5	5	4	..	..	49
63. Diseases of the Urethra, Urinary Abscess, &c. (34)	136	14	6	5	5	2	2	..	..	34
64. Diseases of the Prostate (34)	137	178	176	102	43	46	22	..	..	567
65. Diseases of the Genital Organs, not specified as Venereal	138, 139	1	..	..	..	..	..	..	..	1
71. Diseases of the Skin and Cellular Tissue (37)	151-153	32	21	14	3	6	7	..	..	83
72. Diseases of the Bones and Organs of Locomotion (Tuberculosis and Rheumatism excepted) (37)	154-156	54	32	14	5	8	5	..	..	118
73. Congenital Malformations (Still-births not included) (38)	137	169	77	66	22	20	13	..	..	367
74. Congenital Debility (38)	158	51	31	13	9	11	12	..	..	127
75. Premature Birth (Still-births not included) (38)	159	360	213	153	56	56	37	2	2	879
76. Injury at Birth (Still-births not included) (38)	160	127	84	62	18	10	12	..	..	313
77. Other Diseases Peculiar to Early Infancy (38)	161	84	58	46	17	19	10	..	..	234
78. Senility (39)	162	362	413	171	142	112	57	4	..	1,241
79. Suicide (40)	163-171	251	108	114	49	60	14	4	2	602
80. Homicide (41)	172-175	27	11	9	..	2	4	..	..	53
81. Accident (42)	176-194	1,246	827	491	249	253	73	22	4	3,165
82. Violent Deaths of which the nature (Accident, Suicide, Homicide) is unknown (42)	195	44	75	3	8	6	1	1	..	138
83. Wounds of War (Execution of Civilians by Belligerent Armies included) (42)	196, 197	1	5	4	..	..	1	..	..	11
84. Legal Executions (42)	198	1	2	..	..	..	..	..	..	3
85. Cause of Death not Specified or Ill-defined (43)	199, 200	15	30	24	64	5	3	8	1	180
Total Males .. .. .	..	15,116	10,779	5,724	3,116	2,664	1,348	65	25	38,837

* No. 58:—115, 116, 118, 123, 128, 129.

B.—CAUSES OF DEATH: FEMALES, 1939.

INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
1. Typhoid and Paratyphoid Fever (1)	1, 2	3	3	4	..	1	..	..	..	11
2. Typhus Fever (2)	..	..	..	..	..	..	..	..	..	..
3. Small-pox (3)	3	..	..	..	..	..	..	..	..	..
4. Measles (4)	7	45	38	4	6	1	1	..	..	95
5. Scarlet Fever (5)	8	8	8	3	..	..	..	..	..	19
6. Whooping Cough (6)	10	15	2	5	5	22	..	..	..	49
7. Diphtheria (7)	10	95	20	18	16	14	6	..	..	169
8a. Influenza—Pneumonic (8a)	11 (a)	113	79	72	9	22	12	..	..	307
8b. Influenza—Other (8b)	11 (b)	56	21	18	3	8	7	..	..	113
9. Dysentery (14)	13	14	6	3	3	1	..	..	..	27
10. Plague (9)	14	..	..	..	..	..	..	..	..	..
11. Tuberculosis of the Respiratory System (10)	23	330	323	80	96	54	41	..	..	924
12a. Tubercular Meningitis (11a)	24	12	9	1	..	3	5	..	..	30
12b. Other forms of Tuberculosis (11b)	25-32	22	30	9	6	2	9	..	..	78
13. Syphilis (12)	34	15	13	11	3	4	8	..	..	54
14. Purulent Infection, Septicæmia (non-puerperal) (14)	36	14	12	3	6	3	2	..	..	40
15. Malaria (13)	38	..	1	7	..	..	..	..	..	8
16. Diseases due to other Protozoal Parasites or Helminths (14)	39-42	13	13	4	2	..	1	..	..	33
17. Other Infectious and Parasitic Diseases (14)	*	28	23	23	8	6	3	..	..	91
18. Cancer and other Malignant Tumours (15)	45-53	1,517	1,327	434	357	212	123	..	..	3,970
19. Tumours, Non-malignant or of which the nature is not specified (16)	54, 55	105	67	34	23	10	6	..	..	245
20. Acute Rheumatic Fever (20)	56	35	53	19	12	6	6	..	..	131
21. Chronic Rheumatism and Gout (17)	57, 58	27	45	17	10	4	7	..	..	110
22. Diabetes Mellitus (18)	59	308	235	100	91	42	18	..	..	794
23. Nutritional Diseases (20)	60-64	2	..	..	..	..	..	..	..	2
24. Diseases of the Thyroid and Parathyroid Glands (20)	66	87	48	25	11	8	14	..	1	194
25. Other General Diseases (20)	65, 67-69	12	11	5	6	6	2	..	..	42
26. Anaemias (20)	71	39	39	16	7	8	5	..	..	114
27. Leucaemias, Pseudoleucaemias, and other Diseases of the Blood and Blood-making Organs (20)	70, 72-74	52	46	17	15	7	4	..	..	141
28. Alcoholism (acute or chronic) (19)	75	10	8	..	3	..	..	..	..	21
29. Other Chronic Poisonings (20)	76, 77	..	..	8	..	..	..	..	..	8
30. Meningitis (23)	79	27	13	4	7	8	..	..	1	60
31. Progressive Locomotor Ataxia (21) (tabes dorsalis)	80	4	2	1	..	..	..	..	..	7
32. Cerebral Haemorrhage, Cerebral Embolism and Thrombosis (22)	82	610	428	186	194	103	91	1	..	1,613
33. General Paralysis of the Insane (21)	83	6	9	3	..	..	..	..	..	18
34. Dementia Praecox and other Psychoses (23)	84	22	14	9	8	..	3	..	..	56
35. Epilepsy (23)	85	36	17	10	7	7	2	..	..	79
36. Other Diseases of the Nervous System (23)	*	124	89	41	40	13	13	..	..	320
37. Diseases of the Eye, Ear and their Annexa (23)	88, 89	19	6	5	1	3	2	..	..	36
38. Pericarditis (24)	90	5	5	2	..	..	1	..	..	13
39. Acute Endocarditis (24)	91	27	11	8	6	3	5	..	..	60
40. Chronic Endocarditis, Valvular Diseases (24)	92	275	204	95	80	35	28	..	2	809
41. Diseases of the Myocardium (24)	93	1,939	1,394	485	342	193	129	2	1	4,485
42. Diseases of the Coronary Arteries and Angina Pectoris (24)	94	568	358	157	111	85	28	..	1	1,308
43. Other Diseases of the Heart (24)	95	129	171	69	33	43	35	..	..	485
44. Aneurysm (except of the Heart) (25)	96	21	29	10	4	2	1	..	..	67
Arteriosclerosis and Gangrene (25)	97, 98	800	818	215	150	73	63	..	2	2,121
46. Other Diseases of the Circulatory System (25)	09-103	41	40	19	16	8	3	1	..	128
47a. Acute Bronchitis (26a)	106 (a) (r)	49	14	13	10	5	6	..	..	97

* No. 17: —4, 5, 12, 15-22, 33, 35, 37, 43, 44; No. 36: 78, 81, 86, 87.

B.—CAUSES OF DEATH: FEMALES, 1939—*continued.*

INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
47b. Chronic Bronchitis (26b) ..	106 (b) (d)	65	72	25	18	7	5	..	1	193
48. Pneumonias (27) ..	107-109	673	544	201	126	113	80	2	1	1,740
49. Pleurisy (28) ..	110	23	16	10	4	4	1	1	..	59
50. Other Diseases of the Respiratory System (28) (Tuberculosis excepted) ..	104, 105, 111-114	97	69	46	58	37	14	..	..	321
51. Ulcer of the Stomach and Duodenum (32b) ..	117	39	39	11	5	9	4	..	..	107
52. Diarrhoea and Enteritis (under 2 years of age) (29a) ..	119	79	35	21	16	32	1	..	..	184
53. Diarrhoea and Enteritis (2 years and over) (29b) ..	120	72	40	25	12	15	6	..	..	170
54. Appendicitis (30) ..	121	86	49	18	14	12	7	1	..	187
55. Hernia, Intestinal Obstruction (32a) ..	122	103	81	29	24	11	13	..	..	261
56. Cirrhosis of the Liver (31a) ..	124	47	40	12	13	..	2	..	..	114
57. Other Diseases of the Liver and Biliary Passages including Biliary Calculi (31b) ..	125-127	118	109	41	29	24	12	..	..	323
58. Other Diseases of the Digestive System (32b) ..	*	67	65	36	10	14	13	..	..	205
59. Nephritis (33) ..	130-132	624	648	304	111	71	40	2	2	1,802
60. Other Diseases of the Kidneys and Ureters (34) ..	133	52	42	23	11	12	5	1	..	146
61. Calculi of the Urinary Passages (34) ..	134	9	11	7	3	2	..	..	..	32
62. Diseases of the Bladder (Tumors excepted) (34) ..	135	8	5	2	1	1	1	..	..	18
63. Diseases of the Urethra, Urinary Abscess, &c. (34) ..	136	1	..	2	..	..	..	..	..	3
65. Diseases of the Genital Organa not specified as Venereal (34) ..	138, 139	58	33	25	9	5	7	..	..	137
66. Accidents of Pregnancy (36) ..	141-143	16	10	21	6	1	4	..	..	58
67. Puerperal Haemorrhage (36) ..	144	30	15	14	5	6	2	..	..	72
68a. Post-abortive Sepsis (35a) ..	140 (a)	14	5	4	4	3	3	..	..	33
68b. Criminal Abortion (35b) ..	140 (b)	38	36	2	2	3	..	..	..	81
68c. Puerperal Septicæmia (35c) ..	145	24	9	4	7	1	3	..	..	48
69. Toxæmias of Pregnancy: Albuminuria, Eclampsia, &c. (36) ..	146, 147	41	32	40	4	5	2	1	..	128
70. Other Puerperal Causes (36) ..	148-150	34	12	21	11	3	2	..	..	83
71. Diseases of the Skin and Cellular Tissue (37) ..	151-153	31	16	3	7	10	1	..	..	71
72. Diseases of the Bones and Organs of Locomotion (Tuberculosis and Rheumatism excepted) (37) ..	154-156	18	14	3	6	1	5	..	..	47
73. Congenital Malformations (Stillbirths not included) (38) ..	157	122	71	59	26	25	20	..	..	323
74. Congenital Debility (38) ..	158	42	19	13	10	7	1	..	..	92
75. Premature Births (Stillbirths not included) (38) ..	159	268	167	92	44	32	25	..	2	630
76. Injury at Birth (Stillbirths not included) (38) ..	160	81	39	31	4	10	7	2	1	175
77. Other Diseases peculiar to early Infancy (38) ..	161	62	44	45	11	7	11	2	..	182
78. Senility (39) ..	162	422	423	150	150	84	49	1	2	1,281
79. Suicide (40) ..	163-171	78	37	32	16	11	5	..	..	179
80. Homicide (41) ..	172-175	8	4	7	1	..	2	..	..	22
81. Accident (42) ..	176-194	431	292	150	110	64	34	4	2	1,087
82. Violent Deaths of which the Nature (Accident, Suicide, Homicide) is unknown (42) ..	195	15	44	2	2	2	..	..	..	65
83. Wounds of War (Execution of Civilians by Belligerent Armies included) (42) ..	196, 197	..	..	..	..	..	..	..	..	..
84. Legal Executions (42) ..	198	..	..	..	..	..	..	..	..	..
85. Cause of Death not Specified or Ill-defined (43) ..	199, 200	18	11	3	21	3	1	2	..	59
Total Females ..	..	11,699	9,300	3,806	2,623	1,672	1,078	23	19	30,310

* No. 58:—115, 116, 118, 123, 128, 129.

C.—CAUSES OF DEATH: PERSONS, 1939.

INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
1. Typhoid and Paratyphoid Fever (1)	1, 2	13	8	7	..	6	1	..	..	35
2. Typhus Fever (2)	3	..	..	6	..	1	..	..	..	7
3. Small-pox (3)	6	..	..	..	..	..	..	..	..	..
4. Measles (4)	7	100	66	11	11	1	4	..	..	193
5. Scarlet Fever (5)	8	11	10	6	1	..	..	..	1	29
6. Whooping Cough (6)	9	21	2	8	16	35	..	..	..	82
7. Diphtheria (7)	10	192	42	39	30	27	14	..	..	344
8a. Influenza—Pneumonic (8a)	11(a)	232	149	172	16	57	21	..	1	648
8b. Influenza—Other (8b)	11(b)	103	50	49	8	17	12	..	..	239
9. Dysentery (14)	13	21	12	6	3	4	..	..	..	46
10. Plague (9)	14	..	..	..	..	..	..	..	..	..
11. Tuberculosis of the Respiratory System (10)	23	922	756	290	207	179	102	2	..	2,458
12a. Tubercular Meningitis (11a)	24	35	25	2	2	5	11	..	..	80
12b. Other forms of Tuberculosis (11b)	25-32	54	65	14	16	9	13	..	..	171
13. Syphilis (12)	34	59	71	33	17	16	13	..	1	210
14. Purulent Infection, Septicæmia (non-puerperal) (14)	36	31	23	10	7	6	3	1	..	81
15. Malaria (13)	38	..	7	14	..	..	..	..	..	21
16. Diseases due to other Protozoal Parasites or Helminths (14)	39-42	23	31	8	7	3	2	..	..	74
17. Other Infectious and Parasitic Diseases (14)	*	75	46	72	27	22	8	2	..	252
18. Cancer and other Malignant Tumours (15)	45-53	3,107	2,567	1,011	705	488	271	2	1	8,092
19. Tumours, non-malignant or of which the nature is not specified (16)	54, 55	188	128	58	40	23	11	..	..	448
20. Acute Rheumatic Fever (20)	56	74	100	31	22	13	6	..	..	246
21. Chronic Rheumatism and Gout (17)	57, 58	475	67	25	16	7	9	..	..	169
22. Diabetes Mellitus (18)	59	475	387	154	145	63	33	..	1	1,258
23. Nutritional Diseases (20)	60-64	2	..	1	..	1	..	..	..	4
24. Diseases of the Thyroid and Parathyroid Glands (20)	66	110	63	27	16	11	19	..	1	247
25. Other General Diseases (20)	65, 67-69	21	25	12	14	9	8	..	..	89
26. Anaemias (20)	71	68	64	32	14	12	7	2	..	199
27. Leucaemias, Pseudoleucaemias, and other Diseases of the Blood and Blood-making Organs (20)	70, 72-74	128	97	40	32	19	7	..	..	323
28. Alcoholism (acute or chronic) (19)	75	27	14	11	11	3	2	1	..	72
29. Other Chronic Poisonings (20)	76, 77	3	..	13	1	..	..	..	..	17
30. Meningitis (23)	79	59	34	17	16	17	3	..	1	147
31. Progressive locomotor ataxia (21) (tabes dorsalis)	80	27	16	4	2	4	..	..	..	53
32. Cerebral Hæmorrhage, Cerebral Embolism and Thrombosis (22)	82	1,093	730	346	347	203	143	1	..	2,863
33. General Paralysis of the Insane (21)	83	45	37	14	8	2	4	..	..	110
34. Dementia Præcox and other Psychoses (23)	84	41	26	17	14	2	5	..	..	105
35. Epilepsy (23)	85	77	45	27	16	12	4	..	..	181
36. Other Diseases of the Nervous System (23)	*	278	171	91	72	38	25	..	..	675
37. Diseases of the Eye, Ear and their Annexa (23)	88, 89	46	16	9	5	4	2	..	..	82
38. Pericarditis (24)	90	14	15	7	..	1	3	..	..	40
39. Acute Endocarditis (24)	91	55	29	18	11	8	8	..	..	129
40. Chronic Endocarditis, Valvular Diseases (24)	92	628	576	261	171	90	76	1	2	1,505
41. Diseases of the Myocardium (24)	93	4,365	2,986	1,319	735	496	300	3	6	10,210
42. Diseases of the Coronary Arteries and Angina Pectoris (24)	94	1,713	1,066	517	209	253	101	1	1	3,951
43. Other Diseases of the Heart (24)	95	363	339	177	105	88	70	1	..	1,143
44. Aneurysm (except of the heart) (25)	96	80	75	34	9	14	8	..	..	220
45. Arteriosclerosis and Gangrene (25)	97, 98	1,559	1,501	414	307	172	115	1	2	4,071
46. Other Diseases of the Circulatory System (25)	99-103	99	59	41	28	19	7	3	..	256
47a. Acute Bronchitis (26a)	106 (a) (e)	91	27	28	19	15	18	..	..	198
47b. Chronic Bronchitis (26b)	106 (b) (f)	186	202	73	45	23	22	1	1	558
48. Pneumonias (27)	107-109	1,608	1,200	525	273	306	210	4	1	4,127

* No. 17:—4, 5, 12, 15-22, 33, 35, 37, 43, 44; No. 36:—78, 81, 86, 87.

C.—CAUSES OF DEATH: PERSONS, 1939—*continued.*

INTERMEDIATE CLASSIFICATION.

(Figures in parentheses indicate the abridged classification number in each instance.)

Intermediate Classification.	General Classification Numbers.	N.S.W.	Vic.	Q'land.	S. Aus.	W. Aus.	Tas.	N.T.	A. C. T.	Aust.
49. Pleurisy (28)	110	60	51	29	16	13	5	1	..	175
50. Other Diseases of the Respiratory System (28) (Tuberculosis excepted)	104, 105 111-114	247	182	154	120	105	45	..	..	853
51. Ulcer of the Stomach and Duodenum (32 <i>b</i>)	117	212	168	69	47	38	17	..	I	552
52. Diarrhoea and Enteritis (under 2 years of age) (29 <i>a</i>)	119	198	78	37	33	77	3	..	..	426
53. Diarrhoea and Enteritis (2 years and over) (29 <i>b</i>)	120	125	73	43	21	32	11	..	I	306
54. Appendicitis (30)	121	250	136	83	36	36	16	2	I	566
55. Hernia, Intestinal Obstruction (32 <i>a</i>)	122	219	172	83	53	37	32	..	..	591
56. Cirrhosis of the Liver (31 <i>a</i>)	124	129	98	49	26	10	7	..	..	319
57. Other Diseases of the Liver and Biliary Passages, including Biliary Calculi (31 <i>b</i>)	125-127	175	148	72	42	37	14	..	..	488
58. Other Diseases of the Digestive System (32 <i>b</i>) .. .. .	..	160	135	82	28	30	29	..	..	464
59. Nephritis (33)	130-132	1,408	1,320	639	262	179	92	5	4	3,909
60. Other Diseases of the Kidneys and Ureters (34)	133	103	89	41	23	30	11	I	I	299
61. Calculi of the Urinary Passages (34)	134	37	30	21	14	5	1	..	..	168
62. Diseases of the Bladder (Tumors excepted) (34)	135	20	22	8	6	6	5	..	..	67
63. Diseases of the Urethra, Urinary Abscess, etc. (34)	136	15	6	7	5	2	2	..	..	37
64. Diseases of the Prostate (34)	137	178	176	102	43	46	22	..	..	567
65. Diseases of the Genital Organs, not specified as Venereal (34)	138, 139	59	33	25	9	5	7	..	..	138
66. Accidents of Pregnancy (36)	141-143	16	10	21	6	1	4	..	..	58
67. Puerperal Haemorrhage (36)	144	30	15	14	5	6	2	..	..	72
68 <i>a</i> . Post-abortive Sepsis (35 <i>a</i>)	140(<i>a</i>)	14	5	4	4	3	3	..	..	33
68 <i>b</i> . Criminal Abortion (35 <i>b</i>)	140(<i>b</i>)	38	30	2	2	3	..	..	..	81
68 <i>c</i> . Puerperal Septicaemia (35 <i>c</i>)	145	24	9	4	7	1	3	..	..	48
69. Toxaemias of Pregnancy: Albuminuria, Eclampsia, etc. (36)	146, 147	44	34	40	4	5	2	I	..	128
70. Other Puerperal Causes (36)	148-150	34	12	21	11	3	2	..	..	83
71. Diseases of the Skin and Cellular Tissue (37)	151-153	66	37	17	10	16	8	..	..	154
72. Diseases of the Bones and Organs of Locomotion (Tuberculosis and Rheumatism excepted) (37)	154-156	72	46	17	11	9	10	..	..	165
73. Congenital Malformations (Still-births not included) (38)	157	291	148	125	48	45	33	..	..	690
74. Congenital Debility (38)	158	93	50	26	19	18	13	..	..	219
75. Premature Birth (Still-births not included) (38)	159	628	380	245	100	88	62	2	4	1,509
76. Injury at Birth (Still-births not included) (38)	160	208	123	93	22	40	19	2	I	488
77. Other Diseases peculiar to Early Infancy (38)	161	146	102	91	28	26	21	2	..	416
78. Senility (39)	162	784	836	324	292	196	86	5	2	2,522
79. Suicide (40)	163-171	329	145	146	65	71	19	4	2	781
80. Homicide (41)	172-175	35	15	16	1	2	6	..	..	75
81. Accident (42)	176-194	1,677	1,119	641	359	317	107	26	6	4,252
82. Violent Deaths of which the Nature (Accident, Suicide, Homicide) is unknown (42)	195	59	119	5	10	8	I	I	..	203
83. Wounds of War (Execution of Civilians by Belligerent Armies included) (42)	196, 197	I	5	4	..	..	I	..	..	11
84. Legal Executions (42)	198	I	2	..	..	..	..	..	..	3
85. Cause of Death not Specified or Ill-defined (43)	199,200	63	41	27	85	8	4	10	I	239
Total .. .. .	..	26,815	20,169	9,530	5,739	4,336	2,426	38	44	69,147

* No. 58:—115, 116, 118, 123, 128, 129.

D.—CAUSES OF DEATH : ABRIDGED CLASSIFICATION, AUSTRALIA, 1935 TO 1939.

Abridged Classification.	General Classification Numbers.	1935.	1936.	1937.	1938.	1939.	1939— Rate per 1,000,000 Population.
1. Typhoid Fever	1, 2	63	58	62	48	35	5
2. Typhus Fever	3	6	8	3	5	7	1
3. Small-pox	6	..	..	..	1	..	..
4. Measles	7	129	43	18	10	193	28
5. Scarlet Fever	8	26	56	33	28	29	4
6. Whooping Cough	9	162	257	179	144	82	12
7. Diphtheria	10	412	454	314	308	344	49
8a. Influenza—Pneumonic	11(a)	871	323	261	443	648	93
8b. Influenza—Other	11(b)	297	151	133	180	239	34
10. Tuberculosis of the Respiratory System	23	2,553	2,537	2,462	2,398	2,458	353
11a. Tubercular Meningitis	24	105	109	104	81	80	11
11b. Other Tuberculous Diseases	25-32	195	190	190	177	171	25
12. Syphilis	34	162	169	141	178	210	30
13. Malaria	38	17	11	9	10	21	3
14. Other Infectious or Parasitic Diseases	*	487	496	574	524	453	65
15. Cancer and other Malignant Tumours	45-53	7,310	7,551	7,691	7,929	8,092	1,162
16. Tumors, Non-Malignant or of Unspecified Nature	54, 55	409	449	428	410	448	64
17. Chronic Rheumatism, Gout	57, 58	174	152	155	174	169	24
18. Diabetes Mellitus	59	1,088	1,052	1,149	1,220	1,258	181
19. Acute and Chronic Alcoholism	75	41	54	64	55	72	10
20. Other General Diseases	*	1,121	1,194	1,114	1,215	1,125	162
21. Locomotor Ataxy, General Paralysis of Insane	80, 83	162	157	149	139	163	23
22. Cerebral Hæmorrhage, Embolism, etc.	82	3,029	3,030	2,962	3,062	2,863	411
23. Other Diseases of Nervous System and Sense Organs	90	1,172	1,203	1,116	1,225	1,190	171
24. Diseases of the Heart	90-95	13,862	13,782	14,692	15,493	17,278	2,482
25. Other Diseases of the Circulatory System	96-103	3,448	3,759	4,064	4,335	4,547	653
26a. Acute Bronchitis	106(a)(e)	180	199	172	169	198	28
26b. Chronic Bronchitis	106(b)(d)	606	542	500	538	558	80
27. Pneumonia (all forms)	107-109	4,629	4,396	4,212	4,402	4,127	593
28. Other Diseases of the Respiratory System	104, 105, 110-114	994	1,039	957	951	1,028	148
29a. Diarrhœa and Enteritis (under two years of age)	119	317	358	331	343	426	61
29b. Diarrhœa and Enteritis (two years and over)	120	314	336	333	315	306	44
30. Appendicitis	121	608	554	552	525	560	81
31a. Cirrhosis of the Liver	124	289	284	281	316	319	46
31b. Other Diseases of the Liver and Biliary Calculi	125-127	457	476	426	518	488	70
32a. Hernia, Intestinal Obstruction	122	598	551	645	551	591	85
32b. Other Diseases of the Digestive System	*	913	986	980	944	1,016	146
33. Nephritis	130-132	3,721	3,695	3,848	3,899	3,909	562
34. Other Diseases of the Genito-Urinary System	133-139	1,773	1,190	1,181	1,248	1,216	175
35a. Post-Abortive Sepsis	140(a)	58	86	59	39	33	5
35b. Criminal Abortion	140(b)	98	127	91	105	81	12
35c. Puerperal Septicæmia	145	89	125	62	63	48	7
36. Other Diseases of Pregnancy and Labour	{ 141-144, 146-150 }	345	358	339	355	341	49
37. Diseases of the Skin, Bones, etc.	151-156	325	368	357	331	319	46
38. Congenital Debility, Malformations, Premature Birth, etc.	157-161	3,161	3,303	3,231	3,274	3,322	477
39. Senility	162	2,756	2,884	2,919	2,891	2,522	362
40. Suicide	163-171	791	780	721	746	781	112
41. Homicide	172-175	106	97	107	81	75	11
42. Accidental or Violent Death (except Suicide and Homicide)	176-198	3,411	3,609	3,938	3,886	4,469	642
43. Non-specified and Ill-defined Causes	199, 200	359	335	207	205	239	34
Total .. .. .	..	63,599	63,932	64,496	66,451	69,147	9,932

* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89; No. 32b:—115-118, 123, 128, 129.

E.—CAUSES OF DEATH : ABRIDGED CLASSIFICATION, AUSTRALIA, NUMBERS AND RATES.

Abridged Classification.	General Classification Numbers.	Number of Deaths.			Average Rate per 1,000,000 of Population.		
		1911-15.	1921-25.	1931-35.	1911-15.	1921-25.	1931-35.
1. Typhoid Fever	I, 2	2,848	1,209	379	119	42	12
2. Typhus Fever	3	..	4	15	..	..	1
3. Small-pox	6	6	4	I	..	..	..
4. Measles	7	1,505	582	391	63	20	12
5. Scarlet Fever	8	237	235	331	10	8	10
6. Whooping Cough	9	1,657	1,612	1,186	69	57	36
7. Diphtheria	10	3,677	2,565	2,083	154	90	69
8a. Influenza—Pneumonic	11(a)	1,894	1,808	2,859	79	64	86
8b. Influenza—Other	11(b)		1,344	1,326		47	40
9. Plague	14	I	72	..	..	3	..
10. Tuberculosis of the Respiratory System	23	15,737	15,321	13,221	659	538	400
11a. Tubercular Meningitis	24	1,156	876	618	48	31	19
11b. Other Tubercular Diseases	25-32	1,460	1,404	1,016	61	49	31
12. Syphilis	34	837	632	803	35	22	24
13. Malaria	38	112	150	97	5	5	3
14. Other Infectious or Parasitic Diseases	*	2,820	3,063	2,649	118	108	80
15. Cancer and other Malignant Tumours	45-53	17,838	25,794	34,825	746	906	1,053
16. Tumours, Non-Malignant or of Unspecified Nature	54, 55	546	633	1,817	23	22	55
17. Chronic Rheumatism, Gout	57, 58	552	862	847	23	30	26
18. Diabetes Mellitus	59	2,322	3,355	5,095	97	118	154
19. Acute and Chronic Alcoholism	75	920	763	235	38	27	7
20. Other General Diseases	*	4,039	5,155	5,437	169	188	164
21. Locomotor Ataxy, General Paralysis of Insane	80, 83	1,074	1,138	797	45	39	24
22. Cerebral Hæmorrhage, Embolism, etc.	82	10,957	13,637	15,264	458	479	461
23. Other Diseases of Nervous System and Sense Organs	*	12,550	10,323	5,971	525	363	181
24. Diseases of the Heart	90-95	24,358	31,588	60,227	1,019	1,109	1,817
25. Other Diseases of the Circulatory System	96-103	7,860	7,101	14,511	329	253	438
26a. Acute Bronchitis	106(a)(c)	2,250	1,580	1,078	94	56	33
26b. Chronic Bronchitis	106(b)(d)	4,962	4,053	2,966	208	142	90
27. Pneumonia (all forms)	107-109	15,201	18,400	20,157	636	646	608
28. Other Diseases of the Respiratory System	104, 105, 110-114	4,583	5,781	5,045	192	203	152
29a. Diarrhœa and Enteritis (under two years of age)	119	15,207	9,866	2,043	636	346	62
29b. Diarrhœa and Enteritis (two years and over)	120	4,027	3,144	1,922	160	110	58
30. Appendicitis	121	1,761	2,035	2,680	74	71	81
31a. Cirrhosis of the Liver	124	1,932	1,531	1,321	81	54	40
31b. Other Diseases of the Liver and Biliary Calculi	125-127	1,445	1,706	2,326	60	63	70
32a. Hernia, Intestinal Obstruction	122	2,336	2,648	2,792	98	93	84
32b. Other Diseases of the Digestive System	*	3,968	4,053	4,404	166	142	133
33. Nephritis	130-132	10,751	12,803	17,754	450	450	536
34. Other Diseases of the Genito-Urinary System	133-130	3,065	4,146	5,388	128	146	163
35a. Post-Abortive Sepsis	140(a)	†	†	336	†	†	10
35b. Criminal Abortion	140(b)	†	†	425	†	†	13
35c. Puerperal Septicæmia	145	1,072	1,138	466	45	40	14
36. Other Diseases of Pregnancy and Labour	141-144, 146-150	2,060	2,321	1,833	86	82	56
37. Diseases of the Skin, Bones, etc.	151-156	994	1,556	1,696	42	55	51
38. Congenital Debility, Malformations, Premature Birth, etc.	157-161	21,410	21,511	15,909	896	755	481
39. Senility	162	20,004	20,479	14,021	875	717	424
40. Suicide	163-171	3,123	3,106	3,988	131	109	121
41. Homicide	172-175	446	439	530	19	15	16
42. Accidental or Violent Death (except Suicide and Homicide)	176-198	14,842	13,875	15,639	621	487	472
43. Non-specified and Ill-defined Causes	199, 200	3,026	3,460	1,542	127	122	46
Total .. .. .	..	256,337	271,171	298,262	10,726	9,522	9,011

* No. 14:—4, 5, 12, 13, 15-22, 33, 35-37, 39-44; No. 20:—56, 60-74, 76, 77; No. 23:—78, 79, 81, 84-89;
 No. 32b:—115-118, 123, 128, 129. † Not available, included in 35c and 36.

13. Deaths from Principal Specific Causes.—(i) *General*. In the preceding tables particulars have been given for each of the causes of death comprising the Intermediate and the Abridged Classifications. The more important of these causes are treated in detail hereunder. The intermediate classification number is indicated in parenthesis for each cause or group of causes.

(ii) *Tuberculosis of the Respiratory System (11)*. Of the various forms of tuberculosis prevalent in Australia, phthisis, or tuberculosis of the lungs, has attracted the most attention. The intimate relation, however, between tuberculosis of the lungs and of other parts of the respiratory system renders it desirable that all forms of tuberculosis of the respiratory system should be brought under one head for investigations concerning the age incidence and duration of this disease.

The decline in the toll levied by this disease on the community is plainly disclosed by the table on p. 618, which shows how both the number of deaths and the death-rate have declined since the period 1911-15.

During 1939 there were 2,458 deaths (1,534 males and 924 females) from tuberculosis of the respiratory system, which compares favourably with the average of 2,547 for the preceding five years. The deaths in 1939 represented a rate of 353 per 1,000,000 persons living.

(iii) *Tuberculosis of the Meninges (12a)*. The number of deaths ascribed to this cause in 1939 was 80, which is below the average of 108 for the preceding five years.

(iv) *Other Forms of Tuberculosis (12b)*. The 171 deaths in 1939 comprised the following:—Tuberculosis of the intestines and peritoneum, 30; vertebral column, 37; other bones and joints, 7; skin and sub-cutaneous cellular tissue, 1; lymphatic system, 2; genito-urinary system, 36; other organs, 3; and disseminated tuberculosis—acute 51, chronic 1 and unspecified 3.

(v) *All Forms of Tuberculosis (11, 12)—(a) General*. The total number of deaths in 1939 was 2,709, namely, 1,677 males and 1,032 females.

(b) *Ages at Death*. The following table shows the ages of these 2,709 persons; comparable figures are also given for the year 1911:—

TUBERCULAR DISEASES: DEATHS IN AGE-GROUPS, AUSTRALIA.

Ages.	1911.			1939.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 5 years	124	114	238	45	25	70
5 years and under 10 ..	30	31	61	6	8	14
10 " " 15 ..	44	42	86	6	6	12
15 " " 20 ..	70	148	218	31	63	94
20 " " 25 ..	168	260	428	58	119	177
25 " " 30 ..	219	255	474	88	167	255
30 " " 35 ..	220	206	426	114	130	244
35 " " 40 ..	187	176	363	171	109	280
40 " " 45 ..	246	140	386	151	84	235
45 " " 50 ..	223	100	323	186	68	254
50 " " 55 ..	164	49	213	229	55	284
55 " " 60 ..	140	49	189	183	53	236
60 " " 65 ..	89	43	132	160	38	198
65 " " 70 ..	64	37	101	126	43	169
70 " " 75 ..	42	19	61	70	34	104
75 " " 80 ..	15	6	21	36	21	57
80 " " over	7	6	13	17	9	26
Age unspecified	3	..	3	..	..	..
Total	2,055	1,681	3,736	1,677	1,032	2,709

(c) *Occupations at Death, Males*. A tabulation of occupations of males who died from tubercular diseases in 1921, 1931 and 1939, together with the percentage which each class bore to the total male deaths from these diseases, is given hereunder:—

TUBERCULOSIS (ALL FORMS): DEATH-RATES AND PROPORTION OF TOTAL DEATHS—*continued.*

State or Territory.	Proportion per 10,000 Deaths from all Causes.					
	1911.			1939.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales	737	737	737	428	311	377
Victoria	801	936	862	449	386	419
Queensland	613	648	626	377	236	321
South Australia	775	995	877	398	389	394
Western Australia	718	870	770	503	353	445
Tasmania	839	854	846	527	510	519
Northern Territory	1,356	..	1,231	308	..	227
Australian Capital Territory .. ..	..	2,000	1,000	..	..	..
Australia	745	829	780	432	340	392

(f) *Death-rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a very favourable position as regards the death-rate from this disease:—

TUBERCULOSIS: DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES

Country.	Year.	Respiratory System.	All Forms.	Country.	Year.	Respiratory System.	All Forms.
Queensland	1939	29	30	Belgium	1936	56	72
Union of South Africa (Europeans)	1936	30	34	Germany	1935	62	73
New South Wales	1939	34	37	Scotland	1936	55	74
South Australia	1939	35	38	Italy	1938	59	80
Australia	1939	35	39	Switzerland	1936	73	95
Western Australia	1939	39	41	Norway	1937	78	98
Victoria	1939	40	45	Sweden	1934	85	103
New Zealand	1936	36	46	Northern Ireland	1936	78	103
Denmark	1936	37	47	Spain	1935	(a)	107
Netherlands	1936	36	50	Eire	1936	92	117
Tasmania	1939	43	53	France	1934	109	126
U.S.A.	1936	51	56	Greece	1936	104	128
Egypt	1936	45	56	Czechoslovakia	1936	114	129
Ceylon	1937	55	(a)	Japan	1936	105	142
Canada	1936	50	61	Hungary	1936	127	152
England and Wales	1936	58	69	Portugal	1937	125	153
Great Britain and Northern Ireland	1936	58	71	Poland (b)	1937	135	153
				Finland	1937	179	210

(a) Not available.

(b) In towns with over 100,000 inhabitants.

(vi) *Cancer and other Malignant Tumours (18).*—(a) *General.* The number of deaths from cancer increased continuously to 6,256 in 1929, declined slightly to 6,120 in 1930, but rose again progressively to 8,092 in 1939. Of the deaths registered during 1939, 4,122 were of males, namely, 1,590 in New South Wales, 1,180 in Victoria, 577 in

Queensland, 348 in South Australia, 276 in Western Australia, 148 in Tasmania, 2 in the Northern Territory, and 1 in the Australian Capital Territory; while 3,970 were of females, namely, 1,517 in New South Wales, 1,327 in Victoria, 434 in Queensland, 357 in South Australia, 212 in Western Australia, and 123 in Tasmania.

(b) *Type and Seat of Disease.* Tables showing the type and seat of disease, in conjunction with age and with conjugal condition, of the persons dying from cancer in 1939 will be found in *Demography Bulletin*, No. 57. A summary regarding type and seat of disease for 1939 is given below. It may be pointed out that the significance of the numbers of deaths shown for the various types of cancer 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. On this account it is proposed to discontinue the use of the present classification and to adopt as soon as possible a simpler grouping showing only the more important types of cancer.

DEATHS FROM CANCER: TYPE AND SEAT OF DISEASE, AUSTRALIA, 1939.

Type of Disease.	Males.	Fem.	Persons.	Seat of Disease.	Males.	Fem.	Persons.
Cancer	307	332	639	Buccal Cavity and Pharynx ..	295	47	342
Carcinoma—				Digestive Tract and Peritoneum—			
Carcinoma Simplex	3,132	3,079	6,211	Stomach and Duodenum ..	1,104	655	1,759
Epithelioma ..	148	58	206	Rectum ..	242	181	423
Scirrhus ..	2	25	27	Colon ..	282	340	622
Rodent Ulcer ..	48	30	78	Other ..	728	654	1,382
Adeno-Carcinoma <i>a</i>	42	48	90	Respiratory Organs	335	104	439
Colloid Carcinoma	3	..	3	Uterus ..	..	562	562
Paget's Disease ..	1	1	2	Other Female Genital Organs ..	..	263	263
Sarcoma—				Breast ..	4	739	743
Sarcoma ..	137	127	264	Male Genito-Urinary Organs ..	664	..	664
Myeloma ..	3	8	11	Skin ..	169	73	242
Endothelioma ..	3	3	6	Other or Unspecified Organs ..	299	352	651
Melanoma—							
Melanotic Sarcoma	24	17	41				
Melano-Carcinoma	10	3	13				
Embryonic Tumours—							
Hypernephroma	18	7	25				
Teratoma ..	1	1	2				
Malignant Disease ..	243	231	474				
Total Deaths	4,122	3,970	8,092	Total Deaths	4,122	3,970	8,092

(a) Including X-ray Carcinoma.

(c) *Ages at Death.* The ages of the persons who died from cancer in 1911 and 1939 are given below. Inferences drawn from the great increase in the number of deaths from cancer in 1939 compared with 1911 need qualification in view of the altered age constitution of the population since the earlier year. The number of people reaching the older ages at which cancer risks are greatest has more than doubled in the last twenty years, and it is only in the extreme old age-groups from 60 onwards that the rate of mortality has definitely increased. For all groups up to age 60 there has been no increase in mortality rates since 1911. In the higher age-groups no increase has been recorded in the female rate while the rate for males has shown only a slight increase. It is also

probable that a proportion of the increased number of deaths recorded from cancer in recent years has been due to more correct diagnosis and certification on the part of medical practitioners rather than to any actual increase in the disease itself.

DEATHS FROM CANCER: AGES, AUSTRALIA.

Ages.	1911.			1939.		
	Males.	Females.	Total.	Males.	Females.	Total.
Under 15 years	21	8	29	20	18	38
15 years and under 20	10	6	16	15	7	22
20 " " 25	10	7	17	10	2	12
25 " " 30	12	17	29	32	24	56
30 " " 35	25	35	60	28	46	74
35 " " 40	29	59	88	53	106	159
40 " " 45	81	100	181	86	158	244
45 " " 50	132	173	305	170	300	470
50 " " 55	208	203	411	282	354	636
55 " " 60	203	179	382	434	426	860
60 " " 65	243	177	420	496	499	995
65 " " 70	306	194	500	663	587	1,250
70 " " 75	203	160	363	735	528	1,263
75 " " 80	150	136	286	662	497	1,159
80 " " 85	83	67	150	316	280	596
85 years and over	44	39	83	118	138	256
Unspecified	1	..	1	2	..	2
Total Deaths	1,761	1,560	3,321	4,122	3,970	8,092

(d) *Occupations.* A tabulation in summarized form of occupations of the males who died from cancer in 1921, 1931 and 1939, together with the percentage of each class to the total male deaths from this disease, is given hereunder:—

OCCUPATION OF MALES WHO DIED FROM CANCER: AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage of Total.		
	1921.	1931.	1939.	1921.	1931.	1939.
Professional	133	188	296	5.45	5.40	7.18
Domestic	76	97	111	3.11	2.78	2.69
Commercial	275	446	a 406	11.27	12.80	a 9.85
Transport and Communica- tion	212	295	362	8.69	8.47	8.78
Industrial	940	1,346	a 769	38.52	38.63	a 18.66
Agricultural, Pastoral, Mining, etc.	639	843	991	26.19	24.20	24.04
Indefinite	129	130	a 1,163	5.29	3.73	a 28.21
Dependent	36	139	24	1.48	3.99	0.59
Total Male Deaths	2,440	3,484	4,122	100.00	100.00	100.00

(a) 865 (20.90 per cent.) clerks, labourers, etc., not specified as belonging to any industry, formerly included under "Commercial" or "Industrial", are included under "Indefinite".

(e) *Death-rates.* The following table shows the death-rates per 100,000 of mean population from cancer in each State for the years 1911 and 1939. The substantial increase in the death-rate since 1911 is reflected in both sexes and in all States:—

DEATHS FROM CANCER: RATES.(a)

State or Territory.	1911.			1939.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	77	71	74	115	111	113
Victoria	80	85	82	127	139	133
Queensland	71	56	64	109	90	100
South Australia	70	76	73	117	120	118
Western Australia	65	57	62	113	96	105
Tasmania	77	60	69	123	105	114
Northern Territory	37	..	30	46	..	32
Australian Capital Territory	99	..	56	15	..	8
Australia	75	72	74	117	115	116

(a) Number of deaths from cancer per 100,000 of mean population.

(f) *Proportion of Total Deaths.* While the death-rate from all causes has diminished substantially in recent years, the rate from cancer has risen almost continuously, the result being that out of 10,000 deaths from all causes, 1,170 were due to cancer in 1939, as against 693 per 10,000 total deaths in 1911.

DEATHS FROM CANCER: PROPORTIONS PER 10,000 DEATHS.

State or Territory.	1911.			1939.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	662	783	713	1,052	1,297	1,159
Victoria	637	819	719	1,095	1,413	1,243
Queensland	586	628	602	1,008	1,140	1,061
South Australia	675	828	745	1,117	1,361	1,228
Western Australia	557	700	605	1,036	1,268	1,125
Tasmania	723	629	680	1,098	1,141	1,117
Northern Territory	170	..	154	308	..	227
Australian Capital Territory	2,000	..	1,000	400	..	227
Australia	638	769	693	1,061	1,310	1,170

(g) *Comparison with Tuberculosis.* In recent years the death-rate from tuberculosis has shown a tendency to decrease, while that from cancer has displayed an almost continuous increase. The table hereunder shows that for each of the periods under review the decline in the death-rate from tuberculosis has been accompanied by an almost equal increase in the rate for cancer. Thus in the thirty-five years comprised in the quinquennial averages shown below the death-rate for tuberculosis declined by 44 while the rate for cancer increased by 42 per 100,000 persons. This equal but opposite tendency may be demonstrated by stating that the death-rate from tuberculosis and cancer combined remains almost constant from period to period, the figures being:—1901-05, 152 per 100,000; 1906-10, 145; 1911-15, 152; 1916-20, 154; 1921-25, 153; 1926-30, 152; 1931-35, 150; and 1939, 155.

TUBERCULOSIS AND CANCER: DEATH-RATES(a), AUSTRALIA.

Period.	Death-rate from Tuberculosis.			Death-rate from Cancer.		
	Males.	Females.	Total.	Males.	Females.	Total.
1901-05 ..	100	77	89	64	61	63
1906-10 ..	81	69	75	71	70	70
1911-15 ..	84	69	77	75	74	75
1916-20 ..	84	59	71	86	80	83
1921-25 ..	71	52	62	93	88	91
1926-30 ..	64	49	57	97	94	95
1931-35 ..	52	37	45	108	102	105
1939 ..	48	30	39	117	115	116

(a) Number of deaths per 100,000 of mean population.

(b) *Death-rates, Various Countries.* The following table shows the Australian death-rate from cancer in comparison with that for other countries:—

CANCER: DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Ceylon	1937	10	Australia	1939	116
Egypt	1936	26	New Zealand	1936	118
Japan	1936	48	Eire	1936	121
Greece	1936	50	Czechoslovakia	1936	126
Portugal	1937	51	Sweden	1934	127
Spain	1935	68	Northern Ireland	1936	130
Italy	1938	86	Norway	1937	131
France	1934	96	Netherlands	1936	131
Union of South Africa (Europeans)	1936	97	Germany	1935	145
Finland	1936	100	Denmark	1936	151
Poland (a)	1936	104	Scotland	1936	159
Canada	1936	106	Switzerland	1936	161
Belgium	1936	110	Great Britain and Northern Ireland	1936	168
Hungary	1936	110	England and Wales	1936	169
U.S.A.	1936	111			

(a) In towns with over 100,000 inhabitants.

(vii) *Diseases of the Heart* (38 to 43). The number of deaths in 1939 was 17,278, namely, 10,118 males and 7,160 females. Of these deaths, 40 were attributed to pericarditis, 120 to acute infective endocarditis, 9 to other acute endocarditis, 333 to aortic valve disease, 684 to mitral valve disease, 64 to aortic and mitral valve disease, 201 to endocarditis not returned as acute or chronic, 523 to other or unspecified valve disease, 181 to acute myocarditis, 91 to fatty heart, 7,728 to other myocardial degeneration, 2,210 to myocarditis not returned as acute or chronic, 3,431 to diseases of coronary arteries, 211 to angina pectoris with record of coronary disease, 309 to other angina pectoris, 312 to disordered action of the heart, 48 to cardiac dilatation (cause unspecified), and 783 to heart disease undefined. The sex and territorial distribution of the deaths will be found in the tables on pages 611-6. This class is the largest among causes of death, the death-rate having grown from 1,019 per million in 1911-15 to 1,817 in 1931-35 and 2,482 in 1939. The increase in the numbers of deaths recorded from heart diseases has been particularly pronounced during the past seven years. The rapid increase in mortality is partly a reflection of the ageing of the population, but has been influenced mainly by improved diagnosis and certification by medical practitioners. Many deaths of elderly people formerly attributed to senility or other indefinite causes are believed to be now more frequently certified as associated with some form of heart disease, usually myocardial degeneration. The improvement in diagnosis has been particularly

evident in the case of diseases of the coronary arteries. As a result of a change of classification adopted in 1931, all forms of this disease have been included among heart diseases from that year onwards. Although deaths recorded from coronary diseases were not numerically important in 1931, this type of disease has since become prominent in medical science, and in 1939 the number of deaths assigned to this cause was 3,431, an increase of 2,867, or over 500 per cent., since 1931. The death-rates and proportions per 10,000 deaths in 1939 were as follows:—

**DISEASES OF THE HEART: DEATH-RATES^(a) AND PROPORTION OF
10,000 TOTAL DEATHS, 1939.**

State or Territory.	Death-rates from Diseases of the Heart.			Proportion of 10,000 Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	303	216	260	2,775	2,516	2,662
Victoria	299	234	266	2,577	2,378	2,485
Queensland	280	169	227	2,591	2,144	2,412
South Australia	249	194	221	2,384	2,200	2,300
Western Australia.. ..	236	163	201	2,166	2,147	2,159
Tasmania	275	193	235	2,463	2,096	2,300
Northern Territory ..	93	103	96	615	870	682
Australian Capital Territory	77	73	75	2,000	2,105	2,045
Australia	288	208	248	2,605	2,362	2,499

(a) Number of deaths from diseases of the heart per 100,000 of mean population.

(viii) *Diarrhœa and Enteritis (Children under two years of age)* (52). The number of deaths due to these causes was 426 in 1939, which is an increase of 79 over the average of 347 for the previous five years. During 1939, 5,383 children died before reaching their second birthday, and of these 426, or 7.9 per cent., died from diarrhœa and enteritis. The ages of children dying from these diseases during the first year of life will be found on page 603.

The number of deaths under 2 years of age, due to diarrhœa and enteritis, the death-rates, and proportions of 10,000 deaths for 1911-15, 1921-25, 1931-35 and 1939 are given in the following table. Reference to the last four lines of the table will reveal the very satisfactory decrease in the number of deaths due to these diseases. In view of changed birth-rates, however, the death-rates per 100,000 of mean population are not true measures of changes in the force of mortality. A better measure would be the estimated number of children in every 1,000 born who died from these diseases before reaching their second birthday. The numbers are estimated to be as follows:—

Period—	1911-15	Males, 24.6	Females, 20.9	Total, 22.8
„	1921-25	„ 16.5	„ 13.3	„ 14.9
„	1931-35	„ 3.7	„ 2.8	„ 3.3

DIARRHŒA AND ENTERITIS (UNDER 2 YEARS OF AGE): DEATHS AND DEATH-RATES(a), AUSTRALIA, 1939.

State.	Number of Deaths from Diarrhœa and Enteritis. (Under 2 years of age.)			Death-rates from Diarrhœa and Enteritis (Under 2 years of age.)			Proportion of 10,000 Deaths.		
	Males.	Females.	Total	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	119	79	198	9	6	7	79	68	74
Victoria ..	43	35	78	5	4	4	40	37	39
Queensland ..	16	21	37	3	4	4	28	55	39
South Australia..	17	16	33	6	5	6	55	61	58
Western Australia	45	32	77	18	14	16	169	185	175
Tasmania ..	2	1	3	2	1	1	15	9	12
Australia 1939 ..	242	184	426	7	5	6	62	60	61
Annual Average—									
1911-15 ..	1,687	1,354	3,041	68	59	64	569	627	593
1921-25 ..	1,114	859	1,973	38	31	35	362	366	364
1931-35 ..	234	175	409	7	5	6	70	68	69

(a) Number of deaths from these diseases per 100,000 of mean population.

(ix) *Puerperal Septicæmia* (including Post-Abortive Sepsis, but excluding Criminal Abortion) (68a.c). Mortality from puerperal septicæmia and post-abortive sepsis during 1939 was exceptionally light, the 81 deaths resulting being the lowest recorded during the past nine years. Figures prior to 1931 for these particular causes are not available on a strictly comparable basis, as it is probable that some of the deaths now included under criminal abortion were classified with puerperal septicæmia in earlier years. The death-rate per 1,000 live births during 1939 was 0.66, while corresponding rates for preceding years were:—1931, 1.51; 1932, 1.40; 1933, 1.44; 1934, 1.46; 1935, 1.32; 1936, 1.82; 1937, 1.02; and 1938, 0.85. The rate in 1939 per 1,000 live births of the 162 deaths from puerperal septicæmia, including criminal abortion, was 1.32. The 162 deaths mentioned were made up as follows:—Post-abortive sepsis 33, criminal abortion 81, puerperal septicæmia 48.

(x) *Other Diseases or Accidents of Pregnancy and Labour* (66, 67, 69, 70). The deaths under this heading numbered 339 in 1933; 374 in 1934; 345 in 1935; 358 in 1936; 339 in 1937; 355 in 1938; and 341 in 1939. Included in the 341 deaths in 1939 were the following:—Abortion not returned as septic, 22; ectopic gestation, 34; other accidents of pregnancy, 2; puerperal hæmorrhage, 72; puerperal albuminuria and convulsions, 96; other toxæmias of pregnancy, 32; phlegmasia alba dolens and thrombosis, 3; embolism or sudden death, 22; other accidents of child-birth, 56 (Caesarean section, 19; others 37); other or unspecified conditions of the puerperal state, 2.

(xi) *All Puerperal Causes* (66 to 70). The 503 deaths in 1939 under the preceding two headings, including criminal abortion, correspond to a death-rate of 14.6 per 100,000 females or 30.8 per 100,000 women between the ages of 15 and 45 years. The rate is also equivalent to 4.09 deaths per 1,000 live births. The death-rate may be expressed in other terms by stating that 1 of every 242 women giving birth to a live child in 1939 died from puerperal causes; the corresponding ratios for married women were 1 of every 256, and for single women 1 in every 106. More detailed information will be found in a series of tables in *Demography Bulletin*, No. 57.

The following table shows the death-rate per 1,000 live births from puerperal causes in various countries. Care is needed in comparing the Australian rates with the figures for other countries. In the rates for Australian States and the Commonwealth deaths from criminal abortion have been excluded from puerperal sepsis deaths but included with deaths from other puerperal causes and in the total. Definite information is not available as to the practice in other countries but it is very probable that the rates for the countries given hereunder totally exclude deaths from criminal abortion.

CHILD-BIRTH: DEATHS PER 1,000 LIVE BIRTHS, VARIOUS COUNTRIES.

Country.	Year.	Rates per 1,000 Live Births from—		
		Puerperal Sepsis.	Other Puerperal Causes.	All Puerperal Causes.
Japan	1936	0.64	1.67	2.31
Western Australia	1939	0.44	1.99	2.43
Italy	1938	0.83	1.60	2.43
France	1934	1.00	1.50	2.50
Norway	1937	1.18	1.65	2.83
Netherlands	1936	0.99	2.04	3.03
Tasmania	1939	1.20	2.00	3.20
Sweden	1934	1.60	1.70	3.30
Spain	1935	2.00	1.40	3.40
England and Wales (a)	1936	1.34	2.31	3.65
New Zealand	1936	0.92	2.78	3.70
Denmark	1936	1.30	2.60	3.90
Victoria	1939	0.46	3.44	3.90
South Australia	1939	1.14	2.91	4.05
Australia	1939	0.66	3.43	4.09
Great Britain and Northern Ireland	1936	1.52	2.58	4.10
New South Wales	1939	0.79	3.38	4.17
Greece	1936	2.20	2.00	4.20
Hungary	1936	2.53	1.80	4.33
Switzerland	1936	(b)	(b)	4.36
Belgium	1936	1.60	3.00	4.60
Eire	1936	1.79	2.91	4.70
Germany	1935	1.99	2.86	4.85
Czechoslovakia	1936	2.88	2.03	4.91
Union of South Africa (Europeans)	1936	2.39	2.71	5.10
Queensland	1939	0.40	4.81	5.21
Scotland	1936	2.19	3.36	5.55
Canada	1936	2.00	3.60	5.60
United States of America	1936	2.15	3.53	5.68
Northern Ireland	1936	2.24	3.82	6.06
Egypt (c)	1936	2.67	7.18	9.85

(a) Rate per 1,000 live and still-births.

(b) Not available.

(c) Localities having Health Bureaux.

A tabulation of puerperal causes for Australia according to age at death for married and single women separately will also be found in *Demography Bulletin*, No. 57.

The total number of children left by the 456 married mothers who died was 1,125, an average of 2.5 children per mother.

Eighteen of the mothers who died had been married less than one year, 73 between one and two years, and 37 between two and three years. The duration of marriage ranged up to 29 years, apart from 4 cases in which the date of marriage was not stated. Tabulations distinguishing the ages at marriage and at death will be found in *Demography Bulletin*, No. 57, which also includes a table showing in combination the duration of marriage and previous issue.

(xii) *Congenital Malformation, Debility and Premature Birth (73 to 77).* The deaths under this heading in 1939 numbered 3,322 of which 3,178 were of children under one year of age. Of all deaths of children under one year of age 68 per cent. was due to these causes. The number of deaths for 1939 is given in the following table:—

DEATHS FROM CONGENITAL DEBILITY, ETC., AND MALFORMATION, 1939.

State or Territory.	Congenital Malformation.			Premature Birth and Injury at Birth.			Congenital Debility and other Diseases peculiar to Early Infancy.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	169	122	291	487	349	836	135	104	239
Victoria ..	77	71	148	297	206	503	89	63	152
Queensland ..	66	59	125	215	123	338	59	58	117
South Australia ..	22	26	48	74	48	122	26	21	47
Western Australia	20	25	45	66	42	108	30	14	44
Tasmania ..	13	20	33	49	32	81	22	12	34
Northern Territory	..	..	..	2	2	4	..	2	2
Aust. Cap. Terr...	..	..	..	2	3	5	..	..	..
Australia ..	367	323	690	1,192	805	1,997	361	274	635
Number of deaths under one year	293	253	546	1,192	805	1,997	361	274	635
Number of deaths under one year per 1,000 births	4.65	4.23	4.44	18.90	13.45	16.25	5.72	4.58	5.17

(xiii) *Suicide (79).*—(a) *General.* The deaths from suicide rose each year from 533 in 1922 to 943 in 1930, but the number had declined to 754 in 1932. Since the latter year the deaths from this cause have fluctuated as follows:—1933, 790 deaths—633 males and 157 females; 1934, 826—643 males and 183 females; 1935, 791—612 males and 179 females; 1936, 789—611 males and 178 females; 1937, 721—573 males and 148 females; 1938, 746—574 males and 172 females; and 1939, 781—602 males and 179 females.

(b) *Modes Adopted.* The modes adopted by persons who committed suicide in the years 1931–35, 1938 and 1939 were as follows:—

SUICIDE: MODES ADOPTED, AUSTRALIA.

Mode of Death.	Males.			Females.			Persons.		
	Average of 5 years, 1931–35.	1938.	1939.	Average of 5 years, 1931–35.	1938.	1939.	Average of 5 years, 1931–35.	1938.	1939.
Poisoning	139	103	118	67	67	70	206	170	188
Poisonous gas	39	38	51	20	17	32	59	55	83
Hanging or Strangulation	83	72	108	17	24	23	100	96	131
Drowning	46	33	32	28	24	21	74	57	53
Firearms	109	207	187	11	15	10	210	222	197
Cutting or piercing instruments	89	83	77	9	11	9	98	94	86
Jumping from a high place	15	15	13	6	6	7	21	21	20
Crushing	13	9	8	2	4	4	15	13	12
Other Modes	12	14	8	3	4	3	15	18	11
Total	635	574	602	163	172	179	798	746	781

(c) *Death-rates.* The death-rates from suicide and the proportion per 10,000 of total deaths are given in the following table for 1939, corresponding rates for the periods 1911-15, 1921-25, 1931-35, 1936, 1937 and 1938 being shown at the foot of the table :—

SUICIDE : DEATHS, DEATH-RATES,(a) AND PROPORTION OF TOTAL DEATHS, 1939.

State or Territory.	Number of Deaths.			Death-rates from Suicide.			Proportion of 10,000 Total Deaths.		
	Males.	Females.	Total.	Males.	Females.	Total.	Males.	Females.	Total.
New South Wales	251	78	329	18	6	12	166	67	123
Victoria	108	37	145	12	4	8	100	39	72
Queensland	114	32	146	22	7	14	199	84	153
South Australia	49	16	65	16	5	11	157	61	113
Western Australia	60	11	71	25	5	15	225	66	164
Tasmania	14	5	19	12	5	8	104	56	82
Northern Territory	4	..	4	93	..	64	615	..	455
Australian Capital Territory	2	..	2	31	..	17	800	..	455
Australia, 1939 ..	602	179	781	17	5	11	155	59	113
.. 1938 ..	574	172	746	17	5	11	155	58	112
.. 1937 ..	573	148	721	17	4	11	158	52	112
.. 1936 ..	611	178	789	18	5	12	171	63	123
Average—1931-35	635	163	798	19	5	12	190	62	134
.. 1921-25	509	112	621	18	4	11	166	48	114
.. 1911-15	509	115	625	21	5	13	172	53	122

(a) Number of deaths from suicide per 100,000 of mean population.

(d) *Ages.* From the following table, which shows the ages of the persons who committed suicide in 1939, it will be seen that both extreme youth and extreme old age are represented :—

AGES OF PERSONS WHO COMMITTED SUICIDE : AUSTRALIA, 1939.

Ages.	M.	F.	Total.	Ages.	M.	F.	Total.
10 years and under	2	..	2	60 years and under	42	13	55
15 20	15	8	23	65 70	33	15	48
20 25	43	19	62	70 75	38	5	43
25 30	50	10	60	75 80	20	3	23
30 35	41	10	51	80 85	10	..	10
35 40	50	16	66	85 90	2	..	2
40 45	63	24	87	90 95	1	..	1
45 50	54	24	78	95 100	..	..	..
50 55	69	19	88	Not stated	..	..	..
55 60	68	13	81				
				Total Deaths ..	602	179	781

(e) *Occupations of Males.* The next table gives the occupations of the males who committed suicide in 1921, 1931 and 1939:—

OCCUPATIONS OF MALES WHO COMMITTED SUICIDE: AUSTRALIA.

Occupation Group.	Number of Male Deaths.			Percentage of Total.		
	1921.	1931.	1939.	1921.	1931.	1939.
Professional	32	29	35	6.27	4.21	5.81
Domestic	20	22	13	3.92	3.19	2.16
Commercial	81	106	(a) 81	15.88	15.38	(a) 13.46
Transport and Communica- tion	42	52	48	8.24	7.55	7.97
Industrial	180	256	(a) 116	35.29	37.16	(a) 19.27
Agricultural, Pastoral, Min- ing, etc.	131	182	131	25.69	26.41	21.76
Indefinite	21	39	(a) 174	4.12	5.66	(a) 28.90
Dependent	3	3	4	0.59	0.44	0.67
Total Male Deaths ..	510	689	602	100.00	100.00	100.00

(a) 138 (23 per cent) clerks, labourers, etc., not specified as belonging to any industry, formerly included under "Commercial" or "Industrial", are included under "Indefinite".

(f) *Death-rates, Various Countries.* The following comparative table for various countries shows that Australia occupies a fairly favourable position as regards the death-rate from suicide:—

SUICIDE: DEATHS PER 100,000 PERSONS LIVING, VARIOUS COUNTRIES.

Country.	Year.	Rate.	Country.	Year.	Rate.
Egypt	1936	2.0	New South Wales ..	1939	12.0
Eire	1936	3.3	Great Britain and Nor- thern Ireland ..	1936	12.2
Spain	1935	3.9	England and Wales ..	1936	12.4
Northern Ireland ..	1936	4.0	U.S.A.	1936	14.2
Greece	1936	5.7	Queensland	1939	14.4
Norway	1937	6.9	Japan	1936	15.1
Italy	1938	7.2	Western Australia ..	1939	15.3
Victoria	1939	7.7	Sweden	1934	15.3
Netherlands	1936	8.1	Finland	1936	16.2
Union of South Africa (a)	1936	8.3	Belgium	1935	16.8
Tasmania	1939	8.4	Denmark	1935	19.4
Canada	1937	8.8	France	1934	21.4
Scotland	1936	10.0	Poland (b)	1936	22.0
New Zealand	1936	10.0	Germany	1935	27.5
Portugal	1937	10.6	Switzerland	1936	27.8
South Australia	1939	10.9	Czechoslovakia	1936	27.8
Australia	1939	11.2	Hungary	1936	31.0

(a) European population only.

(b) In towns with over 100,000 inhabitants.

(xiv) *Homicide (80).* Deaths from homicide in 1939 numbered 75, or 6 less than the previous year. The average for the five years 1934 to 1938 was 100. See par. (xvi).

(xv) *Accidental or Violent Deaths (except Suicide and Homicide).* Deaths from accidents in 1939 numbered 4,252 compared with an average of 3,451 for the previous five years. Of the deaths in 1939, 1,677 occurred in New South Wales; 1,119 in Victoria; 641 in Queensland; 359 in South Australia; 317 in Western Australia; 107 in Tasmania; 26 in Northern Territory; and 6 in the Australian Capital Territory. Other deaths of a violent nature numbered 203. See par. (xvi).

(xvi) *Accidental or Violent Deaths (including Homicide and Suicide).* The following table shows the various kinds of violent deaths, including homicides and suicides, recorded in Australia for 1939.

DEATHS FROM EXTERNAL VIOLENCE : AUSTRALIA, 1939.

Cause of Death.	Males.	Females.	Persons.
Suicide (see par. (xiii))	602	179	781
Infanticide (murder of children under 1 year) ..	4	3	7
Homicide by firearms	19	8	27
Homicide by cutting or piercing instruments ..	5	4	9
Homicide by other means	25	7	32
Homicide Total	53	22	75
Poisoning by venomous animals—			
(a) Snakebite	6	3	9
(b) Other .. .. .	..	1	1
Poisoning by food	7	5	12
Accidental absorption of irrespirable or poisonous gas	26	9	35
Other acute accidental poisonings (gas excepted) ..	26	16	42
Conflagration	79	19	98
Accidental burns (conflagration excepted) ..	105	68	173
Accidental mechanical suffocation	32	23	55
Accidental drowning	282	50	332
Accidental injury by firearms	65	3	68
Accidental injury by cutting or piercing instruments	8	..	8
Accidental injury by falling, crushing, etc.—			
In mines and quarries	89	..	89
By machinery	66	1	67
Connected with methods of transport—			
Railways	137	14	151
Tramways	57	15	72
Automobiles	1,117	288	1,405
Other land transportation	131	21	152
Transport by water	20	..	20
Transport by air	27	3	30
Fall not otherwise specified	312	332	644
Other crushings	97	4	101
Cataclysm .. .. .	..	..	..
Injuries by animals (not poisoning)	26	..	26
Starvation, thirst, fatigue	9	2	11
Excessive cold	7	1	8
Excessive heat	262	158	420
Lightning	6	1	7
Other accidental electric shocks	49	7	56
Other and unstated forms of accidental violence—			
Inattention at birth	1	1	2
Other	116	42	158
Violent deaths of unstated nature (open verdict)—			
Drowning	60	27	87
Firearms	22	1	23
Cutting or piercing instruments	1	..	1
Fall	8	7	15
Crushing	8	4	12
Other	39	26	65
War wounds	11	..	11
Capital punishment	3	..	3
External Violence, excluding Suicide and Homicide	3,317	1,152	4,469
Total Deaths from External Violence ..	3,972	1,353	5,325

The following table of death-rates per million of mean population reveals for External Violence (excluding Suicide and Homicide), which consists mainly of accidents, a decrease to 1921-25, but an increase in the rates for 1926-30 to which the growth of automobile accidents contributed very largely. A decreased death-rate was recorded during the period 1931-35, but the rate has been rising steadily since 1933.

DEATH-RATES,^(a) ETC., EXTERNAL VIOLENCE : AUSTRALIA.

Period	Death-rates from Homicide.			Death-rates from External Violence excluding Suicide and Homicide.			Death-rates ^(a) from all External Violence.			All External Violence Proportion of 10,000 Deaths.
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.	
1911-15 ..	21	16	19	948	268	621	1,170	330	770	718
1921-25 ..	17	13	15	753	211	487	950	260	610	643
1926-30 ..	19	15	17	843	240	549	1,070	300	690	746
1931-35 ..	21	11	16	714	223	472	923	284	609	676
1933 ..	18	11	15	678	214	449	883	273	583	654
1934 ..	21	11	16	738	234	490	949	301	630	676
1935 ..	21	11	16	764	243	507	964	308	641	677
1936 ..	19	10	14	802	255	533	999	318	663	703
1937 ..	22	9	16	877	263	575	1,065	321	697	739
1938 ..	15	9	12	843	277	564	1,023	336	684	709
1939 ..	15	6	11	943	335	642	1,129	303	765	771

(a) Number of deaths per 1,000,000 of mean population.

(xvii) "Other Diseases." The intermediate and the abridged classifications of causes of death used in Tables A to E in the preceding pages differ from that used in issues of the Official Year Book previous to No. 25 in that no residue of "other diseases" is shown at the foot. The items are ranged in classes or groups of classes and each class or group of classes is made complete by the addition of an "other diseases" item for that class or group of classes. These "other diseases" items of the intermediate classification are expanded into their constituent causes in the following table:—

F.—DEATHS FROM "OTHER DISEASES": AUSTRALIA, 1939

Causes.	G.C.N. (*)	M.	F.	Total.
17. OTHER INFECTIOUS OR PARASITIC DISEASES.				
Relapsing Fever	4	..	1	1
Undulant Fever	5	1	1	2
Erysipelas	15	10	14	24
Acute Poliomyelitis	16	15	12	27
Encephalitis Lethargica	17	9	7	16
Cerebrospinal Fever	18	9	4	13
Anthrax	20	1	..	1
Tetanus	22	61	15	76
Leprosy	33	7	..	7
Venereal Diseases, other than Syphilis	35	3	..	3
Mycoses	43	8	4	12
Mumps	44 ^a	4	5	9
Other	44 ^b	33	28	61
Total .. .. .	..	161	91	252

(*) G.C.N. = General Classification Number.

F.—DEATHS FROM "OTHER DISEASES": AUSTRALIA, 1939—*continued.*

Causes.	G.C.N.	M.	F.	Total.
25. OTHER GENERAL DISEASES.				
Diseases of the Pituitary Gland	65	3	4	7
Diseases of the Thymus Gland	67	13	6	19
Diseases of the Adrenals (Addison's Disease)	68	14	22	36
Other General Diseases	69	17	10	27
Total .. .. .	..	47	42	89
27. LEUCÆMIAS, ETC., AND OTHER DISEASES OF THE BLOOD AND BLOOD-FORMING ORGANS.				
Hæmorrhagic Conditions	70	14	17	31
Leucæmia, Lymphadenoma—				
Leucæmia	72a	106	79	185
Aleucæmia (Lymphadenoma)	72b	46	31	77
Diseases of the Spleen	73	12	14	26
Other Diseases of the Blood and Blood-forming Organs	74	4	..	4
Total .. .. .	..	182	141	323
29. OTHER CHRONIC POISONINGS.				
Chronic Poisoning by Organic Substances	76	..	..	..
Chronic Poisoning by Mineral Substances—				
Chronic Lead Poisoning	77a	9	8	17
Other	77b	..	..	..
Total .. .. .	..	9	8	17
36. OTHER DISEASES OF NERVOUS SYSTEM.				
Encephalitis (not epidemic)—				
Cerebral Abscess	78a	19	5	24
Others	78b	30	20	50
Other Diseases of the Spinal Cord	81	101	95	196
Convulsions of Infants under Five years of Age	86	24	9	33
Other Diseases of the Nervous System—				
Chorea	87a	3	4	7
Neuralgia and Neuritis	87b	4	6	10
Paralysis Agitans	87c	80	97	177
Disseminated Sclerosis	87d	40	35	75
Idiocy, Imbecility	87e	11	5	16
Other Diseases	87f	43	44	87
Total .. .. .	..	355	320	675
46. OTHER DISEASES OF THE CIRCULATORY SYSTEM.				
Other Diseases of the Arteries	99	44	39	83
Diseases of the Veins (Varices, Hæmorrhoids, Phlebitis, etc.)	100	14	34	48
Diseases of the Lymphatic System, Lymphangitis, etc.	101	4	3	7
Abnormalities of Blood Pressure	102	59	44	103
Other Diseases of the Circulatory System	103	7	8	15
Total .. .. .	..	128	128	256

* G.C.N. = General Classification Number.

F.—DEATHS FROM "OTHER DISEASES": AUSTRALIA, 1939—*continued.*

Causes.	G.C.N.	M.	F.	Total.
50. OTHER DISEASES OF THE RESPIRATORY SYSTEM.				
Diseases of the Nasal Fossæ and Annæa	104	19	13	32
Diseases of the Larynx	105	18	12	30
Congestion, Hæmorrhagic Infarction of Lung	111	253	213	466
Asthma	112	65	51	116
Pulmonary Emphysema	113	7	3	10
Other Diseases of the Respiratory System, Tuberculosis excepted—				
Chronic Interstitial Pneumonia	114a	134	7	141
Gangrene of the Lung	114b	2	3	5
Other Diseases	114c	34	19	53
Total .. ..	..	532	321	853
58. OTHER DISEASES OF THE DIGESTIVE SYSTEM.				
Diseases of the Buccal Cavity, Pharynx, etc.—				
Buccal Cavity and Annæa	115a	17	10	27
Pharynx and Tonsils	115b	53	45	98
Diseases of the Oesophagus	116	4	9	13
Other Diseases of the Stomach (Cancer excepted)	118	32	38	70
Other Diseases of the Intestines	123	66	42	108
Diseases of the Pancreas	128	33	27	60
Peritonitis (without specified cause)	129	54	34	88
Total .. ..	..	259	205	464
70. PUERPERAL CAUSES.				
Phlegmasia Alba Dolens, Embolism, etc.—				
Phlegmasia Alba Dolens and Thrombosis	148a	..	3	3
Embolism and Sudden Death	148b	..	22	22
Other Accidents of Child-birth—				
Cæsarean Section	149a	..	19	19
Other Surgical Operations and Instrumental Delivery	149b	..	6	6
Others	149c	..	31	31
Other or Not Specified Conditions of the Puerperal State—				
Puerperal Diseases of the Breast	150a	..	..	..
Others	150b	..	2	2
Total .. ..	..	..	83	83

* G.C.N. = General Classification Number.

14. Causes of Deaths in Classes.—The figures in the preceding sub-sections relate to specific causes of death, and are of greater value in medical statistics than a mere grouping under general headings. The classification under eighteen general headings adopted by the compilers of the International Nomenclature is, however, shown in the

following table, together with the death-rates and proportions of total deaths pertaining to those classes. A further table furnishes the death-rates for the quinquennia 1911-15, 1921-25 and 1931-35:—

DEATHS, DEATH-RATES,(a) ETC., IN CLASSES : AUSTRALIA, 1939.

Class.	Total Deaths.			Death-rates.			Proportion of 10,000 Deaths.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases	2,922	2,048	4,970	83	60	71	753	676	719
2. Cancer and Other Tumours	4,325	4,215	8,540	123	123	123	1,114	1,391	1,235
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases	740	1,273	2,013	21	37	29	190	420	291
4. Diseases of the Blood and Blood-forming Organs	267	255	522	8	7	8	69	84	75
5. Chronic Poisonings and Intoxications	60	29	89	2	1	1	15	9	13
6. Diseases of the Nervous System and Organs of Special Sense	2,027	2,189	4,216	58	64	61	522	722	610
7. Diseases of the Circulatory System	12,349	9,476	21,825	351	275	313	3,180	3,126	3,157
8. Diseases of the Respiratory System	3,501	2,410	5,911	100	70	85	901	795	854
9. Diseases of the Digestive System	2,145	1,561	3,706	61	45	53	552	515	536
10. Diseases of the Genito-Urinary System	2,987	2,138	5,125	85	62	74	769	705	741
11. Pregnancy, Labour and Puerperal State	..	503	503	..	15	7	..	166	73
12. Diseases of the Skin and of the Cellular Tissue	83	71	154	2	2	2	21	23	22
13. Diseases of the Bones and Organs of Locomotion	118	47	165	3	1	2	30	16	24
14. Congenital Malformations	367	323	690	10	9	10	94	107	99
15. Early Infancy	1,553	1,079	2,632	44	31	38	401	356	381
16. Old Age	1,211	1,281	2,522	35	37	36	320	423	365
17. Violent or Accidental Deaths	3,972	1,353	5,325	113	39	77	1,023	447	771
18. Causes of Death not Determined	180	59	239	5	2	3	46	19	34
Total	38,837	30,316	69,147	1,104	880	993	10,000	10,000	10,000

(a) Number of deaths per 100,000 of mean population.

QUINQUENNIAL DEATH-RATES IN CLASSES : AUSTRALIA.

Class.	Number of Deaths per 100,000 of Mean Population.								
	1911 to 1915.			1921 to 1925.			1931 to 1935.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1. Parasitic and Infectious Diseases							92	70	81
2. Cancer and Other Tumours							113	108	110
3. Rheumatism, Diseases of Nutrition, of Endocrine Glands, and Other General Diseases									
4. Diseases of the Blood and Blood-forming Organs	261	236	249	248	222	236	18	33	25
5. Chronic Poisonings and Intoxications							9	9	9
6. Diseases of the Nervous System and Organs of Special Sense							2	..	1
7. Diseases of the Circulatory System	112	93	103	93	83	88	66	67	67
8. Diseases of the Respiratory System	147	116	132	150	118	134	249	200	225
9. Diseases of the Digestive System	132	93	113	121	88	105	101	75	88
10. Diseases of the Genito-Urinary System	135	123	130	97	81	89	60	46	53
11. Puerperal Condition	72	46	59	72	40	61	81	59	70
12. Diseases of Skin and Cellular Tissue	..	27	13	..	25	12	..	19	9
13. Diseases of Organs of Locomotion	6	5	6	6	4	5	3	3	3
14. Congenital Malformations	2	1	1	3	2	2	3	1	2
15. Early Infancy	12	9	10	12	10	11	11	8	10
16. Old Age	87	71	79	73	56	65	44	34	39
17. Violent or Accidental Deaths	94	80	88	76	68	72	42	42	42
18. Causes of Death not Determined	117	33	77	95	26	61	92	28	61
Total	1,193	942	1,073	1,061	841	953	993	804	900

15. **Ages at Death of Married Males and Females, and Issue.**—*Demography Bulletin*, No. 57, contains a number of tables showing, in combination with the issue, the ages at marriage, ages at death, birthplaces and occupations of married persons who died in Australia in 1939. A summary of those tables is given hereunder. Deaths of married males in 1939 numbered 25,568, and of married females, 22,360. The tabulations which follow deal, however, with only 25,253 males and 22,216 females, the information regarding issue in the remaining 459 cases being incomplete. The total number of children in the families of the 25,253 males was 101,831, and of the 22,360 females, 95,831. The average number of children is shown for various age-groups in the following table:—

AGES AT DEATH OF MARRIED MALES AND FEMALES, AND AVERAGE ISSUE: AUSTRALIA.

Age at Death.	Average Issue.							
	Males.				Females.			
	1911.	1921.	1931.	1939.	1911.	1921.	1931.	1939.
Under 20 years ..	0.33	..	0.75	3.50	0.94	0.77	0.66	0.71
20 to 24 " ..	0.77	0.84	0.81	0.77	1.27	1.22	1.13	1.13
25 " 29 " ..	1.25	1.29	1.33	1.12	1.82	1.86	1.81	1.47
30 " 34 " ..	2.05	2.06	1.79	1.76	2.74	2.45	2.34	2.10
35 " 39 " ..	2.80	2.58	2.13	2.14	3.64	3.29	2.89	2.52
40 " 44 " ..	3.47	3.23	2.77	2.57	4.09	3.66	3.29	2.74
45 " 49 " ..	4.09	3.48	3.10	2.75	4.54	3.76	3.55	3.03
50 " 54 " ..	4.75	3.76	3.46	3.12	5.35	4.23	3.60	3.26
55 " 59 " ..	5.44	4.41	3.69	3.36	5.86	4.69	4.01	3.56
60 " 64 " ..	5.95	4.98	4.02	3.55	5.99	5.39	4.21	3.90
65 " 69 " ..	6.23	5.50	4.41	3.83	6.50	5.86	4.82	4.07
70 " 74 " ..	6.41	6.06	5.06	4.33	6.38	6.30	5.41	4.58
75 " 79 " ..	6.75	6.66	5.65	4.75	6.72	6.56	6.02	4.96
80 " 84 " ..	6.68	6.89	6.17	5.38	6.22	6.76	6.26	5.58
85 " 89 " ..	6.67	7.18	6.59	5.96	5.97	6.93	6.57	6.02
90 " 94 " ..	6.03	7.21	6.94	6.37	5.69	6.53	6.73	6.31
95 " 99 " ..	7.30	6.97	6.69	7.11	5.05	6.05	7.10	6.54
100 years and upwards ..	9.33	9.20	7.00	5.33	5.17	5.11	8.20	5.45
Age not stated ..	4.33	5.36	5.00	..	4.60	5.80	5.00	..
All Ages ..	5.42	4.97	4.44	4.03	5.35	5.05	4.72	4.31

The figures in the preceding table include the issue both living and dead, the proportion between them, taking the issue of deceased males and females together, being about 1,000 to 240. The totals are shown in the following table:—

ISSUE OF DECEASED MARRIED MALES AND FEMALES: AUSTRALIA, 1939.

Issue of Married Males.	Males.	Females.	Total.	Issue of Married Females.	Males.	Females.	Total.
Living ..	42,401	42,095	84,496	Living ..	37,447	38,114	75,561
Dead ..	9,941	7,394	17,335	Dead ..	11,466	8,804	20,270
Total ..	52,342	49,489	101,831	Total ..	48,913	46,918	95,831

16. **Ages 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 ages at death, the following table, which gives the average

issue of males and females according to the age at marriage of the deceased parents shows a corresponding decrease in the averages as the age at marriage advances :—

AGES AT MARRIAGE OF DECEASED MALES AND FEMALES, AND AVERAGE ISSUE : AUSTRALIA.

Age at Marriage.	Average Issue.							
	Males.				Females.			
	1911.	1921.	1931.	1939.	1911.	1921.	1931.	1939.
Under 15 years ..	..	..	..	3.00	9.71	7.60	6.36	6.94
15 to 19 ..	6.07	6.32	6.15	5.56	7.10	6.97	6.79	6.25
20 " 24 ..	6.34	6.05	5.56	5.05	5.77	5.50	5.23	4.90
25 " 29 ..	5.70	5.17	4.70	4.30	4.27	4.09	3.79	3.52
30 " 34 ..	4.92	4.45	3.96	3.52	3.04	2.66	2.42	2.40
35 " 39 ..	4.05	3.90	3.14	2.90	1.68	1.61	1.40	1.18
40 " 44 ..	3.43	2.67	2.36	2.25	0.72	0.62	3.88	0.27
45 " 49 ..	2.59	2.20	1.96	1.57	0.26	0.03	0.12	0.08
50 " 54 ..	2.45	1.70	1.60	0.97	..	..	..	0.23
55 " 59 ..	1.66	1.30	0.95	0.90	..	..	..	..
60 " 64 ..	2.00	0.33	0.63	0.25	..	..	..	..
65 years and upwards ..	1.00	0.25	0.18	0.44	..	..	..	..
Age unspecified ..	5.40	4.43	3.64	3.18	5.23	5.41	3.96	3.08
All Ages ..	5.42	4.97	4.44	4.03	5.35	5.05	4.72	4.31

17. Birthplaces of Deceased Married Males and Females, and Issue.—The following table shows the birthplaces of married males and females who died in 1911 and 1939, together with the average issue. It will be noted that the differences in the average issue of deceased natives of Australia and of the British Isles, which were so marked in 1911, are tending to disappear probably as the result of the approaching similarity of the age constitutions of the two groups.

BIRTHPLACES OF DECEASED MARRIED MALES AND FEMALES, AND AVERAGE ISSUE : AUSTRALIA.

Birthplace.	Married Males.				Married Females.			
	1911.		1939.		1911.		1939.	
	Deaths.	Average Issue.	Deaths.	Average Issue.	Deaths.	Average Issue.	Deaths.	Average Issue.
Australia—								
Australia ..	4,074	4.71	17,123	4.30	4,566	4.57	16,044	4.24
New Zealand ..	64	3.89	276	3.19	56	3.84	213	3.51
Europe—								
England and Wales ..	4,070	5.87	4,373	3.90	3,152	5.86	3,368	4.33
Scotland ..	1,133	5.80	1,159	4.19	1,002	6.00	823	4.83
Ireland ..	1,766	6.12	922	4.57	2,118	5.83	1,082	4.77
Other British Possessions ..	23	6.52	32	3.53	24	5.75	27	4.67
Western ..	190	4.33	203	3.90	55	5.07	86	4.31
Central ..	484	5.81	419	5.09	270	6.56	239	6.12
Southern ..	58	5.09	184	3.29	12	4.92	70	4.37
Eastern ..	35	4.37	54	3.54	6	4.50	9	4.00
Asia—								
British Possessions ..	32	3.87	81	2.67	17	6.41	30	4.07
Foreign Countries ..	74	2.46	193	2.73	5	2.60	29	4.86
Africa—								
British Possessions ..	16	3.56	34	3.12	15	4.80	35	3.14
Foreign Countries ..	..	..	4	4.00	..	..	1	7.00
America—								
British Possessions ..	42	5.55	42	3.52	17	6.47	19	6.32
United States ..	40	3.75	62	3.05	17	4.94	30	3.03
Other Foreign Countries ..	17	4.53	3	2.00	10	4.50	6	4.50
Polynesia ..	5	4.00	23	3.26	9	3.33	14	4.93
At Sea and Indefinite ..	72	4.28	96	4.06	72	4.33	86	3.90
Total ..	12,215	5.42	25,253	4.03	11,123	5.35	22,216	4.31

18. Occupations of Deceased Married Males, and Issue.—The following tabulation shows the average issue in combination with the occupation of deceased males:—

OCCUPATIONS OF DECEASED MARRIED MALES AND AVERAGE ISSUE:
AUSTRALIA.

Occupation Group.	Deaths of Married Males.			Average Issue.		
	1921.	1931.	1939.	1921	1931.	1939.
Professional	926	1,194	1,840	4.04	3.78	3.39
Domestic	552	621	707	3.55	3.64	2.97
Commercial	1,977	2,962	(2)2,763	4.18	3.55	(a) 3.27
Transport and Communica- tion	1,254	1,742	2,453	4.63	4.15	3.92
Industrial	5,086	6,883	(a)5,340	4.95	4.49	(a) 3.92
Agricultural, Pastoral, Min- ing, etc.	3,983	4,495	6,037	5.83	5.31	4.75
Indefinite	759	936	(a)6,113	5.49	4.68	(a) 4.11
Dependent	15	39	..	4.00	3.85	..
Total	14,552	18,872	25,253	4.97	4.44	4.03

(a) 4,550 clerks, labourers, etc. (average issue 4.04), not specified as belonging to any industry, formerly included under "Commercial" or "Industrial", are included under "Indefinite".

§ 5. Australian Life Tables.

The Official Year Book, No. 20, pp. 962 and 969-73, contains a synopsis of the various Australian Life Tables, and comparisons with other countries of the expectation of life at various ages were also given. Considerations of space, however, do not permit of their repetition herein. In connexion with the Census of 1933 Life Tables have been constructed in respect of each sex for Australia as a whole, and these together with monetary tables on single and joint lives based thereon have been published as separate Census publications. A specially contributed article by F. W. Barford, M.A., A.I.A., on the results of the tables for single lives appeared in Official Year Book, No. 29, p. 928.

§ 6. Registration of Births, Deaths and Marriages in the Australian Capital Territory.

Up to the end of 1929 the provisions of the Registration of Births, Deaths and Marriages Act of 1899 and the Marriage Act of 1899 of New South Wales applied to the Australian Capital Territory. Births, deaths and marriages occurring within the Territory were registered by the District Registrars at Queanbeyan and Nowra, and were incorporated in the New South Wales records.

Towards the end of 1929, however, the Registration of Births, Deaths and Marriages Ordinances were enacted, providing for the assumption by the Commonwealth Government of the function of registration within the Territory as from 1st January, 1930. The Commonwealth Statistician is the Principal Registrar, and all registrations are made at Canberra.

Marriages within the Territory are celebrated according to the conditions prescribed by the Marriage Ordinance 1929-1938. This Ordinance, which closely follows the provisions of the Marriage Act of New South Wales, which it supersedes as regards the Australian Capital Territory, came into operation on 1st January, 1930.

CHAPTER XXII.

LOCAL GOVERNMENT.

§ 1. Introduction.

1. **General.**—The following statistics relating to Local Government are somewhat incomplete and otherwise unsatisfactory, but efforts are being made to obtain fuller and more reliable information. Many of the defects in the statistics of Local Government Authorities have been eliminated, and the returns are now prepared on more uniform lines and in greater detail than formerly.

2. **Roads, Bridges, etc.**—The construction and maintenance of roads, bridges and ferries are generally part of the functions of local authorities, but in New South Wales and South Australia, more especially in the large unincorporated areas, these duties are undertaken directly by the Government. In some States, moreover, a certain proportion of the roads and bridges is constructed and maintained by the Government, which, in addition, advances money for main roads to be expended by municipalities under the supervision of special Boards. Although roads, bridges and ferries constructed and maintained directly by the Government do not properly come under the heading of "Local Government," they have been included in this chapter for the sake of convenience. Owing to the difficulty of obtaining complete particulars of receipts and expenditure by the various local governing bodies on roads under their control, the details of receipts and expenditure given in the following section are those of the Government only, relating either to the supervisory board or commission in the State or to direct activities of a department.

3. **Local Government Authorities.**—A description of the various systems of municipal government in the different States, and their development from the earliest date, was published in 1919 by this Bureau in a separate work entitled *Local Government in Australia*.

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 appointed by the Government. In a few instances, however, they are directly controlled by the Government. Only those which are controlled by Boards are dealt with in the following pages.

6. **Fire Brigades.**—In all the States, the management of fire brigades is undertaken by Boards. The members of these Boards are usually elected by the councils of municipalities and insurance companies within the districts placed under their jurisdiction, together with one or more appointed by the Government, while occasionally volunteer or country fire brigades are represented.

§ 2. Roads, Bridges, Etc.

1. *New South Wales.*—(i) *General.* A central road authority was created by legislation early in 1925 for the purpose of providing improved and uniform standards of construction and maintenance of the principal roads, and to administer Governmental subsidies for work on those roads. The funds of this authority (now the Department of Main Roads) are derived principally from taxation of motor vehicles, contributions by the Commonwealth Government from the proceeds of a tax on petrol, direct contributions by Councils and special (not statutory) assistance by the State Government by way of loan moneys or special grants from revenue funds.

There are five classifications of roads which receive assistance from the central authority, and they embrace—

State Highways.—Roads which are principal avenues of communication between the coast and the interior or throughout the State and connecting with such avenues in other States.

Trunk Roads.—Roads which, being secondary avenues of road communication, form with the State Highways and other Trunk Roads, a framework of a general system of intercommunication throughout the State.

Ordinary Main Roads.—Roads which are used principally by through traffic as the means of intercommunication between towns or important centres of population and which with the State Highways and Trunk Roads form part of the general system of road communication throughout the State.

Secondary Roads.—Roads in the Metropolitan area of Sydney which carry a substantial amount of through traffic and relieve neighbouring main roads of traffic which they would otherwise have to bear.

Developmental Roads.—Roads which serve to develop a district or area of land by improving or providing access to a railway station or a shipping wharf or to a road leading to a railway station or a shipping wharf.

The State is divided into two divisions for local government and road administration purposes. The Eastern Division is incorporated in shires and municipalities throughout its area while the Western Division, which covers a wide tract of sparsely populated country, is unincorporated except for six municipalities and portions of two other municipalities within the Division.

In the Eastern Division assistance is given to local councils for works on classified roads as described hereunder. For other roads the cost of both construction and maintenance work is generally chargeable to the revenue of local authorities although Governmental assistance is not infrequently granted for works of construction and reconstruction. This is particularly so in times of acute unemployment and during recent years substantial sums have been distributed for roads by way of grants, primarily for this purpose. There is, in addition, a regular annual endowment of at least £150,000 for shires, a large proportion of which is used for road purposes.

The degree of subsidy from the central road fund in the Eastern Division varies according to the situation of the area concerned, and the classification of the road. There are two areas in this regard (County of Cumberland and Country) and five road classifications, as already described.

The County of Cumberland embraces all municipalities and shires between the Nepean-Hawkesbury River and the Pacific Ocean as far as Bulli on the South, and includes the metropolitan area of Sydney, while the Country covers the remainder of the Eastern Division. In addition to the whole of the motor taxation collected in the Country, half of that collected in the County of Cumberland is required to be spent in the Country, and the contribution by the Commonwealth Government from petrol taxation is distributed between the County of Cumberland and the Country in the same proportion as the motor taxation. The councils in the County of Cumberland, other than the City of Sydney, are required to pay a levy on the Unimproved Capital Value of lands in their areas (with a rebate of half on lands used for rural primary production) into the funds

of the central road authority, which in turn meets the full cost of all proclaimed main roads in that area, together with half the costs of proclaimed secondary roads. The rate of contribution at present is equivalent to 7/16d. in the £ of Unimproved Capital Value. The present rates of subsidy for works in the Country are as follows:—

State Highways	Full cost.
Trunk Roads	Three-quarters of cost.
Ordinary Main Roads	Two-thirds of cost.
Developmental Roads	Full cost of approved construction works only.

For new bridges these subsidies are increased so that the central authority meets the whole cost on State Highways and Trunk Roads, and three-quarters of the cost on ordinary main roads.

The full cost of all roads and bridges in the Western Division is met by the central road authority.

All work in the Western Division is carried out directly by the central road authority (7,767 miles) while in the Eastern Division the work is carried out by the Councils except for approximately 2,000 miles, mostly on State Highways.

(ii) *Length of Roads—*

Eastern Division—

Proclaimed Roads (30th June, 1939)—	Miles.
State Highways	5,183
Trunk Roads	2,371
Ordinary Main Roads	9,039
Secondary Roads	93
Developmental Roads	2,469
Minor Roads (30th June, 1939)	99,137
<i>Western Division (30th June, 1938)</i>	<i>7,767</i>
	126,059

Of these roads, 31 miles were of wood block, 326 miles cement concrete, 234 miles asphaltic concrete, 3,300 miles tar or bituminous macadam (premixed or penetrated), 2,577 surfaced water bound macadam or gravel, 3,685 water bound macadam, 27,049 gravel or crushed rock, and 88,857 miles were formed only, cleared only, or of natural surface.

(iii) *Revenue and Expenditure.*—The revenue and expenditure of the central road authority for the year ended 30th June, 1939, were as follows:—

<i>Revenue.</i>		<i>Expenditure.</i>	
	£		£
Motor Taxation	2,018,556	Maintenance	1,519,929
Petrol Taxation	1,176,039	Construction	1,736,898
Councils' direct contributions ..	250,679	Interest and other loan charges	353,060
Loans from State Government	302,643	Other	101,497
Other	68,331		
Total	3,816,248	Total	3,711,384

The total expenditure, as nearly as can be ascertained, on all roads in the State by all authorities during 1937-38 was £8,396,175.

(iv) *Sydney Harbour Bridge.* The Government expenditure in connexion with the Sydney Harbour Bridge, which amounted to £9,872,465 to 30th June, 1939, is not included in the figures above. Of this amount £8,196,352 was provided by General Loan Account, £1,665,444 from proceeds of municipal and shire rates, £10,664 from the Unemployed Relief Fund and £5 from the Public Works Fund. Interest and exchange

accounted for £1,494,688 and resumptions for £1,145,538. A reduction in the total cost of the bridge will be effected by the sale of surplus resumed lands estimated at from £200,000 to £300,000.

2. 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 to existing roads or the construction of new roads in order to facilitate communication or to improve the conditions of traffic.

(ii) *Length of Roads and Streets*. At the end of 1938 there were 104,004 miles of roads and streets in Victoria, comprising 98 miles of wood or stone, 108 portland cement concrete, 307 asphaltic concrete and sheet asphalt, 7,830 tar or bitumen surface, 23,730 waterbound macadam, gravel, sand, and hard loam pavements, 25,161 formed only, and 46,770 surveyed only but used for general traffic. Of the total length, only 2,569 miles or 2 per cent. were State highways.

(iii) *Receipts and Expenditure*. Funds created under the Act are the *Country Roads Board Fund*, the *Loan Account* and the *Developmental Roads Loan Account*. Particulars of the operations of these Funds are given hereunder.

(a) *Country Roads Board Fund*. All fees (other than fees for licences to drive motor cars) and fines under the Motor Car Act, and all registration fees and fines for traction engines, less cost of collection of such fees and fines, are credited to this fund. The total receipts for the year 1938-39 were £2,414,008 made up as follows:—Motor registration fees, £1,690,962; contributions by municipalities for permanent works (now subject to relief), £146,899, and for maintenance works, £171,979; sale of stores and material and hire of plant, £286,828; and other sources, £117,340. The expenditure for the year was £2,413,140, comprising maintenance and reconditioning of main roads and State highways, £1,201,002; plant, stores, administration, etc., £544,524; and interest, sinking funds, etc., £667,614. The expenditure shown for interest, sinking funds, etc., comprises the following items:—Interest and sinking fund payments on account of loan moneys, £309,277; repayments by municipalities for interest and sinking fund, £118,166; and relief to municipalities from liability in respect of interest and sinking fund, £240,171.

(b) *Country Roads Board Loan Account*. Loans to the amount of £5,322,000 have been authorized from time to time for permanent works on main roads and State highways under the *Country Roads Acts*. During the year ended 30th June, 1939, the amounts paid into this Account were £58,025 from the *State Loans Repayment Fund*, while expenditure for the year on permanent works was £57,865, and the total to the end of the year, £5,044,316.

(c) *Developmental Roads Loan Account*. For the purpose of constructing and maintaining subsidiary or developmental roads, the Government was authorized to borrow sums aggregating £6,475,000. These loan moneys were exhausted at 30th June, 1937, the total expenditure at that date being £6,425,757. The difference between the two amounts represents discount and expenses in connexion with the loan.

(d) *Total Expenditure*. In addition to expenditure from the abovementioned Funds, the following amounts were expended under special appropriations on road construction and maintenance:—Unemployment relief, £54,661, contributions by the Commonwealth Government under the provisions of the *Federal Aid Roads Act*, £725,399, and special Commonwealth grant towards flood repairs, £98.

The total expenditure by the Board on road construction and maintenance during the year ended 30th June, 1939, amounting to £2,098,784, may be summarized as follows:—State Highways, £453,708; main roads, £1,027,211; developmental roads, £468,122; unemployment relief (on main and developmental roads, etc.), £54,661; tourist roads, £77,694; Murray River bridges and punts, £4,067; and roads adjoining Commonwealth properties, £13,321.

3. **Queensland.**—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 duties of the Commissioner are to carry out surveys and investigations necessary to determine State highways, main, developmental, secondary, mining access, tourist roads, or tourist tracks, and, under certain circumstances, to undertake their construction and maintenance.

With the exception of State highways, mining access roads or tourist tracks, no road can be proclaimed until the Commission has considered any objections thereto lodged by interested local authorities.

Local authorities are not liable for the return of any expenditure for construction on State highways, mining access roads (serving only mining interests) or tourist tracks, but are, however, responsible for up to 50 per cent. of maintenance. The liability in respect of main roads is 20 per cent. of construction costs; developmental roads 20 per cent. of interest on construction costs; secondary roads 50 per cent. of construction costs; and tourist roads as agreed prior to commencement of work. The liability in respect of maintenance of State highways, main, developmental and secondary roads is 50 per cent. In the case of mining access roads and tourist tracks no repayment is required. The Commissioner has power to reduce the amount of contribution payable by any local authority in respect of permanent works and maintenance where the rate required to produce the annual repayment exceeds 1d. in the £ on the property valuation of the whole area. He has also power to grant relief in exceptional circumstances.

At 30th June, 1939, there were under various local authorities 123,832 miles of roads in Queensland, of which 6,045 were natural or artificial sand-clay loam, 5,736 waterbound pavement, 1,291 waterbound pavement with bitumen surface, 848 bituminous penetration macadam, 61 concrete, 27,092 formed only and 82,759 unconstructed but used for general traffic. These totals include the roads under the control of the Main Roads Commission, which at 30th June, 1939, totalled 14,863 miles comprising 9,655 miles of main roads, 4,181 of State highways and 1,027 of developmental, tourist, etc., roads.

During the year ended 30th June, 1939, the receipts of the Commission amounted to £2,865,364, including £392,225 from the Treasury Loan Fund, £819,267 from motor fees, £806,218 from the Commonwealth for works under the Federal Aid Roads Scheme and £579,775 from the Special Employment Works Fund. Disbursements amounted to £2,850,077, including £1,872,298 on permanent works, and £405,367 on maintenance.

4. **South Australia.**—The Highways Act 1926–1938 created a Commissioner of Highways and provided for a Highways Fund. The Commissioner is virtually empowered to determine upon which main roads he will spend the moneys available; in doing which he has to take into account (a) the moneys voted, or likely to be voted, by Parliament for main roads; (b) whether the road is or will be the main trunk route (i) connecting any large producing area, or any area capable of becoming in the near future a large producing area, with its market or nearest port or railway station; (ii) connecting two or more large producing areas, or areas capable of becoming in the near future large producing areas, or between two or more large centres of population; (iii) between the capital and any large producing area or any large centre of population; (iv) between the capitals of this State and any other State; and (c) whether the area through which the road passes is, or in the near future will be, sufficiently served by a railway or railways.

After providing for certain fixed charges the Highways Fund is to be credited with the balance received from (a) licence-fees and registration fees under the Road Traffic Act 1934–1939; (b) fees for hawkers' licences; (c) contributions from Councils; and (d) all loans raised and appropriated for roads. All moneys received by the State from the Commonwealth under the Federal Aid Roads Scheme are also expended by the Commissioner of Highways under the general provisions of the Highways Act.

The total length of roads in use for general traffic within local governing areas at 30th June, 1938, was 52,929 miles, of which 10 miles were paved with wood or stone; 242 were bituminous concrete; 1,484 bitumen penetration; 14,207 tar-paved, metalled or gravelled; 7,905 formed only; and 29,081 unformed.

The expenditure from the Highways Fund for the year ended 30th June, 1939, was £877,437, including £141,990 for interest on loans. The amount received from the Commonwealth Government for expenditure on Federal Aid Roads was £472,310, the amount allocated from the Highways Fund for roads in newly-settled areas, etc., was £117,331, and grants in aid of rates collected paid to Councils amounted to £22,090. In sparsely-settled districts outside the incorporated areas, the roads and bridges are constructed and maintained chiefly by the Engineering and Water Supply Department under arrangement with the Commissioner of Highways. The amount so expended during the same period was £16,034. At the close of the period under review the Commissioner was maintaining departmentally about 1,690 miles of improved main roads.

5. Western Australia.—In Western Australia the construction, maintenance and management of roads, streets and bridges are the functions of Municipalities and Road Boards.

Certain principal highways and developmental roads are proclaimed main roads under the control of the Commissioner of Main Roads, who is appointed under the Main Roads Act 1930. At 30th June, 1939, the length of "Declared Main Roads" totalled 3,062 miles.

6. Tasmania.—(i) *Length and Description of Roads.* At 30th June, 1939, there were 9,350 miles of roads in Tasmania, comprising 572 of bitumen or oil-sprayed; 5,144 metalled and gravelled; 2,272 formed; and 1,362 grubbed and cleared. Of the total length, 1,339 miles were State highways.

(ii) *Construction.* In Tasmania the cost of construction of roads and bridges is borne almost entirely by the State Government. Half the proceeds of the sale of land has been applied to form a Crown Lands Fund for the construction of roads to new holdings. This fund has in recent years more than met the demands on it, and expenditure therefrom since 1918 has been limited to £10,000 annually, the balance being used for redemption of debt.

Loan money expended by the Public Works Department during the year 1938-39 on the construction of roads and bridges amounted to £140,770, and expenditure from the Crown Lands Fund to £1,242. In addition, the sum of £208,932 provided by the Commonwealth Government was expended on roads. New-road mileage completed during the year was 69 miles metalled and gravelled and 73 miles formed under State votes, and 8 miles of new construction and 54 miles of reconstruction under Federal Aid Roads Scheme.

(iii) *Maintenance.* The maintenance of roads, other than State highways, is undertaken by the municipalities out of their own revenues. All bridges costing over £50 are maintained by the State Government. The maintenance of State highways is provided for by the State Highways Act 1929, which created the State Highways Trust Fund to which is paid from Consolidated Revenue a sum equal to the amount of all motor taxes collected in the immediately preceding financial year and paid into the Treasury, less 2 per cent. The expenditure on State highways for 1938-39 was £93,450.

7. Summary of Net Loan Expenditure on Roads and Bridges.—Figures showing the total expenditure on roads and bridges in the States are not available. The following table shows the annual net loan expenditure on roads and bridges by the central Government in each State during the years 1934-35 to 1938-39, together with the aggregate amounts of expenditure up to 30th June, 1939. The net loan expenditure by the Government is not available for Tasmania and the figures given in the following table represent the actual amounts expended by the Department of Public Works, including sums for unemployment relief.

ROADS AND BRIDGES : NET LOAN EXPENDITURE.

Year ended 30th June—	N.S.W.	Victoria.(a)	Q'land.(b)	S. Aust.(c)	W. Aust.	Tasmania.	Total
	£	£	£	£	£	£	£
1935 ..	262,436	95,360	807,597	..	110,508	65,960	1,341,861
1936 ..	92,682	77,040	426,266	..	132,783	82,773	811,544
1937 ..	69,704	41,807	325,804	196,000	123,659	96,787	1,453,761
1938 ..	716,051	Cr. 50,200	342,665	152,500	154,713	62,634	1,378,363
1939 ..	1,850,480	Cr. 22,502	357,252	199,900	144,860	140,770	2,670,760
Total to 30/6/39	19,805,962	12,431,083	5,050,642	3,768,145	2,934,893	5,578,944	49,569,669

(a) Represents expenditure from loan and on account of loan. (b) Amounts include relative expenditure by the Public Estate Improvement Branch. (c) Adjusted figures, excluding credits due to purchase of securities.

The loan expenditure given above does not represent the total expenditure on roads and bridges. It relates for the most part to capital expenditure on new works, but it must be supplemented by similar expenditure from loan funds of local bodies, Federal grants and unemployment relief moneys, and further account must be taken of expenditure on maintenance which is mainly defrayed from the current revenues.

§ 3. Local Government Authorities.

1. Area, Population and Value of Ratable Property.—(i) *New South Wales.* Practically the whole of the State, with the exception of the greater portion of the Western Division, has been divided into municipalities and shires, the total area incorporated at the end of 1938 being 184,010 square miles. The areas incorporated comprise the whole of the Eastern and Central Divisions of the State (with the exception of Lord Howe Island, the islands in Port Jackson and the quarantine station at Port Jackson) and a small portion of the Western Division consisting of the whole of six and part of two municipalities.

The operations of the City of Sydney are governed by the Sydney Corporation Act, 1932-1934, and those of other local government areas known as municipalities and shires by the Local Government Act, 1919, and amendments.

The area, population and value of ratable property in the incorporated areas at 31st December, 1938, are given below. The valuations relate to ratable property only and exclude Government and other non-ratable property, the value of which is not inconsiderable in the aggregate.

LOCAL GOVERNMENT AUTHORITIES, NEW SOUTH WALES : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1938.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Annual Value.
		Acres.		£	£	£
Metropolitan— Capital City ..	1	3,220	88,870	47,819,002	155,913,500	7,016,108
Other ..	48	152,087	1,190,800	95,055,890	288,322,904	21,661,859
Total ..	49	155,307	1,279,670	142,874,892	444,236,404	28,677,967
Outside Metropolitan Area ..	250	117,610,773	1,431,410	176,205,179	(a)	(a)
Grand Total ..	299	117,766,080	2,711,080	319,080,071	(a)	(a)

(a) Not available.

(ii) *Victoria.* Local Government is established throughout the State, the various divisions being termed cities, towns, boroughs, or shires. The only unincorporated area is French Island in Western Port Bay. 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.

The financial years of the cities of Melbourne and Geelong end on 31st December and 31st August respectively, and those of all other municipalities on 30th September. The area, population and value of ratable property in the incorporated areas are given below :—

LOCAL GOVERNMENT AUTHORITIES, VICTORIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1938.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.	
				Improved Capital Value.	Annual Value.
		Acres.		£	£
Metropolitan— Capital City	1	7,740	92,900	93,093,580	4,654,679
Other(a)	28	160,906	946,270	260,933,330	14,374,301
Total	29	168,646	1,039,170	354,026,910	19,028,980
Outside Metropolitan Area	167	56,074,895	832,840	293,906,590	14,712,202
Grand Total	196	56,243,541	1,872,010	647,933,500	33,741,182

(a) Including the whole of the Shire of Braybrook and the whole of the City of Heidelberg.

(iii) *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. The following table gives particulars of the area, population, and value of ratable property in the incorporated areas for the year 1937, except for the City of Brisbane for which financial particulars relate throughout to the year ended 30th June, 1938 :—

LOCAL GOVERNMENT AUTHORITIES, QUEENSLAND : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1937-38.

Local Bodies.	Number.	Area.	Population. (a)	Unimproved Capital Value.
		Sq. miles.		£
Capital City	1	385	325,890	21,079,584
Outside Metropolitan Area	143	669,448	667,571	51,295,586
Total	144	669,833	993,461	72,375,170

(a) At 31st December, 1937.

(iv) *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. With the exception of the Corporation of Adelaide, grants are allocated to these bodies by the Commissioner of Highways for the maintenance and construction of main and other roads

The following table gives the area, population and value of ratable property in incorporated areas for the year ended 30th June, 1938.

LOCAL GOVERNMENT AUTHORITIES, SOUTH AUSTRALIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1938.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Annual Value.
		Acres.		£	£	£
Metropolitan— Capital City	1	3,772	31,390	11,800,000	27,000,000	1,270,000
Other	20	99,215	288,985	(a)	70,000,000	3,462,000
Total	21	102,987	320,375	(a)	97,000,000	4,732,000
Outside Metropolitan Area	121	34,400,079	261,454	(a)	78,000,000	4,012,000
Grand Total	142	34,503,066	581,829	(a)	175,000,000	8,744,000

(a) Not available.

(v) *Western Australia.* In this State Local Government is carried on by means of (a) municipalities, and (b) district road boards. Certain functions are delegated to health boards, the personnel of which, in most cases, coincides with those of the municipalities and district road boards. The following table gives particulars of the area, population and value of ratable property in incorporated areas for the year ended October, 1933 for Municipalities, and the year ended June, 1938 for District Road Boards

LOCAL GOVERNMENT AUTHORITIES, WESTERN AUSTRALIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1938.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Annual Value.
		Acres.		£	£	£
Municipalities— Metropolitan— Capital City	1	15,479	86,762	(a)	30,000,000	1,512,534
Other	8	11,374	67,031	(a)	11,917,965	621,866
Outside Metropolitan Area	12	32,686	48,725	(a)	6,517,478	490,698
Total	21	59,539	202,518	(a)	48,435,443	2,625,098
District Road Boards— Other Metropolitan ..	11	(b) 322,560	79,768	3,615,100	(a)	975
Outside Metropolitan Area	116	624,207,360	198,815	18,103,004	(a)	518,386
Total	127	624,529,920	278,583	21,718,104	(a)	519,361
Grand Totals	148	624,589,459	481,101	(a)	(a)	3,144,459

(a) Not available.

(b) Only 95,387 acres are in the Metropolitan Area.

The method of valuation is not identical in the case of all District Road Boards, as in some the assessment is based on the unimproved capital value and in others partly on the unimproved capital value and partly on the annual value. The amounts given are the totals for the areas rated on each valuation, and are not a function of each other.

(vi) *Tasmania.* The whole State is divided into municipal districts, Hobart and Launceston being incorporated under separate Acts. The following table gives particulars of the area, population and value of ratable property in incorporated areas for the year ended June, 1938.

LOCAL GOVERNMENT AUTHORITIES, TASMANIA : AREA, POPULATION AND VALUE OF RATABLE PROPERTY, 1938.

Local Bodies.	Number.	Area.	Population.	Value of Ratable Property.		
				Unimproved Capital Value.	Improved Capital Value.	Annual Value.
Metropolitan—		Acres.		£	£	£
Capital City ..	1	17,760	51,200	4,874,743	13,502,987	833,376
Other(a) ..	2	99,000	14,000	1,136,178	2,953,725	167,969
Total ..	3	116,760	65,200	6,010,921	16,456,712	1,001,345
Outside Metropolitan Area ..	46	16,661,240	171,726	16,860,544	37,323,067	1,917,834
Grand Total ..	49	16,778,000	236,926	22,871,465	53,779,779	2,919,179

(a) Including the whole of the Municipality of Clarence.

2. Revenue and Expenditure.—As the result of resolutions adopted at a Conference of Statisticians in 1936 the financial statistics of Local Government Authorities are now compiled in the various States on a more comparable basis than formerly.

In the returns of revenue and expenditure in the following tables for the year 1938 the proceeds from loans and expenditure thereof have been excluded, as have the operations of business undertakings controlled by the various Local Government Authorities. The profits resulting from the working of these undertakings have been taken into receipts and shown separately.

LOCAL GOVERNMENT AUTHORITIES : REVENUE, 1938.

Particulars.	N.S.W.(a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.					
Taxation—	£	£	£	£	£	£	£					
Rates (net) ..	5,304,475	3,705,651	} 2,265,748	871,444	{ 672,574	333,237	} 13,294,620					
Penalties ..	106,19c	32,833										
Licences ..	72,528	87,949						32,614	29,972	19,764	10,022	252,849
Other ..	44,957	44,957
Total ..	5,528,150	3,826,433	2,298,362	901,416	693,161	344,904	13,592,426					
Public Works and Services—												
Sanitary and garbage services ..	455,871	155,054	382,447	13,341	71,423	11,425	1,089,561					
Council properties ..	567,206	538,250	287,852	83,907	91,318	53,466	1,622,089					
Street construction ..	339,927	162,631	17,800	66,491	8,071	809	595,909					
Other ..	157,731	49,142	18,504	16,851	3,633	7,706	253,567					
Total ..	1,520,735	905,077	706,693	180,680	174,445	73,496	3,561,126					
Government Grants—												
Unemployment relief ..	b 1,834,242	789,184	728,682	12,601	} 127,166	{ 25,523	} 5,691,747					
Roads ..	1,380,348	83,573	385,405	(c) 311,800								
Other ..	297,718	139,426	214,235	30,466				2,391	13,133	687,740		
Total ..	3,512,308	1,012,183	1,328,322	354,957	129,557	42,160	6,379,487					
Profits from Business Undertakings—												
Fees and fines ..		264,576	4,60c	1,296	48,204	32,319	350,995					
All other ..	} 06,216	{ 10,440	{ 180,128	{ 23,518	{ 2,963	{ 12,504	{ 838,773					
Total ..	10,657,409	6,070,805	4,518,105	1,500,708	1,445,327	521,453	24,722,867					

(a) Figures relating to New South Wales are on an income and expenditure basis as distinct from those of other States which are on a cash basis. (b) Includes grants for specific work mainly to relieve unemployment, £1,589,001. (c) Includes £50,000 reimbursements from Highways Department. (d) Includes £332,395 collections in connexion with vehicles registration.

In the next table the expenditure for the year 1938 is shown. The figures are exclusive of expenditure in connexion with the debt services of business undertakings.

LOCAL GOVERNMENT AUTHORITIES : EXPENDITURE. 1938.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
General Administration	678,151	614,001	293,447	137,288	125,497	57,954	1,906,338
Debt Services (excluding business undertakings)—							
Interest ..	846,634	496,016	545,353	47,005	97,171	36,728	2,068,907
Redemption ..	1,117,954	409,987	355,148	78,758	139,256	22,499	2,116,602
Exchange ..	30,742	..	40,367	..	2,327	3,795	77,231
Other ..	3,913	7,817	1,481	..	430	..	13,641
Total ..	1,999,243	913,825	942,349	118,763	239,184	63,022	4,276,381
Public Works and Services—							
Roads, streets and bridges ..	5,498,924	1,956,104	1,764,371	869,643	577,499	221,956	10,888,497
Health administration ..	133,108	184,126	92,065	91,280	37,425	31,119	569,123
Sanitary and garbage services ..	629,627	261,308	349,170	55,716	91,879	21,238	1,408,947
Street lighting ..	340,503	174,966	67,999	54,855	43,131	24,206	705,750
Council properties ..	1,091,592	793,443	250,794	122,303	237,119	58,024	2,553,275
Other ..	212,790	73,129	(a)418,625	69,168	12,969	16,485	833,166
Total ..	7,906,544	3,443,076	2,943,033	1,262,965	1,000,022	373,118	16,928,758
Grants—							
Fire brigades ..	130,570	72,502	24,153	(b)	23,844	4,176	225,245
Hospitals and ambulances ..	21,666	38,880	214,836	(b)	19,933	968	302,372
Other charities ..	..	..	500	2,831	1,391	1,367	..
Other ..	(c)199,315	(d)217,650	16,650	832	2,133	1,320	437,940
Total ..	321,551	329,072	256,139	3,663	47,301	7,831	965,557
All Other ..	e-115,216	(f)842,299	90,396	882	40,555	25,791	884,707
Total ..	10,790,273	6,142,268	4,525,364	1,523,561	1,452,559	527,716	24,961,741

(a) Includes £215,071 for Sewerage and Drainage. (b) Compulsory contributions included under Public Works and Services. (c) Main Roads Department and Ha. Lur. Bridge Fund. (d) Includes £164,836 to Country Roads Board. (e) Includes deductions to offset duplications in the figures above caused by expenditure on the purchase of assets and depreciation of same, etc. (f) Includes £811,546, sustenance, etc.

3. New Money Loan Raisings, Debt and Interest Payable.—Particulars are given in the following table of new money loan raisings during the year 1938-39 and the amount of debt at 30th June, 1939, together with the interest payable annually thereon. In addition to those Local Government Authorities referred to above, the table includes details for those boards or statutory authorities administering works or services such as water supply, sewerage, electricity, roads, tramways, harbours, fire brigades, trading activities, marketing agencies, etc.

LOCAL AND SEMI-GOVERNMENTAL AUTHORITIES: NEW MONEY LOAN RAISINGS, DEBT AND INTEREST PAYABLE, 1938-39.

Particulars.	N.S.W. £'000.	Victoria. £'000.	Q'land. £'000.	S. Aust. £'000.	W. Aust. £'000.	Tasmania. £'000.	Total. £'000.
LOCAL GOVERNMENT AUTHORITIES.							
New Money Loan Raisings(a)	3,943	809	2,225	53	167	223	7,420
Funds Provided for Redemption—							
Repayments by Installments	2,800	626	534	65	139	60	4,224
Amounts Credited to Sinking Fund	390	86	298	1	77	61	913
Total	3,190	712	832	66	216	121	5,137
Debt—							
Due to Government	1,923	604	10,203	117	7	353	13,207
Due to Banks (Net Overdraft)	260	412	796	43	29	4	1,544
Due to Public Creditor	37,342	12,341	19,904	818	3,170	2,985	76,560
Total	39,525	13,357	30,903	978	3,206	3,342	91,311
Maturing Overseas	7,371	16	9,019	..	552	935	17,893
Interest Payable	1,757	591	1,432	44	141	148	4,113

SEMI-GOVERNMENTAL AND OTHER PUBLIC AUTHORITIES.

New Money Loan Raisings(a)	4,580	1,885	1,737	501	12	23	8,738
Funds Provided for Redemption—							
Repayments by Installments	487	417	224	154	18	20	1,330
Amounts Credited to Sinking Fund	193	253	20	46	2	1	515
Total	680	670	244	210	20	21	1,845
Debt—							
Due to Government	24,859	3,286	8,767	7,424	292	365	44,993
Due to Banks (Net Overdraft)	370	76	1,520	33	7	..	2,006
Due to Public Creditor	52,512	61,109	3,514	769	107	495	118,506
Total	77,741	64,471	13,801	8,226	406	860	165,505
Maturing Overseas	5,429	6,659	..	..	..	..	12,088
Interest Payable	2,832	2,614	532	322	18	37	6,355

(a) Excluding Loans raised and entirely redeemed within the year.

§ 4. Water Supply, Sewerage and Drainage.

1. New South Wales.—(i) *General.* In Sydney and its suburbs the water supply and sewerage systems are controlled by the Metropolitan Water, Sewerage and Drainage Board, and in Newcastle and its suburbs by the Hunter District Water Board. The Metropolitan Board's services extend to the South Coast and embrace Wollongong and

Port Kembla. In country districts, both waterworks and sewerage works were formerly constructed by the Public Works Department, and, when completed, handed over to the local government authority affected, by which the cost was to be repaid. Under an Act passed in 1935, the raising of loans by councils until 30th June, 1940 to meet the capital cost of works was facilitated, and councils are now required to undertake the work of construction. In certain cases the Government contributes towards the cost.

(ii) *Waterworks.* (a) *Metropolitan.* The catchment area of the metropolitan water system, covering an area of 376 square miles, is drained by the Nepean, Cataract and Cordeaux Rivers. At 30th June, 1939, there were in the system 8 storage reservoirs with a capacity of 110,246,000,000 gallons and 87 service reservoirs with a capacity of 525,055,000 gallons. Storage facilities are provided chiefly by four reservoirs, namely, Avon, 47,153,000,000 gallons; Cataract, 20,743,000,000 gallons; Cordeaux, 20,597,000,000 gallons; and Nepean, 17,898,000,000 gallons. The total length of mains is 4,539 miles. The average daily consumption during 1938-39 was 106,274,000 gallons.

(b) *Newcastle.* The supply is drawn from the Chichester Reservoir, and is piped about 50 miles to Newcastle. The storage reservoir capacity is 5,000 million gallons. In addition to supplying Newcastle, water is reticulated in Maitland, 20 miles distant from Newcastle, and in the Cessnock coal-mining field, as well as in areas adjoining these centres. The supply also extends to the farming areas of Miller's Forest and the lakeside resorts of Belmont, Swansea and Toronto. Water can also be supplied from the Hunter River at Maitland if required. Service reservoirs distributed throughout the Water Supply District number 36, with a total storage capacity of 60,480,510 gallons. The total length of mains was 936 miles at 30th June, 1939.

(c) *Water Supplied, etc.* The following table gives the number of houses, the estimated population supplied, and other details for the year ended 30th June, 1939 :—

WATERWORKS, SYDNEY AND NEWCASTLE : WATER SUPPLIED, 1938-39.

System.	Number of Premises Supplied.	Estimated Population Supplied.	Average Daily Supply.	Total Supply for the Year.	Average Daily Supply.	
					Per Property.	Per Head of Estimated Population.
					Gallons.	Gallons.
	No.	No.	1,000 Gallons	1,000 Gallons.	Gallons.	Gallons.
Sydney ..	350,161	1,466,000	106,274	38,790,000	304	72.50
Newcastle ..	48,370	241,850	11,865	4,330,760	245	49.05

(iii) *Sewerage and Drainage.* (a) *Metropolitan.* The Sydney sewerage system consists of three main outfalls, discharging into the Pacific Ocean. During 1938-39, new sewers laid measured 84 miles and 1.2 miles of stormwater drains were constructed.

(b) *Newcastle Sewerage Works.* The sewerage works for Newcastle and suburbs as originally designed were completed by the Department of Public Works and vested in the Board. The system has its outfall at Merewether Gulf, south from Newcastle. The length of new sewers laid was 87 miles in 1938-39, and properties connected increased by 1,325.

The stormwater drainage of Newcastle and adjoining areas is divided into two catchment areas, namely, the works in the Cottage Creek Stormwater Area and the works in the Throsby Creek Stormwater Area. A drainage rate of 3d. in the £ on assessed annual value of ratable property was levied in 1938-39.

(c) *Particulars of Services.* The following table supplies details of sewerage services and stormwater drains as at 30th June, 1939.

SEWERAGE AND DRAINAGE : SYDNEY AND NEWCASTLE, 1938-39.

System.	Premises Drained.	Population Served.	Length of Sewers.	Length of Stormwater Drains.
	No.	No.	Miles.	Miles.
Sydney	254,632	1,066,000	2,560.9	86.8
Newcastle	28,257	137,300	387.1	37.0

(d) *Finances.* The following statement shows the revenue and expenditure on account of the services of waterworks, sewerage and drainage during the year 1937-38 for Sydney and 1938-39 for Newcastle :—

WATERWORKS—SEWERAGE AND DRAINAGE : SYDNEY AND NEWCASTLE.

Item.	Capital Debt.	Revenue.	Expenditure.				Surplus or Deficit.
			Working Expenses, including Renewals Reserve.	Interest.	Exchange on Interest.	Sinking Fund.	
	£	£	£	£	£	£	£
Sydney 1937-38—							
Water ..	25,508,562	1,741,809	600,609	942,294	68,394	98,543	+ 31,969
Sewerage ..	15,185,638	999,989	311,960	557,837	39,202	61,814	+ 29,176
Drainage ..	1,005,709	41,526	16,560	40,017	1,857	4,129	- 21,037
Total ..	41,789,909	2,783,324	929,129	1,540,148	109,453	164,486	+ 40,108
Newcastle 1938-39—							
Water ..	2,969,381	246,845	104,084	105,201	13,275	13,407	+ 10,878
Sewerage ..	1,181,185	123,544	56,070	54,943	6,620	6,522	- 611
Drainage ..	123,814	15,343	7,466	7,207	939	957	- 1,226
Total ..	4,574,880	385,732	167,620	167,351	20,834	20,886	+ 9,041

(iv) *Waterworks, Sewerage and Stormwater Drainage Works in Country Towns.** The capital indebtedness of the water and sewerage schemes in country towns controlled by local councils was £5,904,847 at 31st December, 1938, namely, £3,677,829 for water and £2,227,018 for sewerage. Of the foregoing amounts, £1,356,900 for water and £290,052 for sewerage are owing to the State Government. At 31st December, 1938, country waterworks were in operation or under construction in 82 municipalities and 37 shires, and country sewerage services in 48 municipalities and eight shires.

Two country water storage systems—South-west Tablelands and Junee—are administered by the Department of Works and Local Government. These deliver water into service reservoirs for reticulation by Councils; only a small quantity is sold directly to private consumers. The capital indebtedness of these systems was £1,048,774 at 31st December, 1938.

* Excluding the area of operation of the Hunter District Water Board (Newcastle).

A water supply system at Broken Hill was transferred from the control of the Department of Works and Local Government to a special Board in terms of an Act passed in 1938. At 31st December, 1938, the capital indebtedness of the waterworks to the State was £85,318. This amount was written off, and the Board has commenced the construction of exhaustive amplification works and sewerage services.

2. Victoria.—(i) A. *Melbourne and Metropolitan Board of Works.* (a) *General.* All land within 13 miles of the Post Office at the corner of Bourke and Elizabeth streets, Melbourne, together with the remaining areas of the Cities of Mordialloc and Moorabbin and further portions of Shires of Dandenong and Blackburn and Mitcham, is included within the metropolitan area for water supply, sewerage, main drainage and river improvement purposes. This territory covers 447 square miles of land area, and in 1939 embraced 26 cities, and parts of one other city and of 11 shires, or a total of 38 municipalities or portions thereof. In addition, the Board supplies water to certain municipalities outside the metropolitan area.

The Board's liability on 30th June, 1939, for loans raised was £25,707,470. The Board was then still empowered to borrow £1,432,464 before reaching the limit of its borrowing powers.

(b) *Receipts and Expenditure.* The ordinary receipts and expenditure for the year 1938-39 were £2,356,979 and £1,660,442 respectively, and the loan receipts and expenditure, £1,407,520 and £1,951,029 (including loan redemption £1,152,460) respectively.

In the following tables showing the finances of the various services, charges against General Revenue Account amounting to £487,543 have not been included.

B. *Melbourne Water Supply.* (a) *Number of Houses, Population, and Quantity of Water Supplied.* The following table gives particulars of services for the year 1938-39. The rate levied was 7d. in the £ on the net annual value of the property served.

WATER SUPPLY, MELBOURNE : PARTICULARS OF SERVICES.

Year ended 30th June—	Number of Houses Supplied.	Estimated Population Supplied.	Average Daily Consumption.	Total Water Consumption for the Year.	Average Daily Consumption.		Length of Mains, Reti-culation, etc.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1939 ..	285,408	1,133,070	66,870	24,407,663	234,430	59.02	3,234

(b) *Capital Cost, Revenue, Working Expenses, Interest and Surplus.* The cost of construction and the financial operations for the year ended 30th June, 1939, are given below. The total capital cost to that date was £12,201,092.

WATER SUPPLY, MELBOURNE : FINANCES.

Year ended 30th June—	Capital Cost for Year.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1939 ..	320,918	1,007,300	163,837	16.26	539,581	303,882

(a) Includes interest on renewals and payments to sinking fund^s.

C. Melbourne Sewerage. (a) Number of Houses Connected, etc. Particulars of services for the year 1938-39 are given below. The rate levied was 1s. 2d. in the £ on the net annual value of the property served.

SEWERAGE, MELBOURNE : PARTICULARS OF SERVICES.

Year ended 30th June—	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.
					Per House.	Per Head of Estimated Population.	
	No.	No.	1,000 Gallons.	1,000 Gallons.	Gallons.	Gallons.	Miles.
1939 ..	269,411	1,069,562	48,222	17,600,980	179.0	45.1	2,586

(b) Capital Cost, Revenue, Working Expenses, Interest and Surplus. The cost of construction and the financial operations for the year ended 30th June, 1939, are given below. The total capital cost to that date was £14,045,705.

SEWERAGE, MELBOURNE : FINANCES.

Year ended 30th June—	Capital Cost for Year.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1939 ..	266,988	1,120,483	172,221	15.37	672,026	276,236

(a) Includes interest on renewals and payments to sinking funds.

(c) Metropolitan Sewage Farm. The total area of the farm at 30th June, 1939, was 22,634 acres. The following table gives details in connexion therewith for the year ended 30th June, 1939. The total capital cost to that date was £1,259,959.

METROPOLITAN SEWAGE FARM : FINANCES.

(Included in Sewerage Finances.)

Year ended 30th June—	Capital Cost for Year.	Cost of Sewage Disposal.	Interest.	Trading Profit.	Net Cost of Sewage Purification.
	£	£	£	£	£
1939 ..	33,473	31,951	55,486	12,950	74,487

(d) Disposal of Night-soil from Unsewered Premises. The total number of pans cleaned by the Board at its depots at Brooklyn, Campbellfield and Moorabbin, where the night-soil was disposed of by burial, was 604,170 for the year 1938-39.

D. Melbourne Drainage and Rivers—Capital Cost, Revenue, Working Expenses, Interest and Surplus. The following table gives details in connexion therewith for the year ended 30th June, 1939. The total capital cost to that date was £1,237,931.

DRAINAGE AND RIVERS, MELBOURNE: FINANCES.

Year ended 30th June—	Capital Cost for Year.	Revenue.	Working Expenses.	Percentage of Working Expenses on Revenue.	Interest. (a)	Surplus.
	£	£	£	%	£	£
1939	32,921	86,512	21,506	24.86	57,944	7,062

(a) Includes interest on renewals and payments to sinking funds.

(ii) *Geelong Waterworks and Sewerage Trust.* (a) *General.* The Geelong Waterworks and Sewerage Trust, constituted in 1908, consists of five commissioners. The amount of loan money which may be raised is limited to £900,000 for water supply undertaking, £760,000 for sewerage undertaking, and £270,000 for sewerage installation to properties under the deferred payment system. The population supplied is about 49,075.

(b) *Water Supply.* The catchment area is about 16,000 acres. The storage capacity of all the reservoirs is 2,738,119,800 gallons. In addition, the State Rivers and Water Supply Commission has made available a supplementary supply of a minimum quantity of 545 million gallons of water per annum from the upper reaches of the river Barwon. There are 315 miles of mains within the water supply area. The total expenditure on waterworks to 30th June, 1939, was £736,033, and the revenue for the year 1938-39 was £58,421; the sinking fund appropriations at June, 1939, amounted to £74,617, of which £74,150 has been expended in the redemption of loans. There is a water rate of 1s. in the £ (with minima of five shillings for unbuilt on land and one pound for tenements) on the net annual value of ratable properties. The Replacement and Contingencies Reserve (Water) amounts to £27,500.

(c) *Sewerage Works.* The sewerage scheme consists of a main outfall sewer to the ocean at Black Rock, about 9 miles from Geelong, and 13½ miles of main sewers and 143½ miles of reticulation mains have been constructed. The drainage area is 9,571 acres, and the number of buildings within the drainage area is 12,134, and within the sewered areas 11,919, while 11,902 buildings have been connected with the sewers. The total expenditure to 30th June, 1939, on sewerage works was £645,427, and on the cost of sewerage installations under deferred payment conditions £257,403, of which £2,073 is outstanding. The revenue in 1938-39 amounted to £42,737 and the sinking fund appropriations at June, 1939, were £70,723, of which £69,502 has been expended in the redemption of loans. A general rate of 1s. 3d. in the £ is levied on the net annual value of ratable properties. Replacement and Contingencies Reserves (Sewerage) amount to £20,600.

(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 are the Sewerage Authority. The Commissioners number seven, three (one of whom is chairman) being appointed by the Government, and four being elected by the Council of the City of Ballarat.

(b) *Water Supply.* The Water Supply District embraces an area of about 27 square miles, containing a population of about 43,000. The total storage capacity of the six reservoirs is 2,215,558,000 gallons.

The capital cost of construction of the waterworks is £678,233. The liabilities are loans due to the Government amounting to £284,398 as at 31st December, 1939. The revenue for the year 1939 was £37,793.

(c) *Sewerage.* The scheme as designed provides for a population of 90,000 persons. The capital cost of construction to 31st December, 1939, was £449,877. The method of sewerage disposal is by sedimentation, oxidation and sludge digestion. Ninety-seven sewered areas have been declared as at 1st January, 1940, comprising 9,508 tenements.

The scheme is financed by debenture-issue loans from various financial institutions, £496,530 having been provided up to 31st December, 1939, of which £59,287 has been redeemed, leaving a loan liability of £437,243 for constructional works. An expenditure of £183,612 was incurred for house connexions, of which £163,172 has been redeemed, the balance outstanding being £20,440.

(iv) *Bendigo Sewerage Authority.* The members of the Bendigo City Council constitute this Authority. The sewerage district comprises the populated area of the city of Bendigo. The works are completed and the expenditure to 30th September, 1939, was £339,262 for sewerage scheme and £185,791 for house connexions, excluding those tenements connected privately. The number of tenements connected to sewers is 6,396.

(v) *Sewerage in other Country Districts.* At the end of 1939 sewerage authorities had been constituted also in the following districts:—Ararat, Bairnsdale, Beechworth, Benalla, Castlemaine, Colac, Dandenong, Dimboola, Echuca, Euroa, Hamilton, Horsham, Kerang, Kyabram, Kyneton, Leongatha, Lorne, Maffra, Mildura, Mornington, Morwell, Murtoa, Nhill, Portland, Sale, Shepparton, Swan Hill, Traralgon, Wangaratta, Warracknabeal, Warragul, Warrnambool, Werribee, Wodonga, Yarram and Yarrawonga.

(vi) *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 following table gives particulars regarding waterworks under the control of trusts and municipal corporations for the year 1939:—

COUNTRY WATERWORKS, VICTORIA : FINANCES.

Year.	Under Waterworks Trusts.				Under Municipal Corporations.			
	Number of Trusts.	Capital Cost.	Capital Indebtedness.	Current Interest Outstanding.	Number of Corporations.	Capital Cost.	Capital Indebtedness.	Current Interest Outstanding.
	No.	£	£	£	No.	£	£	£
1939 ..	111	2,062,192	1,459,340	1,193	17	901,344	570,796	95

3. *Queensland.*—(i) *The Metropolitan Works Board, Department of Works, Brisbane City Council.* (a) *General.* The whole of the water supply in the metropolitan area and the bulk supply to the City of Ipswich is filtered.

The available storage in the Brisbane River is 543 million gallons, the catchment area being approximately 4,000 square miles. In Lake Manchester the storage capacity is 5,700 million gallons, and the catchment area 28.5 square miles. The capacities of Enoggera and Gold Creek reservoirs are 1,000 million gallons and 407 million gallons respectively, and the catchment areas 12.8 and 3.8 square miles respectively.

The total capacity of the service reservoirs on Tarragindi Hill, Eildon Hill, Bartley's Hill, Highgate Hill, Roles Hill, Wickham Terrace and Paddington (elevated tank) is approximately 27,356,000 gallons.

(b) *Waterworks. Summary.* The following table gives a summary of operations for the year ended 30th June, 1939 :—

WATERWORKS, BRISBANE : SUMMARY.

Year ended 30th June—	Length of Reticulation Mains.	Number of Tenements Connected. (a)	Estimated Population Supplied.	Quantity Supplied.	Average Daily Supply.	Average Daily Supply per Head of Estimated Population.
	Miles.	No.	No.	1,000 Gallons.	Gallons.	Gallons.
1939	962	75,333	320,165	5,383,550	14,749,452	46.70

(a) Exclusive of Ipswich, which is a bulk supply.

The total length of the trunk mains is 207 miles.

(c) *Sewerage.* At 30th June, 1939, 33,248 premises were connected to the Council's sewerage system, the estimated population served being 149,616 persons. The total length of sewers in operation is 1,026 miles, consisting of 542 miles of sewers within premises, and 484 miles of main and reticulation sewers.

(d) *Waterworks and Sewerage Works Finances.* The subjoined table gives particulars regarding finance during the year ended 30th June, 1939 :—

WATER AND SEWERAGE WORKS, BRISBANE : FINANCES.

Year ended 30th June—	Capital Cost.	Net Revenue from Rates.	Management and Working Expenses.	New Works Construction.	Interest and Redemption of Loans, including Sinking Fund and Overdraft.
	£	£	£	£	£
1939	10,842,668	784,475	182,977	401,465	(a) 627,950

(a) Exclusive of the sum of £56,263 paid as exchange, registry fees, etc.

(ii) *Country Towns.*—(a) *Water Supply.* In addition to the city of Brisbane, there were at 30th June, 1939, seventy-five country towns in Queensland provided with water supply systems (including seven in the course of construction) constructed by municipalities chiefly from Government loans. The subjoined statement gives particulars of all water supply systems, exclusive of Brisbane, for the year 1938-39 :—

COUNTRY WATER SUPPLY SYSTEMS : QUEENSLAND.

<i>Cost of Construction to 30th June, 1939—£3,643,588.</i>					
<i>Receipts.</i>			<i>Expenditure.</i>		
	£			£	
Rates and sales of water ..	309,940		Office and salaries ..	25,236	
Government and other loans ..	178,897		Construction ..	301,774	
Government subsidy of loans ..	92,119		Maintenance ..	130,173	
Other	14,410		Interest and redemption ..	136,048	
			Other expenses ..	6,322	
Total	595,366		Total	599,553	
Assets		2,573,314	Liabilities		2,082,278

(b) *Sewerage Systems.* At 30th June, 1939, there were eight cities outside the Metropolitan area—Bundaberg, Ipswich, Mackay, Maryborough, Rockhampton, Toowoomba, Townsville and Warwick—with sewerage works. Sewerage works are also in the towns of Charleville and Goondiwindi and in the shires of Paroo (Cunnamulla) and Quilpie. The works at Mackay, Maryborough, Toowoomba and Cunnamulla are in operation, whilst those for the other cities were in course of construction at the end of the year.

4. South Australia.—(i) *General.* The water supply and sewerage systems in this State are constructed and maintained by the Public Works Department.

(ii) *Adelaide Waterworks.* (a) *Summary.* The following table gives particulars for the year 1938-39, the figures for consumption being recorded by gaugings taken at the reservoirs and including evaporation and absorption. There are 62,118 meters in the Adelaide District.

ADELAIDE WATERWORKS : SUMMARY.

Year ended 30th June—	Number of Assessments.	Annual Value.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption.
	No.	£	Acres.	Mill n Gallons.	Miles.	Million Gallons.
1939	135,255	5,520,921	138,074	14,436	1,386	9,279

(b) *Finances.* Particulars for the year 1938-39 are given below :—

ADELAIDE WATERWORKS : FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.		Expenses.				Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Adminis-tration.	Mainten-ance.	Other.	Total.	
	£	£	£	£	£	£	£	%
1939 ..	4,676,110	367,684	446,273	24,027	68,844	18,290	111,161	7.17

(iii) *Adelaide Sewerage.* Particulars for the year 1938-39 are given hereunder :—

ADELAIDE SEWERAGE : SUMMARY.

Year ended 30th June—	Length of Sewers.	Number of Con-nexions.	Capital Cost of Revenue-Producing Works.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates, etc.	Total.	Adminis-tration, Mainte-nance, etc.	Total.	
	Miles.	No.	£	£	£	£	£	%
1939 ..	536	55,382	1,645,830	184,313	191,885	32,119	37,194	9.40

(iv) *Country Water Supply. (a) Summary.* The chief items of information regarding these undertakings are set forth in the table below for the year 1938-39. There are 34,956 meters in country districts.

COUNTRY WATERWORKS, SOUTH AUSTRALIA : SUMMARY.

Year ended 30th June—	Number of Assessments.	Area Supplied.	Capacity of Reservoirs.	Length of Mains.	Annual Consumption.
	No.	Acres.	Million Gallons.	Miles.	Million Gallons.
1939	50,370	11,719,894	9,378	4,998	5,400

(b) *Finances.* The next table gives financial information for the year 1938-39 :—

COUNTRY WATERWORKS, SOUTH AUSTRALIA : FINANCES.

Year ended 30th June—	Capital Cost.	Revenue.		Working Expenses.				Percentage of Net Revenue on Capital Cost.
		Rates.	Total.	Administration.	Maintenance.	Other.	Total.	
1939 ..	£ 9,972,942	£ 161,838	£ 207,570	£ 21,402	£ 75,877	£ 33,126	£ 130,405	% 0.77

(v) *Other Sewerage Systems.* Information in summarized form is given below regarding the two suburban sewerage systems, namely, the Glenelg system and the Port Adelaide and Semaphore system, for the year 1938-39 :—

SUBURBAN SEWERAGE SYSTEMS, SOUTH AUSTRALIA : SUMMARY.

Year ended 30th June—	Length of Sewers.	Number of Connections.	Capital Cost.	Revenue.		Working Expenses.		Percentage of Net Revenue on Capital Cost.
				Rates.	Total.	Administration and Maintenance.	Total.	
1939 ..	Miles. 387	No. 25,363	£ 1,715,204	£ 75,054	£ 76,995	£ 36,287	£ 39,829	% 2.17

5. *Western Australia.*—(i) *General.* The water supply and sewerage systems of Western Australia are principally under the management of Government Departments, and are divided into the following categories :—(a) Metropolitan Water Supply, Sewerage and Drainage, covering Perth, Fremantle, Claremont, Guildford, Midland Junction and Armadale District ; (b) Goldfields Water Supply ; (c) Water Supply of other towns ; (d) Agricultural Water Supply ; and (e) Artesian and sub-artesian waters.

(ii) *Metropolitan Water Supply, Sewerage and Drainage. (a) General.* The sources of the metropolitan water supply are the Victoria Reservoir, Mundaring Reservoir, Churchman Brook Reservoir, Canning Dam, certain bores and the Armadale and Wungong pipe head dams. During the year 1938-39 the construction of the Canning Dam was continued and at 30th June, 1939, there were 3,795 million gallons impounded.

The sewerage treatment works of Perth and suburbs consist of primary sedimentation with separate sludge digestion and discharge of effluent to the ocean. Fremantle treatment works consist of septic tanks with ocean outfall for effluent. Further extensive reticulation works were carried out during the year. At 30th June, 1939, the number of premises connected with sewers was 36,652.

(b) *Summary.* The following table gives particulars regarding water supply for the year 1938-39 :—

METROPOLITAN WATER SUPPLY, WESTERN AUSTRALIA : SUMMARY.

Year ended 30th June—	Estimated Population Supplied.	Number of Services.	Water Supplied.	Average Daily Supply.		Number of Meters.	Length of Mains.
				Per Head.	Per Service.		
	No	No.	1,000 Gallons.	Gallons.	Gallons.	No.	Miles.
1939 ..	248,248	61,467	5,147,207	56.81	229.42	40,014	953

(c) *Finances.* The table hereunder gives separate information for the water supply and sewerage and drainage branches for the year 1938-39 :—

**METROPOLITAN WATER SUPPLY, AND SEWERAGE AND DRAINAGE,
WESTERN AUSTRALIA : FINANCES.**

Year ended 30th June—	Water Supply.			Sewerage and Drainage.		
	Capital Cost.	Revenue.	Expendi- ture.	Capital Cost.	Revenue.	Expendi- ture.
	£	£	£	£	£	£
1939 ..	4,898,167	285,313	279,502	3,497,938	174,950	180,344

(iii) *Goldfields Water Supply.* The source of supply for the Coolgardie and adjacent goldfields, as well as for towns and districts on or near the pipe-line, is the Mundaring Reservoir, which has a capacity of 4,650 million gallons. There are several classes of consumers—the railways, the mines, domestic and other—and in 1938-39 the railways consumed 6 per cent., the mines 35 per cent., and domestic, etc., 59 per cent. of the supply. The following table gives details for the year 1938-39 :—

GOLDFIELDS WATER SUPPLY, WESTERN AUSTRALIA : SUMMARY.

Year ended 30th June—	Total Con- sumption.(a)	Number of Services.	Length of Water Mains.	Capital Cost.	Revenue.	Expendi- ture.
	1,000 gallons.	No.	Miles.	£	£	£
1939 ..	1,735,000	13,670	1,720	5,527,890	331,457	298,531

(a) Includes 137,724,000 gallons supplied to the Metropolitan Water Supply Department.

(iv) *Water Supply of Other Towns.* During the year 1938-39 water supplied to other towns and districts amounted to 270,541,575 gallons, distributed as follows :— Railways, 24,385,600 gallons ; mines, 24,380,000 gallons ; and 221,775,975 gallons to domestic and other consumers.

(v) *Agricultural Water Supply.* During the year 1938–39, two wells were sunk and seven tanks excavated. During the twenty-nine years from 1st July, 1910, to 30th June, 1939, 535 tanks were built, 379 wells sunk, and 3,598 bores put down to a total depth of 177,057 feet. Of the bores mentioned, 552 yielded fresh and 311 stock water.

(vi) *Artesian and Sub-artesian Waters.* Up to 30th June, 1939, the total number of bores put down in search of artesian or sub-artesian water and in which water was struck was 281, ranging in depth from 30 to 4,006 feet. These figures include 51 bores sunk in the metropolitan area.

6. *Tasmania.*—(i) *Hobart Water Supply.* The cost of this undertaking to 30th June, 1939, was £733,051, but a considerable amount of reticulation work has been done out of revenue and not charged to capital account. The outstanding loans at 30th June, 1939, amounted to £566,042. At the same date the number of tenements supplied in the city and suburbs was 14,289 and the length of reticulation mains was 143 miles. The revenue for the year 1938–39 was £50,036.

(ii) *Hobart Sewerage System.* The revenue for the year ended 30th June, 1939, was £38,190. Up to that date 83.2 miles of sewers had been laid in connexion with the original city system at a cost of £219,889 and 8,769 tenements connected. Since the original city was sewered, the municipalities of Queenborough and New Town have been included in the city, and are now being sewered. In Queenborough 29.7 miles of sewers, connecting with 1,808 tenements, have been constructed at a cost of £132,553. In New Town a total of 39.8 miles of sewers has been laid, and 1,891 properties connected. The cost to 30th June, 1939, including surveys and sewerage outfall, was £116,391.

§ 5. Harbour Boards and Trusts.

1. *New South Wales.*—(i) *Maritime Services Board of New South Wales.* (a) *General.* The Port of Sydney is administered by the Maritime Services Board of New South Wales, a corporate body of five Commissioners, three of whom are full-time members and two, representing shipping and commercial interests, part-time members. The Board was brought into existence on 1st February, 1936, by the Maritime Services Act, 1935, in order 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.

(b) *Port of Sydney.* The functions of the Board in respect of the Port of Sydney include the provision of adequate wharfage, channels, lights and other port facilities, the control of shipping, pilotage, the imposition and collection of rates and charges on goods and vessels, the licensing of harbour craft and the general management and control of the Port.

The entrance to Sydney Harbour is nearly a mile wide, and is not less than 80 feet deep. Between the entrance, known as "The Heads", and the Harbour proper, a distance of 4 miles, there are two separate channels, each with a depth of 40 feet at low tide and a width of 700 feet. The foreshores are 188 miles in length, and the total area of the port is 14,284 acres, or 22 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.

Exclusive of ferry wharves, and jetties used for private purposes, there are 64,600 feet of wharfage controlled by the Maritime Services Board, and 10,000 feet of commercial wharfage privately owned. There is ample shed accommodation, and the port is well equipped with railway wharfage for the handling of traffic which is required to pass direct from ship to rail and vice versa. For the wheat export trade, in both bulk and bags, ample wharfage accommodation and handling equipment of the most modern character are available. Facilities in all directions can be very considerably extended when required. Approximately two-thirds of the shipping wharves controlled by the Board are leased to shipping companies, the remainder, which are unleased, are directly maintained by the Commissioners.

The subjoined table gives particulars concerning the finances of the Board for the year 1938-39, in respect of the functions of the former Sydney Harbour Trust at the Port of Sydney :—

MARITIME SERVICES BOARD : FINANCES OF THE PORT OF SYDNEY.

Year ended 30th June	Revenue.				Working Expenditure.	Interest.	Surplus.	Total Capital Debt.
	Wharfage and Harbour Rates.	Tonnage Rates and Berthing Charges.	Other Sources.	Total.				
	£	£	£	£	£	£	£	£
1939 ..	773,501	38,180	343,946	1,155,627	4435,350	6481,551	238,726	111,276,399

(a) Includes £55,230 exchange. (b) Includes £58,210 sinking fund contributions. (c) After allowing for balance in liquidation of Capital Debt Account.

(c) *Port of Newcastle.* In regard to the volume of shipping entered, Newcastle ranks second in importance in New South Wales and fourth in Australia. It is primarily a coal-loading port, but its activities cover the shipment of general commodities. The wharfage and other facilities of the port have been further improved and extended to meet the actual and the anticipated growth of trade with the expansion of industry in the district. A terminal elevator, which has been erected for the handling of bulk wheat, has enhanced the importance of Newcastle as an exporting centre.

(d) *Port Kembla.* Port Kembla, which is sharing to an increasing extent in the shipping trade of the State, has an area of 330 acres, with depths ranging from 20 to 50 feet, and wharfage accommodation has been provided for large ocean-going vessels. Being adjacent to the southern coalfields and a rapidly developing industrial centre, its trade is growing and a great future for the port is predicted.

(e) *Other Ports.* In addition to the ports of Sydney and Newcastle, the Board controls 29 outports along the coastline of 609 miles.

(ii) *Port Charges.* There has been much ill-informed criticism of the port charges levied upon shipping in Australian ports. The fact is that the Governmental charges compare favourably with those of other parts of the world when the services rendered are taken into consideration. They are much lower than the charges at the leading ports of the United Kingdom. Direct comparisons of port charges are difficult, if not impossible, to make, because of the differing port customs, and the absence of similarity in the nature and methods of applying them. It is considered that the most satisfactory method of comparison is to take the total collections by the port authorities, and arrive at the average rate per ton. This has been done in the case of the two leading ports in Australia and in the United Kingdom, and the figures are as follows :—

PORT CHARGES : AUSTRALIA AND UNITED KINGDOM.

Port.	Net Tonnage of Vessels Entered.	Charges on Shipping (excluding Pilots' fee).	Average Rate per Ton of Shipping.
		£	d.
Australia—			
Sydney (1938-39)	11,650,317	234,094	4.8
Melbourne (1938)	8,578,270	210,432	5.9
United Kingdom—			
London (1938-39)	31,041,920	1,418,494	10.9
Liverpool (1938-39)	21,724,050	1,594,036	17.6

2. *Victoria.*—(i) *Melbourne Harbour Trust.* (a) *General.* Information regarding the origin and constitution of this trust appears in Official Year Book No. 12, p. 970 *et seq.* At the 31st December, 1939, the sheds available for wharfage accommodation had a length of 18,278 feet, covering an area of 1,207,684 square feet. The area of water in the bay and River Yarra under the control of the Trust is approximately 5,321 acres and the total length of wharves, piers and jetties in the port is 61,850 feet, giving an area of over 57 acres of wharfage, of which 50,699 feet is effective berthing space. During 1939 the quantity of material raised by dredging and excavation in the river and bay amounted to 3,130,345 barge yards at a cost of £112,052. The Trust has expended £363,204 in reclaiming land within its jurisdiction by depositing 17,022,275 barge yards of material thereon.

(b) *Finances.* During the year ended 31st December, 1939, the revenue (excluding refunds) of the Trust amounted to £843,899, and expenditure to £837,577 (including the amount of £155,234 paid to Consolidated Revenue and Geelong Harbour Trust). There was a net surplus on revenue account of £6,322. Appropriation for sinking fund and charges for depreciation, renewals and insurance against revenue account for the year amounted to £196,009. The capital expenditure for the year was £128,567. Up to 31st December, 1939, the total capital expenditure amounted to £9,161,942, the loan indebtedness at that date being £4,018,527.

(ii) *Geelong Harbour Trust.* The Geelong Harbour Trust was reconstituted in 1934 under the provisions of the Melbourne and Geelong Harbour Trusts Act 1934. The Trust is under the control of three Commissioners appointed by the Governor in Council. Revenue for the year 1939 was £93,514. Revenue expenditure was £98,485 and capital expenditure £58,326, while loans outstanding at the end of that year amounted to £520,360.

(iii) *Harbour Boards.* The Harbour Boards Act 1928 made provision for the establishment of Harbour Boards at Gippsland Lakes, Welshpool, Warrnambool, Port Fairy and Portland, all of which ports were, at the commencement of the operation of this Act, under the control of the Public Works Department. The Warrnambool Harbour Board, which was constituted on 29th May, 1928 under the provisions of this Act, was abolished on 30th June, 1936 by Order in Council and the port was restored to the control of the Public Works Department.

3. *Queensland.*—(i) *Bowen Harbour Board.* The Bowen Harbour Board consists of seven members, of whom two are appointed by the Governor in Council and the remainder elected by the electors of the town of Bowen and adjacent shires. The district under its jurisdiction comprises the area within the boundaries of the town of Bowen, the shires of Proserpine and Wangaratta, and Division I. of the shire of Ayr. The capital expenditure for the year 1939 was £307, while for the same period the revenue was £14,622 and the expenditure £15,370, all of which was from revenue.

(ii) *Bundaberg Harbour Board.* The Bundaberg Harbour Board consists of nine members, of whom one is appointed by the Governor in Council, four elected by the electors of the city of Bundaberg, and two each by the electors of the shires of Gooburrum and Woongarra.

The capital expenditure for the year 1939 was £952, while for the same period the revenue was £11,062 and expenditure £6,187.

(iii) *Cairns Harbour Board.* The Cairns Harbour Board, which controls the port, consists of thirteen members, representing the city of Cairns and six adjoining shires. The wharves are exclusively under the control of this Board and consist of 1,900 lineal feet in reinforced ferro-concrete, upon which spacious sheds are erected with a floor

area of 14,400 square feet, brilliantly lighted by the Barron Falls Hydro-Electricity Scheme. A most comprehensive electrical equipment is erected at the wharves for handling sugar from shed direct into vessels' holds and a special sugar storage shed, fitted with this equipment, can accommodate 7,500 tons. The Board's suction dredger maintains a minimum depth of 22 feet of water in the entrance channel. Ships drawing over 27 feet of water can berth at wharves. Railway facilities are provided in front of and at rear of the wharves. The revenue of the Board, derived from harbour, berthage and miscellaneous dues, etc., for the year 1939, was £61,428, and expenditure £72,241. In addition £7,953 was spent from loan during the year on the reclamation of foreshores.

(iv) *Gladstone Harbour Board.* The Gladstone Harbour Board is composed of seven members, two of whom are appointed by the Governor in Council and five elected by the electors of the town of Gladstone and the shires of Calliope and Miriam Vale.

The capital expenditure for the year 1939 was £14,014 and the total to the end of 1939 amounted to £132,334. The revenue for 1939 was £23,499, and the expenditure £25,799.

(v) *Mackay Harbour Board.* The Mackay Harbour Board consists of nine members elected by the electors of the city of Mackay and the shires of Pioneer, Sarina, Mirani and Nebo. The harbour is in course of construction.

Expenditure for the year 1939 totalled £438,315 of which £401,955 was spent on construction. Receipts totalled £392,569, harbour dues amounting to £57,440, Government Loan to £13,732, and Government subsidy of Loan to £107,867.

(vi) *Rockhampton Harbour Board.* The Rockhampton Harbour Board consists of eleven members, of whom seven are elected by the electors on the rolls of the city of Rockhampton, and the shires of Mount Morgan, Fitzroy and Livingstone. The remaining four are elected by the councillors of groups of inland shires.

The revenue for the year 1939 was £41,012 and the expenditure £38,906. The capital expenditure for the year 1939 was £5,211, and the total to the end of 1939 was £810,431.

(vii) *Townsville Harbour Board.* The Townsville Harbour Board is composed of nine members of whom two are appointed by the Governor in Council and the remaining seven are elected by the electors of Townsville and adjacent towns and shires. All harbour works and conveniences for the use of shipping are under the control of the Board. The capital expenditure for the year 1939 was £5,245; the receipts for the year 1939 were £76,095, and the expenditure £71,659.

HARBOUR BOARDS, QUEENSLAND : FINANCES.

Year ended 31st December	Revenue.			Expenditure.				Assets.	Liabilities.
	Wharfrage and Harbour Dues.	Total.	Interest on Loans.	Redemption of Loans.	Construction and Maintenance.	Other.	Total.		
1939 ..	249,510	629,262	62,262	29,661	556,818	27,689	676,430	2,580,445	2,559,489

4. Western Australia.—(i) *Fremantle Harbour Trust.* (a) *General.* Fremantle Harbour is controlled by a Board of five Commissioners appointed by the Governor in Council. A description of the works is given in a previous issue of the Official Year Book (see No. 12, p. 973). Since that account was written, bulk-handling facilities have been provided and the inner harbour, entrance channel and berthing accommodation have been dredged to a depth of 36 feet below the lowest known low water. The length of berthage accommodation at all the quays is now 10,177 feet.

(b) *Finance.* The following table gives financial data for the year 1938-39 :—

FREMANTLE HARBOUR TRUST : FINANCES.

Year ended 30th June—	Revenue.	Expenditure.						Total
		Working Expenses.	Interest.	Sinking Fund.	Renewals Fund.	Capital Expenditure.	Surplus Revenue. (a)	
1939 ..	£ 512,414	£ 247,243	£ 143,538	£ 18,901	£ 2,000	£ 5,251	£ 99,098	£ 516,031

(a) Paid to Consolidated Revenue.

(ii) *Bunbury Harbour Board.* (a) *General.* The Bunbury Harbour Board consists of five members appointed by the Government. The jetty is 4,900 feet long, with berthage accommodation of 3,700 feet, and is electrically lighted.

(b) *Finances.* Details for the year 1938-39 are given hereunder. Surplus revenue is paid into Consolidated Revenue Fund to meet interest and sinking fund :—

BUNBURY HARBOUR BOARD : FINANCES.

Year ended 30th June—		Capital Account.	Revenue.	Expenditure.
1939 ..	.. ..	£ 680,247	£ 32,035	£ (a) 52,435

(a) Includes £33,488, Interest on Capital Account, of which £2,974 was contributed from the earnings of the Board.

5. *Tasmania.*—(i) *Marine Board of Hobart.* (a) *General.* The Marine Board of Hobart consists of nine wardens elected by the ship-owners of the Port of Hobart and the importers and exporters of goods into or from any port within the jurisdiction of the Board.

(b) *Finances.* The following table gives details for the year ended 30th June, 1939 :—

MARINE BOARD OF HOBART : FINANCES.

Year ended 30th June—	Capital Debt.	Revenue.		Expenditure.		
		Taxes, Dues, etc.	Total.	Interest and Sinking Fund.	Works, Services, etc.	Total.
1939 ..	£ 24,494	£ 51,394	£ 55,085	£ 8,164	£ 38,989	£ 50,882

(ii) *Marine Board of Launceston.* (a) *General.* The Marine Board of Launceston consists of five wardens, three elected by the ratepayers of the city of Launceston and two by ratepayers of the municipalities within the Tamar District.

(b) *Finances.* The following table gives details for the year ended 30th June, 1939 :—

MARINE BOARD OF LAUNCESTON : FINANCES.

Year ended 30th June—	Capital Debt.	Revenue.		Expenditure.		
		Taxes, Dues, etc.	Total.	Interest and Sinking Fund.	Works, Services, etc.	Total.
	£	£	£	£	£	£
1939.. ..	235,747	57,985	63,356	15,620	15,169	63,356

(iii) *Marine Board of Burnie.* The length of the breakwater is 1,250 feet, with a depth up to 42 feet at low water, and a wharf alongside. 736 feet in length by 91 feet wide, with a depth at low water from 30 to 40 feet. There are two other timber wharves 700 feet and 520 feet long respectively. The receipts for the year ending 30th June, 1939, were £33,776, and the expenditure £24,336, including £15,943 interest on loans, etc.

§ 6. Fire Brigades.

1. *New South Wales.*—(i) *General.* Under the Fire Brigades Act, 1909-1927, a Board of Fire Commissioners consisting of eight members operates, and 127 fire districts have been constituted. The cost of maintenance of fire brigades is borne in proportions of quarter, quarter, and half by the Government, the municipalities, and the insurance companies concerned, but the expenditure must be so regulated that the proportion payable by the councils in a fire district shall not exceed the amount obtainable from ½d. in the £ rate on the unimproved capital value of ratable land in the fire district: provided that the Board, with the consent of the Minister, and at the special request of the councils of the municipalities or shires constituting or forming part of a fire district or a majority in number of such councils may, as to that district, exceed the limit above provided.

(ii) *Board of Fire Commissioners of New South Wales.* At 31st December, 1939, the Board had under its control 79 fire stations in the Sydney fire district and 154 fire stations in the country fire districts. The Sydney fire district includes the City of Sydney and suburbs, and comprises a total area of 293 square miles. The revenue for the year 1939 was £483,131, made up as follows :—From the Government, £118,677; municipalities and shires, £118,677; fire insurance companies and firms, £237,354; and from other sources, £8,423. The disbursements for the year were £478,089.

2. *Victoria.*—(i) *General.* The Fire Brigades Act of 1928 provides for a Metropolitan Fire Brigades Board, and a Country Fire Brigades Board, each consisting of nine members, with local committees in country districts. The income of each Board is derived in equal proportions from the Treasury, the municipalities and insurance companies.

(ii) *Metropolitan Fire Brigade Board.* On 30th June, 1939, the Board had under its control 43 stations. The total receipts for the year 1938-39 were £231,353, comprising contributions £182,406, receipts for services £28,905 and interest and sundries £20,042. The expenditure was £228,560, made up as follows :—Salaries (permanent staff) £127,149, interest and repayments of principal £19,418, and other expenditure, £81,993. The loan expenditure during the year was £27,238, and the loan indebtedness at the end of the year, £207,336.

(iii) *Country Fire Brigades Board.* At 30th June, 1939, there were 126 municipal councils and 110 insurance companies included in the operations of the Act. The brigades are composed chiefly of volunteers, but in the large centres a few permanent station-keepers and partially-paid firemen are employed. Complete fire-alarm systems are installed in 42 of the larger provincial cities and townships. There were 154 registered brigades at the end of June, 1939. For the year 1938-39 the revenue was £35,026 and the expenditure £35,439. Loan expenditure during the year amounted to £18,104, and at the close of the year the loan indebtedness was £59,862.

3. *Queensland.*—(i) *General.* The Acts of 1920-1931 made provision for the retention of existing fire districts, and for the constitution of new districts. For each district there must be a Fire Brigades Board consisting of seven members, and the cost of maintenance of each brigade is proportioned as follows :—The Treasury two-sevenths, insurance companies three-sevenths, and local authorities two-sevenths. All volunteer fire brigades in a district must be registered.

(ii) *Fire Brigades Boards.* At 30th June, 1939, there were fire brigades in 35 towns. The total revenue for the year 1938-39 was £108,742, received mainly from the following sources :—Government £24,770, local authorities £24,462, insurance companies £37,187, and loans (Government and other), £18,732. The total expenditure for the year was £115,251, the chief items being salaries and wages £59,523, and interest and redemption of loans, £12,170.

4. *South Australia.* The Fire Brigades Act 1936, provides for a Board of five members, and the expenses and maintenance of brigades are defrayed as to two-ninths by the Treasury, five-ninths by insurance companies, and two-ninths by the municipalities concerned. The contribution of the Treasury, however, is limited to £10,000 and if two-ninths of the expenses and maintenance exceeds this amount five-sevenths of the excess is contributed by the insurance companies and two-sevenths by the municipalities. At the end of 1938 there were altogether 28 fire brigade stations the total revenue for the year 1938 was £62,485.

5. *Western Australia.*—(i) *General.* Under the 1916 Act certain Municipal and Road Board Districts are constituted fire districts under the control of the Western Australian Fire Brigades Board. The income of the Board is derived as to two-eighths from Government, three-eighths from municipalities, and three-eighths from insurance companies.

(ii) *Western Australian Fire Brigades Board.* The whole of the brigades throughout the State are now controlled by the Western Australian Fire Brigades Board, and number 42. The revenue and expenditure for the year ended 30th September, 1939, were £66,976 and £63,924 respectively. The estimated value of land and buildings was £96,000 and of plant £41,000.

6. *Tasmania.*—(i) *General.* The municipal council of any municipality may, under the Act of 1920, petition the Governor to proclaim the municipality or any portion of it to be a fire district, each district to have a Board of five members. The expenses of each Board are borne in equal proportions by contributions from the Treasury, the municipality concerned, and insurance companies insuring property within the district.

(ii) *Hobart Fire Brigade Board.* The revenue of the Board for the year 1939 amounted to £7,236.

CHAPTER XXIII.—LABOUR, WAGES AND PRICES.

A.—RETAIL PRICES AND PRICE INDEXES.

§ 1. Collection of Returns of Retail Prices and Rents.

The retail prices of an extensive range of articles and services in common demand are collected by the Bureau at frequent intervals from representative retail establishments in the more important towns throughout the Commonwealth. The prices of a less extensive range of commodities are also collected at annual intervals from most towns of any significant size, the total number of towns so covered reaching approximately 200.

Definite standards of quality have been established for each article in order to ensure that, as far as care and effort can make it possible, prices for articles of identical grade or quality will be recorded at all times and for all places. These standards, which are incorporated in printed "specifications", are closely watched and revised from time to time to keep them in harmony with changing trade practices and conditions.

The actual collection of the data is carried out, under the direct supervision of the State Statisticians, by specially qualified officers of the Bureau, while two supervising field officers are provided to assist in the co-ordination of activities in the several States. The prices of food are obtained, where practicable, from about ten retailers in each of the capital cities, and from about five retailers in the provincial towns. Tradespeople and agents are carefully selected in order to ensure the supply of representative figures for the whole of each town, and returns are carefully verified if there should be any doubt as to the accuracy of the information supplied.

Returns of rents are made in the middle of each quarter by a representative number of house-agents in each town, for brick and wooden houses respectively, classified according to the number of rooms. These returns show the rents of individual houses, all of which are inspected by the Bureau's field officers.

§ 2. Compilation of Indexes of Retail Prices and Rents.

1. **General.**—The methods adopted for the compilation of indexes of retail prices and rents are very briefly described below. For a more detailed explanation, and an analysis of the problems involved, the reader should refer to *Labour Report* No. 30 and the Appendix to *Labour Report* No. 9.

2. **The Regimen.**—The "regimen" from which the retail price indexes are compiled consists of a list of those commodities and services which most commonly enter into the consumption of the average household. The regimen is divided into the following distinct groups and sections:—

Group.	RETAIL PRICES.	Section.
I. Food and Groceries	{ A.—Groceries.
		{ B.—Dairy Produce.
		{ C.—Meat.
II. Housing	{ D.—House Rent.
		{ E.—Clothing—Man.
		{ F.—Clothing—Woman.
III. Clothing	{ G.—Clothing—Boy (10½ years).
		{ H.—Clothing—Girl (7 years).
		{ J.—Clothing—Boy (3½ years).
		{ K.—Household Drapery.
IV. Miscellaneous	{ L.—Household Utensils.
		{ M.—Fuel and Light.
		{ N.—Other Miscellaneous.

An index (the "All Items" or "C" series) is compiled for the whole of the foregoing groups, but for many purposes indexes are required for each group or section separately.

A list of the articles and services included in the various sections is published in the *Labour Report*.

3. **The Mass Units.**—The "mass units" or "multipliers" represent the estimated annual consumption per head or per household as the case may be in Australia of the units of quantity adopted for the various items in each of the sections. In the case of

food and groceries the mass units are approximately the annual average consumption per head for household purposes of the various articles during the years 1927 to 1929. In the case of housing the mass unit is the multiplier applied to the weekly rental to raise it to an annual basis. In the case of Sections E to J the mass units represent the estimated annual consumption per head of the articles included in these sections. In the case of Sections K to M the mass units represent the estimated consumption per household, while in Section N are shown the actual amounts necessary to cover the estimated cost of the services included for an average household.

It will be noted that the mass units are all shown on the basis of consumption per head or per household. In the tabulation for index-number purposes, the figures are raised to a "total population" basis, by multiplying the aggregate cost of each group or section by the numbers of the population properly applicable to it. Thus food and groceries is multiplied by the whole population; housing by the total number of households; the clothing sections by the proportions of the population applicable to each; and the Sections K to N (miscellaneous) by the total number of households. The resultant index-numbers measure changes, therefore, in the cost to the whole population of the commodities and services included.

4. **Relative Importance of the Groups and Sections.**—The relative importance of the groups and sections in the "All Items" ("C" series) index for Melbourne for the December quarter of 1930 was as follows:—

Group.	Section.	Percentage of Total Aggregate Cost.
I. Food and Groceries	A.—Groceries	15.0
	B.—Dairy Produce	10.2
	C.—Meat	11.2
II. Housing	D.—House Rent (4 and 5 rooms) ..	23.8
	E.—Man	8.2
III. Clothing	F.—Woman	8.8
	G.—Boy, 10½ years	1.6
	H.—Girl, 7 years	1.1
	J.—Boy, 3½ years	0.6
	K.—Household Drapery	1.3
IV. Miscellaneous	L.—Household Utensils	0.5
	M.—Fuel and Light	5.0
	N.—Other Miscellaneous	12.7
		100.0

5. **Base Periods of the Indexes.**—The base period originally adopted by the Bureau for its retail price indexes was the year 1911. When the collection of the prices of clothing and miscellaneous items was undertaken for the purposes of the "All Items" ("C" series) index, the month of November, 1914, was adopted as the base period for this series. The desirability of computing retail price indexes to a post-war base was considered by a Conference of Statisticians in 1929, and it was resolved that from 1st January, 1930, the five years 1923–27 should be adopted as the base period. Commencing with the year 1930, therefore, the retail price indexes have been published on this base. The aggregate to which all index-numbers are related is the weighted aggregate cost of the regimen in the six capital cities during the period taken as base.

6. **The Methods of Tabulation.**—The prices (converted to pence) received from each retailer for each item of the regimen are added together and divided by the number of individual prices. These averages are then multiplied by their respective mass units. The sum of these products for each section or group of the regimen is then multiplied by the population factor applicable to such section or group. The aggregate so produced for any section, group or combination thereof for the period taken as the base of the indexes is regarded as equal to 1,000. The index-number for any other period is then calculated by applying to 1,000 the ratio which the aggregate for such period bears to the base aggregate.

§ 3. The Food, Groceries and Rent (" B " Series) Index of Retail Prices.

1. **General.**—This index measures the prices of food and groceries and the rent of 4 and 5-roomed houses. It was first compiled in respect of the year 1925, and index-numbers were retrospectively computed for the several earlier years shown below. It was designed to replace the " A " series index (food, groceries and rent of all houses), which was the original index first compiled by the Bureau in 1912. Owing, however, to the continued use of the latter index by Industrial Tribunals for the purpose of adjusting wages to variations in retail prices, the " B " series index never replaced the " A " series in this connexion.

2. **Retail Price Index-Numbers: Capital Cities, 1907 to 1939.**—Index-numbers computed separately for each group of the regimen, and the weighted average for both groups together, for the capital city of each State are shown in the next table.

RETAIL PRICE INDEX—NUMBERS: CAPITAL CITIES. (" B " SERIES).

(Base of each Section: Weighted Average of Six Capital Cities, 1923–27 = 1,000.)

City.	1907.	1911.	1914.	1921.	1935.	1936.	1937.	1938.	1939.
FOOD AND GROCERIES.									
Sydney	523	553	646	1,062	840	848	858	904	936
Melbourne	517	523	610	1,063	784	809	836	884	942
Brisbane	530	569	603	1,014	763	791	828	838	864
Adelaide	532	570	679	1,066	780	798	818	861	897
Perth	670	753	728	1,116	821	833	881	899	938
Hobart	565	592	678	1,133	792	827	870	880	923
Weighted Average (a) ..	533	559	640	1,064	806	825	851	886	927
HOUSING (4 AND 5 ROOMS).									
Sydney	593	701	760	989	891	930	965	1,004	1,035
Melbourne	455	569	628	820	850	882	909	955	955
Brisbane	283	373	466	630	720	766	822	841	854
Adelaide	510	706	655	809	736	795	832	868	888
Perth	458	524	589	739	792	844	861	872	881
Hobart	405	452	518	881	890	908	899	913	925
Weighted Average (a) ..	497	612	662	862	839	879	912	942	965
FOOD, GROCERIES AND HOUSING.									
Sydney	548	606	687	1,036	858	878	904	941	972
Melbourne	495	539	616	977	808	835	862	902	945
Brisbane	442	500	554	877	747	781	824	858	858
Adelaide	524	618	671	975	764	796	826	862	891
Perth	594	672	679	982	810	849	871	887	914
Hobart	508	542	621	1,044	827	856	879	891	922
Weighted Average (a) ..	520	578	648	992	818	844	872	906	939

(a) For Six Capital Cities.

§ 4. The All Items (" C " Series) Index of Retail Prices.

1. **General.**—This index measures the prices of food and groceries, rent of 4 and 5-roomed houses, clothing and miscellaneous household requirements, and for convenience of reference has been designated the " All Items " (" C " series) index. It has become more important in recent years because of its adoption by the Commonwealth Arbitration Court from 1st May, 1934, for the adjustment of wages controlled by that Court. It is used at present as the basis of the " Court " series of index-numbers adopted from July, 1937, by the same Court.

The compilation of this series was undertaken by the Bureau following a recommendation of the Royal Commission on the Basic Wage, which reported in 1920 and 1921. The Commission itself had collected data on prices in the capital cities for the month of November, 1914 to 1920 inclusive. In consequence, the Bureau commenced its own more comprehensive inquiries in five principal towns of each State, as from November, 1921, and continued them at quarterly intervals thereafter.

2. Retail Price Index-Numbers : Thirty Towns, November 1921 to June Quarter 1940.—The following table gives index-numbers representing the variations in the prices, in 30 of the more important towns, of food and groceries, housing, clothing, and miscellaneous household requirements combined.

RETAIL PRICE INDEX-NUMBERS : THIRTY TOWNS (" C " SERIES). ALL ITEMS OF HOUSEHOLD CONSUMPTION.

(Base : Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

State and Town.	Nov- em- ber, 1921.	Year 1929.	Year 1933.	Year 1934.	Year 1935.	Year 1936.	Year 1937.	Year 1938.	Year 1939.	1940.	
										Mar. Qtr.	June Qtr.
NEW SOUTH WALES—											
Sydney ..	1,046	1,073	832	842	852	866	889	913	936	946	970
Newcastle ..	1,041	1,028	819	834	856	853	849	877	901	914	941
Broken Hill ..	975	1,018	806	819	819	848	893	940	955	954	980
Goulburn ..	1,033	1,108	843	852	860	864	867	893	916	921	946
Bathurst ..	947	979	801	807	814	833	842	860	883	894	918
Weighted Average, 5 Towns ..	1,042	1,067	830	841	852	865	886	911	933	943	968
VICTORIA—											
Melbourne ..	1,003	1,017	789	801	824	844	868	896	924	934	963
Ballarat ..	992	957	760	781	803	826	839	850	874	882	903
Bendigo ..	1,002	969	789	811	820	821	840	854	875	889	916
Geelong ..	1,019	980	772	782	824	848	855	884	911	915	939
Warrnambool ..	1,034	960	812	826	850	851	856	892	918	936	951
Weighted Average, 5 Towns ..	1,003	1,011	787	801	824	843	866	893	920	930	959
QUEENSLAND—											
Brisbane ..	923	923	751	762	780	804	837	852	870	887	900
Toowoomba ..	949	916	778	785	785	802	840	843	858	874	890
Rockhampton ..	972	904	752	759	776	802	840	853	867	887	900
Townsville ..	1,025a	939a	762a	759a	789a	810a	883	902	918	932	947
Bundaberg ..	994b	931b	757b	761b	769b	779b	809	831	847	860	873
Weighted Average 5 Towns ..	941	922	753	764	780	803	840	854	871	888	902
SOUTH AUSTRALIA—											
Adelaide ..	989	1,037	789	806	820	839	859	888	906	912	934
Kadina, etc. ..	998	943	747	758	763	765	769	786	810	811	826
Port Pirie ..	1,025	980	762	778	789	813	844	868	896	894	914
Mount Gambler ..	1,029	963	800	800	809	818	830	849	872	866	887
Peterborough ..	948	1,043	832	832	833	843	851	868	897	901	918
Weighted Average, 5 Towns ..	992	1,030	787	804	817	835	855	883	902	907	929
WESTERN AUSTRALIA—											
Perth, etc. ..	1,008	1,026	811	830	834	856	869	882	901	902	932
Kalgoorlie, etc. ..	1,048	1,032	937	975	1,011	1,027	1,030	1,048	1,066	1,064	1,092
Northam ..	1,030	1,022	814	825	829	860	890	900	915	912	943
Bunbury ..	1,045	978	824	843	865	880	897	914	936	934	963
Geraldton ..	1,056	1,051	851	866	886	933	970	957	965	958	983
Weighted Average, 5 Towns ..	1,020	1,026	825	842	848	870	884	897	915	916	945
TASMANIA—											
Hobart ..	1,070	1,000	825	837	849	860	875	887	908	918	938
Launceston ..	1,067	967	817	828	834	840	856	872	888	898	921
Burnie ..	1,003	966	775	780	792	814	854	865	879	890	927
Devonport ..	904	948	773	787	801	809	833	848	861	869	886
Queenstown ..	1,031	972	867	876	873	850	857	875	903	914	929
Weighted Average, 5 Towns ..	1,057	986	820	831	841	850	866	879	898	909	929
Weighted Average, 30 Towns ..	1,013	1,026	803	816	831	848	871	894	917	927	951
Weighted Average, 6 Capital Cities ..	1,013	1,033	804	817	832	850	873	897	920	930	954

(a) Charters Towers.

(b) Warwick.

3. Retail Price Index-Numbers : Capital Cities, 1914 to 1920.—The next table gives index-numbers representing the variations in the prices, in each capital city, of all items of household consumption combined. The index-numbers for the clothing and miscellaneous groups were compiled from data collected by the Royal Commission on the Basic Wage.

RETAIL PRICE INDEX—NUMBERS : CAPITAL CITIES ("C" SERIES). ALL ITEMS OF HOUSEHOLD CONSUMPTION.

(Base of each Group : Weighted Average of Six Capital Cities, 1923-27 = 1,000.)

Period.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Six Capitals.
FOOD AND GROCERIES.							
Nov. 1914 ..	638	616	614	683	746	687	641
" 1915 ..	844	835	860	858	819	858	842
" 1916 ..	833	791	748	835	854	807	812
" 1917 ..	877	798	825	805	828	949	836
" 1918 ..	877	843	882	862	816	918	861
" 1919 ..	1,073	975	1,069	1,012	987	1,041	1,026
" 1920 ..	1,225	1,220	1,117	1,225	1,113	1,293	1,209
HOUSING (4 AND 5 ROOMS).							
Nov. 1914 ..	758	608	463	611	586	525	649
" 1915 ..	780	611	472	574	581	571	659
" 1916 ..	791	625	467	573	592	574	665
" 1917 ..	797	657	492	606	602	586	685
" 1918 ..	832	699	526	656	619	614	722
" 1919 ..	866	744	604	707	650	746	768
" 1920 ..	980	807	634	783	718	904	851
FOOD, GROCERIES AND HOUSING.							
Nov. 1914 ..	680	613	560	658	689	630	644
" 1915 ..	825	756	722	758	734	756	777
" 1916 ..	818	732	648	742	761	724	760
" 1917 ..	848	748	707	734	748	820	782
" 1918 ..	861	792	756	789	746	810	812
" 1919 ..	1,000	893	904	904	867	936	934
" 1920 ..	1,138	1,074	945	1,068	973	1,155	1,082.
CLOTHING.							
Nov. 1914 ..	755	780	657	756	698	825	754
" 1915 ..	805	797	690	821	760	833	792
" 1916 ..	903	870	779	919	849	940	881
" 1917 ..	1,009	976	899	1,049	980	1,041	992
" 1918 ..	1,102	1,103	1,025	1,066	1,135	1,200	1,097
" 1919 ..	1,237	1,213	1,192	1,303	1,277	1,344	1,238
" 1920 ..	1,323	1,422	1,274	1,384	1,359	1,430	1,365
MISCELLANEOUS.							
Nov. 1914 ..	766	728	728	770	780	699	749
" 1915 ..	798	770	756	803	822	770	786
" 1916 ..	808	784	766	832	869	780	802
" 1917 ..	889	879	836	883	926	865	882
" 1918 ..	988	950	931	988	1,035	945	972
" 1919 ..	1,059	1,016	968	1,035	1,120	1,006	1,036
" 1920 ..	1,209	1,181	1,139	1,200	1,262	1,124	1,194
TOTAL HOUSEHOLD EXPENDITURE.							
Nov. 1914 ..	712	671	611	699	707	687	687
" 1915 ..	816	768	721	780	755	776	782
" 1916 ..	836	773	698	798	800	783	795
" 1917 ..	892	823	773	832	832	879	847
" 1918 ..	938	890	848	887	885	923	905
" 1919 ..	1,065	988	981	1,018	1,005	1,042	1,022
" 1920 ..	1,193	1,172	1,054	1,164	1,111	1,213	1,166

4. Relative Cost of Each Group of Items.—The following table shows for the towns covered by this Series of index-numbers the relative cost of each of the groups of household consumption :—

RETAIL PRICE INDEX-NUMBERS: ("C" SERIES). ALL ITEMS OF HOUSEHOLD CONSUMPTION. RELATIVE COST OF EACH GROUP OF ITEMS.

(Base : Weighted Average Cost of All Groups in each Town = 1,000.)

State and Town.	1938.					1939.				
	Food and Groceries.	Housing (4 & 5 Rooms).	Clothing.	Miscellaneous.	Total Household Expenditure.	Food and Groceries.	Housing (4 & 5 Rooms).	Clothing.	Miscellaneous.	Total Household Expenditure.
NEW SOUTH WALES—										
Sydney	356	254	201	189	1,000	360	255	199	186	1,000
Newcastle	380	227	203	190	1,000	386	228	201	185	1,000
Broken Hill	418	180	195	207	1,000	418	184	195	203	1,000
Goulburn	377	226	209	188	1,000	390	220	206	184	1,000
Bathurst	376	221	211	192	1,000	383	221	210	186	1,000
Weighted Average 5 Towns	359	251	200	190	1,000	363	252	198	187	1,000
VICTORIA—										
Melbourne	355	241	201	203	1,000	368	239	197	196	1,000
Ballarat	374	189	218	219	1,000	387	189	214	210	1,000
Bendigo	375	192	214	219	1,000	383	194	210	213	1,000
Geelong	362	223	207	208	1,000	375	222	204	199	1,000
Warrnambool ..	360	236	205	199	1,000	375	232	201	192	1,000
Weighted Average 5 Towns	357	237	202	204	1,000	368	236	199	197	1,000
QUEENSLAND—										
Brisbane	354	228	212	206	1,000	357	227	213	203	1,000
Toowoomba	340	227	216	217	1,000	345	228	215	212	1,000
Rockhampton ..	371	201	217	211	1,000	375	201	218	206	1,000
Townsville	372	220	203	205	1,000	377	217	205	201	1,000
Bundaberg	383	174	220	223	1,000	387	175	221	217	1,000
Weighted Average 5 Towns	357	224	212	207	1,000	361	222	213	204	1,000
SOUTH AUSTRALIA—										
Adelaide	349	226	212	213	1,000	357	226	208	209	1,000
Kadina, etc. ..	417	113	237	233	1,000	432	111	231	226	1,000
Port Pirie	389	183	215	213	1,000	401	183	210	206	1,000
Mount Gambier ..	372	187	219	222	1,000	387	182	215	216	1,000
Peterborough ..	373	197	215	215	1,000	394	194	207	205	1,000
Weighted Average 5 Towns	353	220	213	214	1,000	361	221	208	210	1,000
WESTERN AUSTRALIA—										
Perth, etc. ..	367	229	205	199	1,000	375	225	203	197	1,000
Kalgoorlie, etc. ..	361	291	177	171	1,000	369	286	176	169	1,000
Northam	374	226	204	196	1,000	383	224	202	191	1,000
Bunbury	362	251	203	184	1,000	372	248	200	180	1,000
Geraldton	348	255	193	204	1,000	353	255	194	198	1,000
Weighted Average 5 Towns	366	235	203	196	1,000	374	233	200	193	1,000
TASMANIA—										
Hobart	357	238	210	195	1,000	366	235	207	192	1,000
Launceston	367	222	211	200	1,000	370	222	211	197	1,000
Burnie	382	222	212	184	1,000	386	219	210	185	1,000
Devonport	385	206	219	190	1,000	390	205	216	189	1,000
Queenstown	402	208	212	178	1,000	406	206	207	181	1,000
Weighted Average 5 Towns	364	230	210	196	1,000	371	228	208	193	1,000
Weighted Average for 30 Towns	358	239	204	199	1,000	365	239	202	194	1,000
Weighted Average 6 Capital Cities	356	243	203	198	1,000	363	242	201	194	1,000
Charters Towers (Q.) ..	395	136	222	247	1,000	395	152	215	238	1,000
Warwick (Q.)	367	176	226	231	1,000	371	185	220	224	1,000
Port Augusta (S.A.) ..	397	173	217	213	1,000	405	175	212	208	1,000

5. Retail Price Index-Numbers in Terms of Currency : Capital Cities, 1914 to 1940.— In each part of the following table the average cost of the particular regimen in the six capital cities during the five-yearly period 1923-27 has been equated to a base of 20s. od. The figures measure the variations in the prices of (i) food and groceries, (ii) housing (4 and 5 rooms), (iii) food, groceries and housing, combined, (iv) clothing, (v) miscellaneous household requirements and (vi) all items of household consumption combined.

RETAIL PRICE INDEX-NUMBERS IN TERMS OF CURRENCY : CAPITAL CITIES ("C" SERIES).

(Base of each Group : Weighted Average of Six Capital Cities, 1923-27 = 20s. od.)

Period.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 6 Capital Cities.
FOOD AND GROCERIES.							
1914	s. d. 22 11	s. d. 12 2	s. d. 12 1	s. d. 13 7	s. d. 14 7	s. d. 13 7	s. d. 12 10
1921	21 3	21 3	20 3	21 4	22 4	22 8	21 3
1935	16 10	15 8	15 3	15 7	16 5	15 10	16 1
1936	17 0	16 2	15 10	16 0	17 1	16 6	16 6
1937	17 4	16 9	16 7	16 6	17 7	17 5	17 0
1938	18 1	17 8	16 9	17 3	18 0	17 7	17 9
1939	18 9	18 10	17 3	17 11	18 9	18 6	18 6
1939 { March Qtr.	18 11	19 0	17 8	18 2	18 7	18 3	18 8
June ..	18 7	18 10	17 2	18 1	19 0	18 5	18 6
Sept. ..	18 7	18 8	17 1	17 9	18 11	18 4	18 5
Dec. ..	18 10	18 10	17 2	17 9	18 6	18 10	18 6
1940 { March ..	18 8	18 5	17 6	17 7	18 5	18 4	18 4
June ..	19 2	19 1	17 8	18 3	19 1	18 8	18 11

HOUSING (4 AND 5 ROOMS).							
1914	15 2	12 7	9 4	13 1	11 9	10 4	13 3
1921	19 9	16 5	12 7	16 2	14 9	17 7	17 3
1935	17 10	17 0	14 5	14 9	15 10	17 10	16 9
1936	18 7	17 8	15 4	15 11	16 11	18 2	17 7
1937	19 4	18 2	16 5	16 8	17 3	18 0	18 3
1938	20 1	18 8	16 10	17 4	17 5	18 3	18 10
1939	20 8	19 1	17 1	17 9	17 7	18 6	19 4
1939 { March Qtr.	20 6	19 0	17 0	17 8	17 7	18 5	19 2
June ..	20 8	19 1	17 1	17 9	17 7	18 6	19 3
Sept. ..	20 9	19 2	17 1	17 10	17 7	18 6	19 4
Dec. ..	20 10	19 2	17 1	17 10	17 8	18 7	19 5
1940 { March ..	20 10	19 3	17 1	17 10	17 8	18 8	19 5
June ..	20 16	19 4	17 2	17 10	17 8	18 8	19 5

FOOD, GROCERIES AND HOUSING (4 AND 5 ROOMS).

1914	13 9	12 4	11 2	13 5	13 7	12 5	13 0
1921	20 9	19 5	17 6	19 6	19 8	20 11	19 10
1935	17 2	16 2	14 11	15 3	16 2	16 7	16 4
1936	17 7	16 8	15 7	15 11	17 0	17 1	16 11
1937	18 1	17 3	15 6	16 6	17 5	17 7	17 5
1938	18 10	18 0	16 9	17 3	17 9	17 10	18 1
1939	19 5	18 11	17 2	17 10	18 3	18 5	18 9
1939 { March Qtr.	19 6	19 0	17 5	17 11	18 2	18 3	18 10
June ..	19 4	18 11	17 1	17 11	18 5	18 5	18 9
Sept. ..	19 5	18 10	17 1	17 9	18 4	18 4	18 9
Dec. ..	19 6	18 11	17 1	17 9	18 2	18 8	18 10
1940 { March ..	19 6	18 9	17 4	17 8	18 1	18 5	18 9
June ..	19 9	19 2	17 5	18 1	18 6	18 8	19 1

RETAIL PRICE INDEX—NUMBERS IN TERMS OF CURRENCY: CAPITAL CITIES ("C" SERIES)—continued.
(Base of each Group: Weighted Average of Six Capital Cities, 1923-27 = 20s. od.)

Period.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Weighted Average of 6 Capital Cities.
CLOTHING.							
1914	15 1	15 7	13 2	15 1	14 0	16 6	15 1
1921	25 1	25 5	22 6	23 11	24 8	28 7	24 11
1935	14 11	15 11	15 5	17 1	16 6	18 1	15 8
1936	15 7	15 10	15 7	16 8	16 4	17 2	15 10
1937	16 4	16 1	15 11	16 5	16 1	16 5	16 3
1938	16 8	16 5	16 6	17 2	16 6	17 0	16 7
1939	16 10	16 8	16 10	17 3	16 8	17 1	16 10
1939 { March Qtr. ..	16 8	16 5	16 7	17 2	16 6	17 0	16 8
{ June	16 10	16 5	16 8	17 3	16 6	17 1	16 9
{ Sept.	16 10	16 6	16 8	17 3	16 9	17 0	16 9
{ Dec.	17 1	17 3	17 4	17 5	16 10	17 4	17 2
1940 { March	17 8	17 11	17 11	17 11	17 1	17 9	17 9
{ June	18 6	19 2	18 7	18 8	18 3	18 10	18 9

MISCELLANEOUS.

1914	15 4	14 7	14 7	15 5	15 7	14 0	15 0
1921	20 2	20 5	18 11	20 8	20 7	18 8	20 2
1935	19 6	18 5	18 1	19 6	18 7	17 1	18 11
1936	19 0	18 11	18 4	19 10	18 8	17 8	18 11
1937	18 0	19 7	18 10	20 5	18 11	18 0	19 2
1938	18 9	19 8	18 11	20 6	19 0	18 8	19 3
1939	18 10	19 6	19 1	20 5	19 1	18 9	19 3
1939 { March Qtr. ..	18 9	19 7	19 0	20 5	19 0	18 7	19 2
{ June	18 9	19 6	19 1	20 5	19 0	18 9	19 3
{ Sept.	18 9	19 6	19 1	20 5	19 1	18 10	19 3
{ Dec.	18 10	19 8	19 2	20 6	19 2	18 11	19 4
1940 { March	19 0	19 9	19 4	20 9	19 4	19 2	19 6
{ June	19 8	20 1	19 7	21 0	19 9	19 5	19 11

ALL ITEMS OF HOUSEHOLD CONSUMPTION.

1914	14 3	13 5	12 3	14 0	14 2	13 9	13 9
1921	20 11	20 1	18 6	19 9	20 2	21 5	20 3
1935	17 1	16 6	15 7	16 5	16 8	17 0	16 8
1936	17 4	16 11	16 1	16 9	17 1	17 2	17 0
1937	17 9	17 4	16 9	17 2	17 5	17 6	17 6
1938	18 3	17 11	17 1	17 9	17 8	17 9	17 11
1939	18 9	18 6	17 5	18 1	18 0	18 2	18 5
1939 { March Qtr. ..	18 8	18 6	17 6	18 2	17 11	18 0	18 5
{ June	18 8	18 5	17 4	18 2	18 1	18 2	18 4
{ Sept.	18 8	18 4	17 4	18 1	18 1	18 1	18 4
{ Dec.	18 10	18 8	17 6	18 1	18 0	18 5	18 6
1940 { March	18 11	18 8	17 9	18 3	18 0	18 4	18 7
{ June	19 5	19 3	18 0	18 8	18 8	18 0	19 1

§ 5. Retail Price Index-Numbers, 200 Towns.

1. **General.**—To supplement the information collected monthly for the 30 towns specified in the preceding sections a special investigation into prices in 70 additional towns was undertaken in November, 1913. This investigation was repeated in November, 1914, and again in November, 1915, when the number of additional towns was increased to 120. In November, 1923, the number was further increased to 170. Information in regard to prices obtained in November each year relates at present, therefore, to 200 towns. The results of the first investigation were published in *Labour Bulletin* No. 5 (pp. 26-33), and details respecting succeeding investigations are incorporated in the *Labour Bulletins* and *Reports* issued subsequently by this Bureau.

In issues of the *Official Year Book* prior to No. 31, 1938, information is given regarding movements in the rents of 4-roomed and 5-roomed houses. While the index-numbers were useful in a general way as a measure of changes in rents in any one town from time to time, there has been an increasing tendency to regard them as an adequate measure of the relative absolute levels of rents in different towns at any given date. In order to prevent such a misuse of the figures, and because of increasing doubts as to the ability of the Bureau, except at prohibitive cost, to ensure that returns of rents from all these towns shall be based on continuously representative samples, it has reluctantly been decided to limit the information collected to the prices of food and groceries. Should any industrial tribunal desire further information on house rentals in any of these towns, the Bureau will be prepared to consider requests for special investigations by its staff of field officers.

2. **Retail Price Index-Numbers : 200 Towns, 1935 to 1939.** In the following table the base of the index-numbers has been changed from that used in issues of the *Official Year Book* prior to No. 31 of 1938. The new base is the weighted average cost of food and groceries in the six capital cities in the period 1923-27.

RETAIL PRICE INDEX-NUMBERS—(200 TOWNS SERIES) : FOOD AND GROCERIES.

(Base : Weighted Average in Six Capital Cities, 1923-27 = 1,000.)

State and Town.	1935. November.	1936. November.	1937. November.	1938. November.	1939. November.
NEW SOUTH WALES—					
Albury	803	857	864	930	999
Armidale	821	811	853	890	938
Ballina	812	853	852	930	978
Bathurst(a)	842	838	861	914	947
Bega	851	863	875	937	984
Berry	874	873	880	956	964
Blackheath	882	920	927	977	991
Bourke	873	901	913	1,002	1,017
Bowral	848	861	887	954	976
Broken Hill(a)	929	977	1,036	1,128	1,079
Casino	855	900	900	979	974
Cessnock	846	849	858	924	957
Cobar	1,012	1,031	1,038	1,109	1,057
Cooma	895	879	883	990	1,008
Coonamble	918	961	921	990	960

(a) Information also available monthly for these towns.

INDEX-NUMBERS—200 TOWNS SERIES: FOOD AND GROCERIES—*continued.*

State and Town.	1935. November.	1936. November.	1937. November.	1938. November.	1939. November.
NEW SOUTH WALES—<i>continued.</i>					
Cootamundra	824	849	829	944	939
Corrimal	834	876	884	920	961
Cowra	844	860	873	953	963
Cronulla	859	876	886	901	967
Deniliquin	883	907	967	995	994
Dubbo	842	848	863	892	929
Forbes	883	862	863	918	924
Gilgandra	873	864	881	938	945
Glen Innes	807	814	819	873	886
Goulburn(a)	846	855	888	952	996
Grafton	824	854	888	913	931
Grenfell	830	837	841	923	945
Griffith	913	940	936	983	978
Gulgong	821	855	839	883	985
Gunnedah	829	842	833	870	912
Hay	903	931	906	1,010	982
Inverell	848	802	831	878	908
Junee	828	876	914	922	993
Katoomba	867	885	915	970	983
Kempsey	803	811	836	889	953
Kiama	887	904	911	965	1,005
Kurri Kurri	808	839	838	919	945
Lecton	886	894	926	978	1,024
Lismore	834	886	918	994	990
Lithgow(a)	859	809	873	961	947
Maitland	833	832	835	906	930
Moree	886	904	894	956	997
Moss Vale	844	849	895	922	947
Mudgee	819	840	860	922	995
Narrabri	877	894	901	954	1,011
Narrandera	864	898	896	977	982
Newcastle(a)	880	869	882	940	969
Nowra	901	899	887	983	959
Orange	817	812	815	918	950
Parkes	843	859	903	964	961
Penrith	806	818	825	868	914
Port Kembla	866	908	905	963	996
Portland	862	857	877	903	941
Queanbeyan	884	905	953	1,000	1,022
Quirindi	864	866	890	909	957
Richmond	826	816	827	826	876
Scone	836	861	871	893	979
Singleton	826	813	830	900	917
Sydney(a)	851	863	877	909	943
Tamworth	806	806	829	895	923

(a) Information also available monthly for these towns.

INDEX-NUMBERS—200 TOWNS SERIES: FOOD AND GROCERIES—*continued.*

State and Town.	1935. November.	1936. November.	1937. November.	1938. November.	1939. November.
NEW SOUTH WALES—<i>con-</i>					
<i>tinued.</i>					
Taree	848	864	889	922	978
Temora	804	823	862	961	1,024
Tenterfield	831	865	864	936	919
Tumut	832	837	842	947	967
Ullmarra	852	892	885	969	921
Wagga Wagga	835	850	884	935	964
Walcha	927	845	866	910	927
Wellington	818	828	829	851	900
Weston	818	835	841	913	962
Windsor	850	851	864	892	881
Wollongong	829	853	878	955	978
Wyalong	862	870	895	966	998
Yaas	850	837	887	978	956
Young	855	843	867	948	947
Weighted Average for State (74 Towns)	852	863	878	919	950
VICTORIA—					
Ararat	855	918	910	942	985
Bacchus Marsh	820	860	887	920	968
Bairnsdale	862	880	879	912	991
Ballarat(a)	818	872	860	886	963
Beechworth	828	885	890	969	970
Benalla	850	880	905	945	1,003
Bendigo(a)	812	856	853	904	952
Camperdown	849	863	868	932	996
Casterton	845	888	873	957	1,005
Castlemaine	828	845	848	884	949
Colac	817	842	850	907	972
Creswick	838	859	863	882	938
Daylesford	813	843	865	922	951
Dunolly	835	889	872	909	948
Echuca	824	846	857	921	993
Euroa	845	875	878	975	996
Geelong(a)	796	833	857	914	973
Hamilton	855	911	885	958	1,009
Healesville	831	892	917	947	995
Horsham	873	926	916	928	1,038
Kerang	869	895	927	941	998
Koroit	828	836	840	896	964
Korumburra	783	835	859	895	994
Kyneton	785	851	870	921	971
Lilydale	845	884	881	915	999

(a) Information also available monthly for these towns

INDEX-NUMBERS—200 TOWNS SERIES: FOOD AND GROCERIES—*continued.*

State and Town.	1935. November.	1936. November.	1937. November.	1938. November.	1939. November.
VICTORIA—<i>continued.</i>					
Malfra	825	901	865	925	1,008
Maldon	848	876	888	953	1,009
Maryborough	811	888	891	978	990
Melbourne(a)	797	833	848	896	958
Mildura	903	938	977	992	991
Morwell	842	858	887	922	977
Nhill	913	956	933	967	961
Orbost	870	912	919	968	1,053
Portland	863	863	862	903	1,008
Port Fairy	820	862	840	911	998
St. Arnaud	875	930	930	997	1,040
Sale	827	895	890	958	1,004
Seymour	880	901	937	991	1,032
Shepparton	819	864	880	954	1,002
Stawell	911	949	934	1,007	1,034
Swan Hill	874	918	924	969	996
Terang	875	863	885	924	968
Traralgon	816	839	834	878	954
Wangaratta	827	880	879	955	1,016
Warracknabeal	828	858	881	936	992
Warragul	820	827	845	905	965
Warrnambool(a)	785	844	834	910	974
Wonthaggi	804	895	913	946	983
Weighted Average for State (48 Towns)	803	841	854	902	963
QUEENSLAND—					
Ayr	825	841	867	913	940
Barcaldine	938	959	959	993	1,028
Bowen	885	902	902	961	995
Brisbane(a)	780	820	835	824	854
Bundaberg(a)	803	874	873	875	904
Cairns	887	915	914	949	977
Charleville	949	989	969	970	992
Charters Towers(a)	876	889	887	933	956
Chillagoe	900	915	946	944	1,007
Cloncurry	1,030	1,026	1,031	1,050	1,069
Cooktown	963	986	989	1,003	1,057
Cunnamulla	927	938	921	951	970
Dalby	807	870	836	835	896
Gayndah	851	907	867	895	926
Gladstone	827	871	870	903	920
Goondiwindi	889	914	868	893	916
Gympie	857	849	840	859	901
Hughenden	919	931	925	989	1,032
Innisfail	943	974	995	978	984
Ipswich	785	820	825	824	857

(a) Information also available monthly for these towns.

INDEX-NUMBERS—200 TOWNS SERIES: FOOD AND GROCERIES—*continued.*

State and Town.	1935. November.	1936. November.	1937. November.	1938. November.	1939. November.
QUEENSLAND—<i>continued.</i>					
Longreach	978	990	993	1,009	1,040
Mackay	872	898	895	916	952
Maryborough	794	828	835	849	887
Mount Morgan	855	891	880	902	911
Nambour	834	844	863	883	892
Rockhampton(a)	839	864	877	863	885
Roma	877	885	870	921	952
Stanthorpe	803	817	830	808	911
Toowoomba(a)	751	800	789	781	815
Townsville(a)	887	904	921	933	948
Warwick(a)	792	820	795	822	858
Winton	931	951	903	1,021	1,021
Weighted Average for State (32 Towns)	806	841	850	849	879
SOUTH AUSTRALIA—					
Adelaide(a)	784	804	833	860	883
Burra (Kooringa)	868	879	899	911	949
Freeling	804	823	845	856	883
Gawler	772	814	827	840	872
Kadina, Moonta, Wallaroo	868	890	897	915	981
Kapunda	793	812	836	848	892
Millicent	805	820	918	875	951
Mount Gambier(a)	802	815	847	907	976
Murray Bridge	763	776	810	839	877
Peterborough(a)	816	851	884	910	984
Port Augusta(a)	892	926	945	949	996
Port Pirie(a)	811	896	915	950	986
Quorn	848	841	853	881	943
Renmark	920	919	906	931	988
Victor Harbour	815	839	852	857	900
Weighted Average for State (15 Towns)	791	813	841	867	895
WESTERN AUSTRALIA—					
Albany	884	896	892	911	947
Beverley	890	918	903	956	972
Bridgetown	930	955	973	971	1,002
Broome	1,142	1,180	1,181	1,184	1,211
Bunbury(a)	845	873	896	931	961
Carnarvon	1,032	1,082	1,127	1,128	1,143
Collie	855	901	874	894	945
Geraldton(a)	840	960	924	901	926
Greenbushes	946	960	937	965	984
Kalgoorlie and Boulder(a)	981	1,006	1,002	1,056	1,076

(a) Information also available monthly for these towns

INDEX-NUMBERS—200 TOWNS SERIES: FOOD AND GROCERIES—*continued.*

State and Town.	1935. November.	1936. November.	1937. November.	1938. November.	1939. November.
WESTERN AUSTRALIA—<i>con- tinued.</i>					
Katanning	829	884	872	904	930
Leonora and Gwalia	1,094	1,140	1,168	1,172	1,193
Meekatharra	1,088	1,143	1,164	1,124	1,153
Narrogin	863	910	884	918	968
Northam(a)	850	910	905	931	954
Perth and Fremantle(a)..	813	863	866	888	919
Wagin	856	924	870	908	959
York	859	848	867	922	946
Weighted Average for State (18 Towns)	835	882	884	907	937
TASMANIA—					
Beaconsfield	818	841	830	912	879
Burnie(a)	837	883	906	923	961
Campbelltown	860	878	872	904	914
Deloraine	787	795	824	854	852
Devonport(a)	824	873	895	936	938
Franklin	896	868	905	911	969
Hobart(a)	797	874	889	891	944
Lyunceston(a)	793	844	870	908	921
New Norfolk	830	909	891	892	950
Queenstown(a).. ..	900	920	922	1,000	1,018
Scottsdale	780	814	829	853	901
Ulverstone	812	888	867	889	925
Zeehan(a)	943	981	983	1,001	1,026
Weighted Average for State (13 Towns)	805	867	884	903	938
Australian Capital Territory					
Canberra(a) (b).. ..	931	949	965	1,026	1,040
Weighted Averages—					
Australia (200 Towns) ..	825	851	865	906	939
Thirty Towns	820	847	862	895	935
Six Capitals	817	843	859	890	932

(a) Information also available monthly for these towns.

(b) Not in Weighted Averages.

§ 6. Changes in the Regimen.

Since the original compilation of retail price indexes by the Bureau, the regimens of the several groups and sections have undergone some modifications. These are briefly referred to in the following paragraphs.

(i) *Food and Groceries.*—The regimen for food and groceries was originally introduced in 1912, and the first revision was made in the September quarter of 1932. A second revision took place in the September quarter of 1936, as part of the general revision of the regimen by the Conference of Statisticians of April, 1936. The main features of this revision are referred to in (iv) below.

(ii) *Housing.* The housing constituent of the regimen has also been revised. Originally the rentals of all houses from "3 rooms and under" to "8 rooms and over" were tabulated, and they were continuously used in the "A" series index from 1912 to 30th June, 1938, when this series was discontinued. They were also used in the "All Items" index up to and including the year 1924. From the following year rentals of 4 and 5-roomed houses only were used in the "C" series index, and in the same year they were combined with food and groceries to form the "B" series index.

Since the December quarter of 1936, following on the resolutions of the 1936 Conference of Statisticians, the rentals of 4 and 5-roomed houses in certain towns have been collected and tabulated on a somewhat different basis from that previously used. The returns in the twelve more important cities and towns show the rents of individual houses, on the basis of which variations from a pre-determined standard are measured. This standard, the change in which has affected the index-numbers only in respect of the relative levels of rents in the different towns, and in respect of their absolute height, was determined by means of a special investigation of the 1933 Census data relating to rentals of 4 and 5-roomed wood and brick houses occupied by fully-employed wage and salary earners. This method not being generally applicable to the circumstances of small country towns, on account of the greater diversity of average "quality" of houses, the level of rents in these towns has been determined from a sample of houses selected by house-agents in accordance with definite standards laid down. The variations in rentals from this standard are measured in the same manner as described above for the twelve more important cities and towns.

(iii) *Clothing and Miscellaneous.* The regimen for clothing and miscellaneous household requirements was originally introduced in 1921, and the first revision was made in the March quarter of 1935. A second revision took place in the September quarter of 1936, as part of the general revision of the regimen by the Conference of Statisticians of April, 1936. Some minor alterations have since been made in the regimen.

(iv) *Revision of the Regimen by the Conference of Statisticians of April, 1936.* This revision was of a comprehensive nature. Conference not only recommended extensive revisions of the regimen from which the indexes are compiled, but also considered methods of collection and compilation. As a result of its deliberations, and subsequent discussions by correspondence, many improvements and refinements were introduced.

The changes in the regimen were made with a view to improving the index-numbers as measures of price variations. They comprised chiefly the elimination or replacement of articles no longer in demand, or which experience had shown to be unsuitable media for the measurement of price variations; the alteration of units of quantity in certain cases to conform with those in most general use; the adjustment of the mass unit allotted to certain articles to bring them into accord with present-day consumption habits; and the re-adjustment of the population weights applicable to the several groups and sections of the regimen in accordance with the results of the 1933 Census. Definite grades or qualities were also established for each article in the regimen, to ensure that quotations should be given, as far as possible, for the same article at all times and in all places. Improved methods of collecting and weighting average house rentals were also adopted (see (ii) above). The resolutions of the Conference were reprinted in Appendix XI. of *Labour Report* No. 27.

B.—WHOLESALE PRICES AND PRICE INDEXES.

§ 1. Melbourne Wholesale Price Index.

1. General. The data on which this section is based relate almost entirely to wholesale prices in Melbourne. An index of Sydney wholesale prices is compiled by the Government Statistician of New South Wales, and published in the *Year Book* and the *Monthly Summary of Business Statistics* of that State.

The index of Melbourne wholesale prices was first computed in 1912, and has been continued on the same lines since that year. The items included in the Melbourne wholesale price index comprise chiefly basic materials which in the form of raw material,

food, or as a source of power, enter into production for home consumption. The purpose of the index, therefore, is to measure the changes in the prices of these particular materials rather than the changes in prices generally. As Australia does not, to any extent, manufacture from imported raw materials commodities for export, the local consumption appears to give the most appropriate weighting. Any lack of uniformity in the variations of the index-numbers for these wholesale prices and for retail prices would indicate broadly changes in the relation of manufacturing and distributing charges to the cost of basic materials.

2. Index-Numbers. Index-numbers for each group of commodities and for all groups together are shown in the following table:—

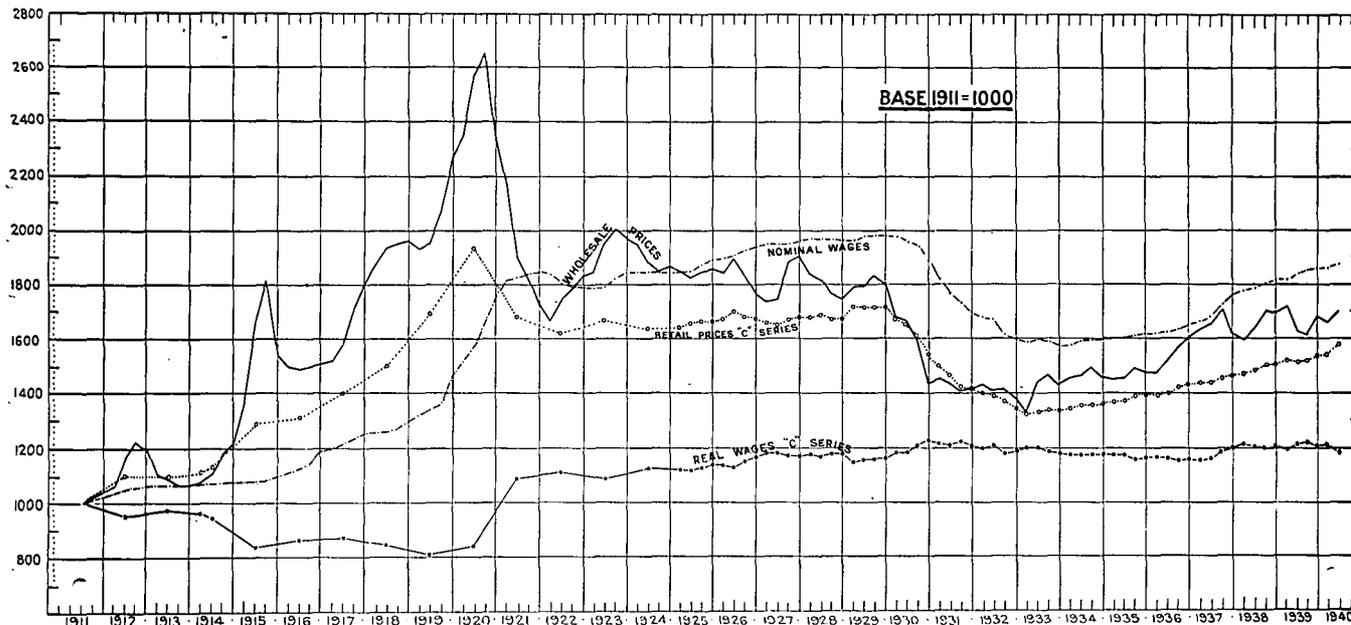
INDEX-NUMBERS: MELBOURNE WHOLESALE PRICES, 1861 TO 1940.

(Base of each Group : Year 1911 = 1,000.)

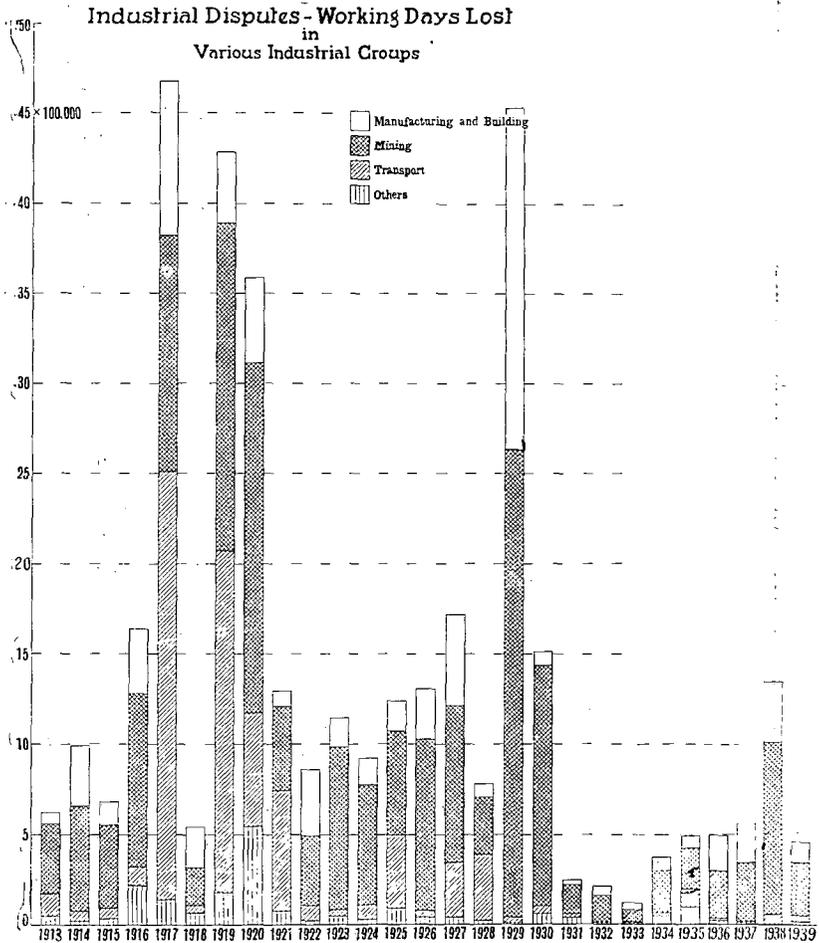
Year.	I. Metals and Coal.	II. Wool, Cotton, Leather, etc.	III. Agri- cultural Produce, etc.	IV. Dairy Produce.	V. Gro- ceries.	VI. Meat.	VII. Building Materials.	VIII. Chemicals.	All Groups.	
1861	..	1,438	1,381	1,583	1,008	1,063	..	1,070	2,030	1,538
1871	..	1,096	1,257	1,236	864	1,586	..	1,044	1,409	1,229
1881	..	1,178	1,115	1,012	935	1,421	..	1,091	1,587	1,221
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
1902	..	1,007	756	1,192	1,215	945	1,447	837	881	1,051
1903	..	923	834	1,209	1,059	936	1,443	875	921	1,049
1904	..	821	885	754	876	916	1,427	845	875	890
1905	..	772	850	894	980	942	1,209	801	859	910
1906	..	882	978	916	972	923	1,110	896	864	948
1907	..	1,037	1,017	973	1,020	948	1,294	968	961	1,021
1908	..	1,033	901	1,312	1,198	968	1,335	935	891	1,115
1909	..	1,014	907	1,000	1,119	978	1,088	911	815	993
1910	..	1,004	1,052	969	1,100	999	1,008	996	898	1,003
1911	..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1912	..	1,021	991	1,370	1,206	1,052	1,357	1,057	978	1,170
1913	..	1,046	1,070	1,097	1,054	1,024	1,252	1,128	995	1,088
1914	..	1,099	1,032	1,207	1,137	1,021	1,507	1,081	1,253	1,149
1915	..	1,284	1,017	2,162	1,530	1,133	2,435	1,275	1,528	1,604
1916	..	1,695	1,423	1,208	1,485	1,322	2,515	1,491	1,760	1,504
1917	..	2,129	2,008	1,157	1,423	1,343	2,403	1,884	2,171	1,662
1918	..	2,416	2,360	1,444	1,454	1,422	2,385	2,686	3,225	1,934
1919	..	2,125	2,363	1,985	1,651	1,516	2,348	2,851	2,898	2,055
1920	..	2,298	2,624	2,439	2,209	1,918	3,279	3,226	2,825	2,480
1921	..	2,173	1,362	1,767	2,000	1,976	2,158	2,733	2,393	1,903
1922	..	1,942	1,681	1,628	1,648	1,869	1,787	2,005	1,965	1,758
1923	..	1,826	2,148	1,778	1,837	1,746	2,579	2,025	1,933	1,944
1924	..	1,835	2,418	1,647	1,655	1,721	2,223	1,815	1,806	1,885
1925	..	1,852	1,967	1,797	1,636	1,723	2,212	1,711	1,790	1,844
1926	..	1,938	1,582	2,001	1,784	1,731	1,931	1,665	1,816	1,832
1927	..	1,962	1,650	1,826	1,823	1,724	2,111	1,624	1,866	1,817
1928	..	1,912	1,781	1,726	1,751	1,707	2,015	1,744	1,923	1,792
1929	..	1,912	1,556	1,792	1,853	1,690	2,246	1,754	1,942	1,803
1930	..	1,866	1,127	1,484	1,627	1,666	2,025	1,875	1,982	1,596
1931	..	1,826	1,039	1,121	1,399	1,794	1,508	2,025	2,166	1,428
1932	..	1,736	1,000	1,230	1,303	1,767	1,348	2,043	2,127	1,411
1933	..	1,713	1,118	1,175	1,195	1,714	1,487	2,061	2,106	1,409
1934	..	1,660	1,261	1,288	1,274	1,735	1,540	2,015	2,018	1,471
1935	..	1,602	1,217	1,344	1,325	1,729	1,508	1,964	1,996	1,469
1936	..	1,566	1,331	1,480	1,351	1,731	1,684	1,969	1,997	1,543
1937	..	1,772	1,406	1,604	1,451	1,750	1,678	2,430	2,006	1,656
1938	..	1,746	1,051	1,789	1,549	1,747	1,871	2,238	2,059	1,662
1939	..	1,758	1,101	1,820	1,557	1,752	1,710	2,220	2,075	1,665
1940	..	1,854	1,386	1,568	1,567	1,784	1,882	2,890	2,298	1,717

NOTE.—The figures given in this table are comparable in the vertical columns but are not directly comparable horizontally.

WHOLESALE AND RETAIL PRICES, NOMINAL AND EFFECTIVE OR REAL WAGE INDEX-NUMBERS.—AUSTRALIA, 1911 TO 1940.



EXPLANATION.—The index-numbers in the above graph are for the Six Capital Cities as a whole, with the exception of those for Wholesale Prices which are for Melbourne. They are all calculated to the common base 1911 = 1,000, the scale for which appears on the left of the graph. They are shown *quarterly* from 1912 in the case of the Wholesale Prices (Melbourne). The "C" Series Retail Prices (food, groceries, rent of 4 and 5 rooms, clothing and miscellaneous household expenditure) are shown *quarterly* from 1925. Nominal Wages are shown *quarterly* from 1914, and Real Wages *quarterly* from 1925 for the "C" Series.



EXPLANATION.—The scale refers to working days lost in hundred thousands. Thus, taking the year 1917, and comparing the shaded and blank sections with the scale, it will be observed that about 870,000 working days were lost in Manufacturing and Building, over 1,300,000 in Mining, over 2,300,000 in Transport, and about 150,000 in other industries.

§ 2. Basic Materials and Foodstuffs.

1. **General.**—As mentioned above, the Melbourne wholesale price index was first computed in 1912. Neither the component items nor the weighting have been varied. Consequently the index is a measure of changes in wholesale price levels based on usages which have altered substantially since the period on which the weighting was determined. As such it is useful as an indication of long-term trends over the past eighty years which it covers, on the assumption that the relative importance of component items remained constant. But it no longer serves as a measure of price variations from month to month or from year to year of commodities weighted in accordance with present day consumption. Reference to a description of the index published in the annual *Labour Report* will indicate that animal fodders preponderate in the "Agricultural Produce" group, while "Building Materials" include little besides imported timber. In other groups, some principal items have increased in consumption while others have decreased. It was resolved, therefore, at the Conference of Statisticians at Brisbane in 1930 that the time had come to revise and extend the items included in order to bring the index into line with changed conditions. An investigation to that end was commenced, and in the course of the past few years, many new price-series have been collected on a monthly basis back to January, 1928. Some of these have been incorporated in a new index of the prices of basic materials and foodstuffs, preliminary index-numbers of which are currently published in the *Monthly Review of Business Statistics*. Others are being incorporated in a number of "special-purpose" indexes, which it is hoped to publish in the future. Their construction has been delayed in order to make use, for weighting purposes, of the larger amount of information which is now becoming available as the result of the collection of more extensive statistics of factory production. The price quotations have in the main been obtained directly from manufacturers and dealers, and, with a few important exceptions, from Melbourne sources. Apart from home-produced building materials, coal and one or two minor commodities, however, the price movements may be taken as representative of fluctuations in wholesale prices of basic materials in most Australian markets. The weighting system adopted is based on average annual consumption during the years 1928-29 to 1934-35 inclusive. In the meantime, however, the original index has been continued on existing lines, as set out in § 1 of this chapter.

2. **Index-numbers.**—Index-numbers for each group of commodities and for all groups combined for this new index of wholesale prices of basic materials and foodstuffs are given in the following table.

INDEX-NUMBERS: BASIC MATERIALS AND FOODSTUFFS, 1928-29 TO 1940-41.

(Base: 1928-29 = 1,000.)

Period.	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides.	Building Materials.	Foodstuffs and Tobacco.	Goods principally Imported.	Goods principally Home Produced.	All Groups.
1928-29 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1932-33 ..	823	1,022	586	976	604	1,000	745	1,066	732	815
1933-34 ..	808	794	792	917	697	991	788	977	755	811
1934-35 ..	766	842	609	840	674	981	816	1,009	749	814
1935-36 ..	725	895	774	816	766	981	857	1,037	776	840
1936-37 ..	758	925	920	814	903	1,044	910	1,088	828	892
1937-38 ..	798	951	776	824	844	1,098	932	1,117	815	911
1938-39 ..	807	944	633	833	806	1,024	961	1,087	862	916
1939-40 ..	827	1,083	806	880	1,013	1,144	936	1,214	859	944

INDEX—NUMBERS: BASIC MATERIALS AND FOODSTUFFS, 1928-29 TO 1940-41—continued.

Period.	Metals and Coal.	Oils, Fats and Waxes.	Textiles.	Chemicals.	Rubber and Hides.	Building Materials.	Foodstuffs and Tobacco.	Goods principally Imported.	Goods principally Home Produced.	All Groups.
1937-38—										
July ..	787	954	982	815	1,015	1,148	964	1,154	872	944
August ..	788	955	984	815	1,045	1,115	975	1,152	882	949
September ..	808	954	901	821	1,005	1,154	990	1,138	894	957
October ..	700	955	811	821	965	1,119	969	1,120	875	936
November ..	795	953	768	821	848	1,099	993	1,116	824	895
December ..	792	952	785	823	866	1,082	876	1,111	805	879
January ..	801	952	719	822	816	1,085	888	1,110	813	885
February ..	800	951	696	831	744	1,077	896	1,104	817	886
March ..	801	949	676	831	734	1,071	913	1,100	828	894
April ..	801	947	662	831	714	1,071	933	1,099	841	903
May ..	799	946	663	831	691	1,059	952	1,092	854	911
June ..	797	944	635	831	684	1,061	986	1,094	875	928
1938-39—										
July ..	801	945	655	831	750	1,019	1,001	1,086	887	936
August ..	802	944	648	831	772	1,023	1,027	1,107	899	949
September ..	803	943	624	831	772	1,016	990	1,096	876	929
October ..	806	943	635	832	847	1,028	963	1,087	865	918
November ..	806	943	643	832	840	1,028	916	1,084	833	893
December ..	803	942	621	832	809	1,028	995	1,087	822	886
January ..	811	941	624	833	821	1,028	936	1,103	840	903
February ..	795	944	635	834	812	1,028	957	1,079	860	912
March ..	814	944	624	835	819	1,028	1,017	1,077	906	947
April ..	814	945	621	835	802	1,022	990	1,077	886	932
May ..	814	946	625	835	809	1,022	915	1,081	834	893
June ..	814	947	645	835	818	1,013	914	1,080	834	893
1939-40—										
July ..	815	946	663	835	805	1,013	904	1,077	828	888
August ..	816	944	659	835	825	1,013	894	1,077	821	882
September ..	816	948	787	835	931	1,098	907	1,125	833	902
October ..	816	993	850	835	986	1,099	934	1,157	852	925
November ..	829	1,039	855	835	1,046	1,134	924	1,195	849	931
December ..	829	1,087	842	839	1,085	1,140	920	1,231	844	937
January ..	829	1,096	844	922	1,082	1,139	927	1,234	854	946
February ..	830	1,097	816	923	1,098	1,200	935	1,249	861	955
March ..	833	1,140	834	923	1,089	1,201	951	1,266	875	969
April ..	849	1,152	843	924	1,063	1,203	971	1,275	891	985
May ..	835	1,274	843	924	1,084	1,201	987	1,329	902	1,006
June ..	835	1,279	838	924	1,062	1,287	974	1,352	894	1,006
1940-41—										
July ..	835	1,280	836	1,006	1,052	1,287	970	1,361	893	1,007
August ..	835	1,275	825	1,014	1,050	1,359	986	1,373	907	1,020
September ..	835	1,272	838	1,014	1,051	1,359	993	1,368	912	1,023
October ..	841	1,282	850	1,012	1,059	1,359	994	1,398	907	1,027
November ..	841	1,282	848	1,019	1,112	1,359	962	1,392	889	1,011
December ..	841	1,286	852	1,019	1,106	1,359	977	1,409	895	1,020

C.—WAGES.

§ 1. Operations under Wages Board and Industrial Arbitration Acts.

1. General.—Particulars regarding operations under the Commonwealth and State Acts for the regulation of wages, hours and conditions of labour were first compiled for the year 1913, and reviews to the end of each annual period appear in the *Labour Reports* and in the *Quarterly Summaries of Australian Statistics*.

2. Awards, Determinations, Industrial Agreements.—The following table gives a summary for each of the years 1935 to 1939:—

AWARDS AND DETERMINATIONS MADE AND INDUSTRIAL AGREEMENTS FILED.

State.	1935.		1936.		1937.		1938.		1939.	
	Awards or Determinations made.	Agreements Filed.								
New South Wales	44	31	52	39	63	42	64	38	64	17
Victoria	101	..	141	..	121	..	99	..	173	..
Queensland	46	22	61	..	37	46	38	38	50	25
South Australia	69	9	22	17	42	16	6	4	18	7
Western Australia	17	24	24	26	35	32	28	31	20	25
Tasmania	18	..	22	..	43	..	26	..	18	..
Commonwealth Court	69	13	32	13	38	11	31	13	31	21
Commonwealth Public Service Arbitrator	4	..	2	..	3	..	3	..	1	..
Total	368	99	356	132	391	143	295	124	375	95

3. Boards Authorized, Awards, etc., in Force.—(i) *Totals for Australia.* The following table gives particulars at the dates specified for all States of Boards authorized, and including operations under the Commonwealth and State Arbitration Acts, of the number of awards, determinations and industrial agreements in force:—

BOARDS AUTHORIZED, AWARDS, ETC. : AUSTRALIA.

Dates.	Boards Authorized.	Boards which have made Awards or Determinations.	Awards or Determinations In Force.(a)	Industrial Agreements In Force.
31st December, 1913	505	(b)386	(c)575	401
.. .. 1920	475	440	1,041	972
.. .. 1930	642	580	1,285	601
.. .. 1935	660	583	1,457	620
.. .. 1936	660	583	1,443	611
.. .. 1937	660	583	1,568	655
.. .. 1938	678	610	1,037	606
.. .. 1939	680	624	1,686	673

(a) Including awards made by Arbitration Courts and the Commonwealth Public Service Arbitrator.
 (b) Owing to the fact that a number of awards under the New South Wales Industrial Disputes Act (1908) were still in force, the Boards constituted for such industries under the Industrial Arbitration Act (1912) had not made any awards.
 (c) Excluding awards or determinations which expired in New South Wales (under the Act of 1908) on 31st December, 1913.

Considerable expansion of the principle of the fixation of a legal minimum rate of wage and of working conditions took place during the period under review. At the end of 1939, the number of awards or determinations and industrial agreements* in force had increased by 1,111 and 272 respectively over the number in force at 31st December, 1913.

* The registration of industrial agreements is not provided for under the Victorian and Tasmanian Acts, but such agreements may be registered and filed under the provisions of the Commonwealth Conciliation and Arbitration Act, and are operative within these States.

(ii) *Summary for States.* The following table gives particulars for each State and the Commonwealth of the number of Boards authorized, etc., for the years specified :—

BOARDS AUTHORIZED, AWARDS, ETC. : 1913 AND 1939.

Particulars.	At 31st Dec.	Commonwealth.		N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
		Court.	Pub. Ser. Arb.							
<i>Industrial and Wages—</i>										
Boards authorized ..	{ 1913 .. ..	..	..	216	135	75	56	..	23	505
	{ 1939 .. ..	..	..	(a) 323	192	..	76	29	60	680
Boards which have made Determinations ..	{ 1913 .. ..	..	..	123	123	74	47	..	19	386
	{ 1939 .. ..	..	..	(b) 280	189	..	66	29	60	624
<i>Awards and Determinations—</i>										
In force	{ 1913	17	..	265	127	73	54	18	21	575
	{ 1939	209	52	572	213	271	132	177	60	1,686
<i>Industrial Agreements—</i>										
In force	{ 1913	228	..	75	..	5	11	82	..	401
	{ 1939	113	..	158	..	159	51	192	..	673
<i>Commonwealth Court Awards—</i>										
In force in each State ..	{ 1913 .. ..	..	..	13	17	15	16	9	13	..
	{ 1939 .. ..	..	..	128	157	65	117	46	87	..
<i>Commonwealth Agreements—</i>										
In force in each State ..	{ 1913 .. ..	..	..	132	129	68	62	57	61	..
	{ 1939 .. ..	..	..	24	44	20	14	13	37	..
<i>Commonwealth Public Service Arbitrator—</i>										
Determinations in force in each State	{ 1939 .. ..	..	..	46	42	36	39	36	35	..

(a) Under Industrial Arbitration Act (1926), Conciliation Committees have been appointed, and, at the end of 1939, 324 Committees were in operation. (b) Includes fourteen Demarcation Boards.

(iii) *Australian Capital Territory.* A reference to the operations of the Industrial Board in the Australian Capital Territory, which was created and issued its first award in 1922, appears in *Labour Report* No. 30, Chapter II., § 1.

§ 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 therefore are 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 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 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 each year in the Appendix to the *Labour Report*.

2. Weekly Rates of Wage, 1935 to 1939.—(i) *General*. The arithmetical average of the rates of wage given in the Appendix referred to is taken for each industrial group. These averages are weighted in accordance with census results to give the average of all occupations 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 :—

WAGE RATES OF ADULT MALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations Included ..	874	909	627	567	489	482	3,948

RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1935 ..	84 2	79 9	88 5	77 11	86 7	81 0	83 0
" " 1936 ..	85 6	83 1	88 7	79 6	90 7	83 3	85 0
" " 1937 ..	92 1	88 1	92 8	85 10	93 1	87 0	90 4
" " 1938 ..	95 0	91 2	95 10	87 1	99 1	88 5	93 5
31st March, 1939 ..	95 0	91 4	95 10	87 4	99 6	88 7	93 7
30th June, 1939 ..	96 7	92 6	95 10	88 1	100 6	89 0	94 8
30th September, 1939 ..	95 10	93 8	97 4	89 2	100 4	89 3	95 0
31st December, 1939 ..	96 7	93 5	97 5	88 11	100 6	89 5	95 3

INDEX-NUMBERS.

(Base : Weighted Average Wage for Australia (51s. 3d.), 1911 = 1,000.)

31st December, 1935 ..	1,642	1,555	1,725	1,520	1,689	1,581	1,620
" " 1936 ..	1,668	1,621	1,729	1,552	1,768	1,625	1,659
" " 1937 ..	1,797	1,719	1,808	1,674	1,816	1,697	1,763
" " 1938 ..	1,854	1,780	1,870	1,700	1,933	1,725	1,823
31st March, 1939 ..	1,854	1,782	1,870	1,704	1,942	1,729	1,826
30th June, 1939 ..	1,885	1,805	1,870	1,719	1,962	1,737	1,847
30th September, 1939 ..	1,870	1,828	1,899	1,740	1,957	1,741	1,854
31st December, 1939 ..	1,885	1,823	1,900	1,735	1,962	1,745	1,858

Wages declined in all States during the three years 1931 to 1933, the average rates at 31st December of the latter year being approximately 17 per cent. less than those ruling at the end of 1930. Increases were granted in each of the States during the next six years and the weighted average nominal rate for Australia at 31st December, 1939, was 14s. 9d. per week more than in 1933 and only 1.6 per cent. below the average at 31st December, 1930. At the close of 1939, rates were highest in Western Australia, followed in the order named by Queensland, New South Wales, Victoria, Tasmania and South Australia. The highest weighted average rate for Australia was recorded at 30th September, 1929, namely, 101s. 5d. per week.

(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.

WAGE RATES OF ADULT MALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.

NOTE.—Index-numbers for each industrial group and for all industrial groups are based on the average wage for all groups in 1911 (51s. 3d.) = 1,000. The index-numbers in this table are comparable throughout :—

Industrial Group.	Weighted Average Nominal Weekly Rate of Wage and index-number at—							
	31st Dec., 1935.	31st Dec., 1936.	31st Dec., 1937.	31st Dec., 1938.	31st March, 1939.	30th June, 1939.	30th Sept., 1939.	31st Dec., 1939.
	<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. Wood, Furniture, etc.	Wage .. 86/8	88/3	95/1	98/2	98/2	99/8	99/10	100/1
	Index-No. 1,691	1,722	1,855	1,916	1,916	1,944	1,947	1,953
II. Engineering, etc.	Wage .. 85/3	86/10	94/11	97/8	97/9	99/3	99/2	99/3
	Index-No. 1,663	1,694	1,852	1,906	1,907	1,930	1,935	1,936
III. Food, Drink, etc.	Wage .. 85/3	87/3	92/6	95/2	95/3	96/1	96/7	96/9
	Index-No. 1,664	1,702	1,805	1,857	1,858	1,876	1,885	1,888
IV. Clothing, Boots, etc.	Wage .. 80/9	81/4	89/0	91/9	91/9	92/8	92/7	93/2
	Index-No. 1,576	1,587	1,737	1,790	1,790	1,809	1,806	1,817
V. Books, Printing, etc.	Wage .. 100/11	104/4	108/7	112/0	112/0	113/3	114/0	114/3
	Index-No. 1,969	2,035	2,110	2,185	2,185	2,209	2,225	2,229
VI. Other Manufacturing	Wage .. 83/0	85/2	91/3	94/4	94/5	95/6	95/6	95/8
	Index-No. 1,619	1,661	1,780	1,840	1,843	1,864	1,864	1,867
VII. Building	Wage .. 94/1	95/7	101/7	104/6	104/9	105/7	105/11	106/5
	Index-No. 1,836	1,866	1,982	2,039	2,043	2,060	2,068	2,076
VIII. Mining, etc.	Wage .. 97/10	99/2	103/0	108/2	109/4	109/10	109/4	109/10
	Index-No. 1,908	1,935	2,010	2,111	2,133	2,144	2,132	2,142
IX. Railways, etc.	Wage .. 84/9	86/0	92/4	95/5	95/5	96/4	96/7	96/7
	Index-No. 1,653	1,677	1,802	1,862	1,862	1,879	1,884	1,884
X. Other Land Transport	Wage .. 80/1	81/8	88/3	91/7	91/7	92/10	92/10	92/10
	Index-No. 1,562	1,593	1,722	1,787	1,787	1,812	1,811	1,812
XI. Shipping, etc.(a)	Wage .. 85/2	86/8	95/6	97/6	97/6	98/6	98/5	98/6
	Index-No. 1,661	1,690	1,863	1,902	1,902	1,921	1,921	1,922
XII. Agricultural, etc.(b)	Wage .. 73/4	75/9	78/9	82/3	82/4	83/5	83/10	84/0
	Index-No. 1,431	1,478	1,537	1,604	1,606	1,628	1,636	1,639
XIII. Domestic, etc.(b)	Wage .. 76/8	79/1	85/3	88/3	88/3	89/4	89/8	89/11
	Index-No. 1,496	1,543	1,663	1,722	1,722	1,743	1,750	1,755
XIV. Miscellaneous	Wage .. 79/6	82/2	87/6	90/5	90/5	91/7	92/7	92/10
	Index-No. 1,552	1,603	1,707	1,764	1,764	1,788	1,807	1,811
All Industrial Groups	Wage .. 82/10	84/10	90/2	93/5	93/7	94/8	95/0	95/3
	Index-No. 1,617	1,656	1,760	1,823	1,826	1,847	1,854	1,858

(a) Including the value of victualling and accommodation where supplied. (b) Including the value of board and lodging where supplied.

The foregoing table shows that the highest average weekly wage at 31st December, 1939, was recorded in Group V. (Books, Printing, etc.), 114s. 3d. per week, followed by Groups VIII. (Mining, etc.), 109s. 10d., VII. (Building), 106s. 5d., I. (Wood, Furniture, etc.), 100s. 1d., II. (Engineering, etc.), 99s. 3d., XI. (Shipping, etc.), 98s. 6d., III. (Food, Drink, etc.), 96s. 9d., and IX. (Railways, etc.), 96s. 7d. The lowest average rate was recorded in Group XII. (Agricultural, etc.), 84s. 0d. During the year rates of wage increased in all groups, the greatest increases occurring in the following.—Miscellaneous, 2s. 5d. per week; Books, Printing, etc., 2s. 3d.; Wood, Furniture, etc., and Building, each 1s. 11d.; Agricultural, etc., 1s. 9d.; Mining, etc., and Domestic, etc., each 1s. 8d.; Engineering, etc. and Food, etc., each 1s. 7d.; Clothing, etc., 1s. 5d.; Other Manufacturing, 1s. 4d.; Other Land Transport, 1s. 3d.; Railways, etc., 1s. 2d.; and Shipping, etc., 1s. 0d. The increase during the year in the weighted average rate for all groups was 1s. 10d. per week. Compared with the average rates at 31st December, 1929 (101s. 2d.), the highest point recorded for that date in any year, wages at the end of 1939 showed a decrease of 5s. 11d. per week.

(iv) *Adult Females—States.* The following table shows the weighted average nominal weekly rates of wage payable to adult female workers for a full week's work in each State and Australia at the dates specified.

WAGE RATES OF ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
No. of Occupations Included ..	85	87	37	47	24	28	308

RATES OF WAGE.

	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
31st December, 1935 ..	44 11	44 2	48 0	42 5	49 1	44 10	45 0
" " 1936 ..	45 7	46 10	48 4	43 4	50 11	45 1	46 5
" " 1937 ..	50 2	49 2	51 4	46 10	51 0	48 6	49 8
" " 1938 ..	51 10	50 7	53 6	47 9	54 4	49 8	51 3
31st March, 1939 ..	52 4	50 7	53 6	48 8	54 4	49 10	51 6
30th June, 1939 ..	53 1	51 6	53 9	48 11	54 11	50 2	52 3
30th September, 1939 ..	52 8	51 9	54 9	49 2	55 8	50 2	52 4
31st December, 1939 ..	53 3	51 9	55 2	49 7	55 8	50 8	52 8

INDEX-NUMBERS.

(Base : Weighted Average for Australia (27s. 2d.), 30th April, 1914 = 1,000.)

31st December, 1935 ..	1,654	1,626	1,767	1,561	1,808	1,651	1,655
" " 1936 ..	1,677	1,722	1,780	1,594	1,873	1,661	1,708
" " 1937 ..	1,848	1,810	1,889	1,724	1,877	1,785	1,828
" " 1938 ..	1,907	1,862	1,969	1,758	2,000	1,828	1,887
31st March, 1939 ..	1,926	1,863	1,969	1,790	2,000	1,833	1,896
30th June, 1939 ..	1,954	1,895	1,978	1,800	2,021	1,845	1,922
30th September, 1939 ..	1,939	1,904	2,016	1,811	2,049	1,845	1,927
31st December, 1939 ..	1,900	1,906	2,031	1,826	2,049	1,866	1,938

Female rates followed the same downward course as male rates from 1931 to 1933. The weekly average nominal wage for Australia fell from 53s. 7d. at 31st December, 1930, to 43s. 5d. at the same date in 1933, a decline of 10s. 2d., or 19 per cent. As with the rates for males increases were recorded in all States during the next six years, and the weighted average rate for Australia at 31st December, 1939, had advanced by 9s. 3d. per week over that ruling on 31st December, 1933, and was only 1.7 per cent. below the average at 31st December, 1930. The highest weighted average rate for Australia was recorded during the quarter ended 30th September, 1929, namely, 54s. 2d. per week.

(v) *Adult Females—Industrial Groups.* The following table shows the weighted average weekly rates of wage payable in Australia to adult female workers in the industrial groups in which they are mainly employed, and in all groups combined.

WAGE RATES OF ADULT FEMALES.

WEIGHTED AVERAGE NOMINAL WEEKLY RATES PAYABLE FOR A FULL WEEK'S WORK AND INDEX-NUMBERS OF WAGE RATES IN EACH INDUSTRIAL GROUP.

Date.	Industrial Group.						All Groups.
	III. Food, Drink, etc.	IV. Clothing, Boots, etc.	I., II., V., and VI. All Other Manufacturing.	XIII. Domestic, etc.(a)	XIV. Miscel- laneous.		
RATES OF WAGE.							
	<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>
31st December, 1935..	42 1	44 2	44 8	46 3	46 5	45 0	45 0
" " 1936..	43 1	44 9	45 8	47 1	50 9	46 5	46 5
" " 1937..	45 7	48 1	49 4	51 1	53 0	49 8	49 8
" " 1938..	47 1	49 9	50 6	52 11	54 6	51 3	51 3
31st March, 1939 ..	47 2	49 11	50 7	53 0	55 6	51 6	51 6
30th June, 1939 ..	47 6	50 6	51 6	54 2	56 5	52 3	52 3
30th September, 1939	48 2	50 5	51 4	54 3	56 5	52 4	52 4
31st December, 1939..	48 9	50 10	51 11	54 5	56 8	52 8	52 8
INDEX-NUMBERS.							
(Base : Weighted Average for Australia (27s. 2d.), 30th April, 1914 = 1,000.)							
31st December, 1935..	1,549	1,625	1,645	1,701	1,708	1,655	1,655
" " 1936..	1,585	1,646	1,680	1,734	1,867	1,708	1,708
" " 1937..	1,677	1,770	1,815	1,880	1,952	1,828	1,828
" " 1938..	1,732	1,831	1,859	1,947	2,004	1,887	1,887
31st March, 1939 ..	1,737	1,836	1,861	1,950	2,042	1,896	1,896
30th June, 1939 ..	1,749	1,859	1,895	1,992	2,075	1,922	1,922
30th September, 1939	1,773	1,856	1,890	1,996	2,077	1,927	1,927
31st December, 1939..	1,795	1,869	1,910	2,003	2,085	1,938	1,938

(a) Including the value of board and lodging, where supplied.

During 1939 the rate of wage for female employees in each industrial group showed an increase, the greatest increases occurring in Group XIV. (Miscellaneous), 2s. 2d. per week, and III. (Food, Drink, etc.), 1s. 8d. per week. The weighted average for all groups increased by 1s. 5d. per week.

3. *Relative Hours of Labour and Hourly Rates of Wage, 1935 to 1939.*—(i) *General.* The rates of wage referred to in preceding paragraphs are the minima payable for a full week's work. The number of hours constituting a full week's work differs, however, in many instances between various trades and occupations in each State, and between the same trades and occupations in the several States. To secure what may be for some other purposes a better comparison, the results in the preceding paragraphs are reduced to a common basis, namely, the rate of wage per hour. Particulars as at the end of the years 1935 to 1939 are given in the following table, for males and females separately in each State. These particulars relate to (a) the weighted average nominal weekly wage; (b) the weighted average number of working hours constituting a full week's work; and (c) the weighted average hourly wage. The weighted average weekly wage relates to all industrial groups combined, and includes the value of board and lodging

where supplied in land occupations, and the value of victualling and accommodation where supplied in marine occupations. whereas the number of working hours and the hourly wage relate to all industrial groups other than Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Many of the occupations included in these groups are of a casual or seasonal nature, and the hours of labour in the agricultural and dairying industry are not generally regulated either by awards or determinations of industrial tribunals or otherwise, hence the necessary data for the computation of the average number of working hours are not available.

The general effect of reducing the rates of wage to a common basis (i.e., per hour) is to eliminate on comparison any apparent difference between the several States which may be due to unequal working time.

(ii) *Adult Males and Females.* Particulars of the weekly and hourly wages and hours of labour for adult males and females at the close of the last five years are given in the table hereunder :—

WEEKLY AND HOURLY WAGES AND HOURS OF LABOUR OF ADULT WORKERS.

31st December—		Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
MALE WORKERS.									
1935	Weekly Wage (a) ..	84/2	79/9	88/5	77/11	86/7	81/0	83/0	
	Working Hours (b) ..	44.18	46.69	43.69	46.63	45.48	46.75	45.26	
	Hourly Wage (b) ..	1/11½	1/9	2/1	1/8½	1/10½	1/9½	1/10½	
1936	Weekly Wage (a) ..	85/6	83/1	88/7	79/6	90/7	83/3	85/0	
	Working Hours (b) ..	44.08	46.41	43.69	46.55	45.30	46.33	45.09	
	Hourly Wage (b) ..	2/0¼	1/10	2/1	1/9	2/0¾	1/9½	1/11½	
1937	Weekly Wage (a) ..	92/1	88/1	92/8	85/10	93/1	87/0	90/4	
	Working Hours (b) ..	44.07	46.22	43.68	46.57	45.25	46.24	45.03	
	Hourly Wage (b) ..	2/2½	1/11½	2/2½	1/10½	2/1½	1/11	2/0¾	
1938	Weekly Wage (a) ..	95/0	91/2	95/10	87/1	99/1	88/5	93/5	
	Working Hours (b) ..	44.01	45.85	43.67	46.31	44.33	46.00	44.82	
	Hourly Wage (b) ..	2/3	2/0¼	2/3	1/10½	2/4	1/11½	2/1½	
1939	Weekly Wage (a) ..	96/7	93/5	97/5	88/11	100/6	89/5	95/3	
	Working Hours (b) ..	43.92	44.61	43.46	45.83	44.33	45.33	44.29	
	Hourly Wage (b) ..	2/3½	2/1½	2/3½	1/11½	2/4	2/0	2/2½	
FEMALE WORKERS.									
1935	Weekly Wage ..	44/11	44/2	48/0	42/5	49/1	44/10	45/0	
	Working Hours ..	43.93	45.44	44.03	46.03	45.57	46.07	44.81	
	Hourly Wage ..	1/0½	0/11½	1/1	0/11½	1/1	0/11½	1/0	
1936	Weekly Wage ..	45/7	46/10	48/4	43/4	50/11	45/1	46/5	
	Working Hours ..	43.93	44.94	44.03	46.03	45.57	45.24	44.60	
	Hourly Wage ..	1/0½	1/0½	1/1½	0/11½	1/1½	1/0	1/0½	
1937	Weekly Wage ..	50/2	49/2	51/4	46/10	51/0	48/6	49/8	
	Working Hours ..	43.92	44.76	44.03	46.02	45.57	45.24	44.52	
	Hourly Wage ..	1/1½	1/1½	1/2	1/0½	1/1½	1/0½	1/1½	
1938	Weekly Wage ..	51/10	50/7	53/6	47/9	54/4	49/8	51/3	
	Working Hours ..	43.88	44.63	44.03	45.96	45.38	45.10	44.44	
	Hourly Wage ..	1/2½	1/1½	1/2½	1/0½	1/2½	1/1½	1/1½	
1939	Weekly Wage ..	53/3	51/9	55/2	49/7	55/8	50/8	52/8	
	Working Hours ..	43.88	44.42	44.01	45.96	45.38	45.10	44.36	
	Hourly Wage ..	1/2½	1/2	1/3	1/1	1/2½	1/1½	1/2½	

(a) Weighted average weekly rate in all industrial groups combined. (b) Weighted average working hours per week, and computed hourly rates of wage for all industrial groups excepting Groups XI. (Shipping, etc.), and XII. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in industrial groups XI. and XII.

(iii) *Index-Numbers.* The downward tendency in hours of labour for Australia as a whole commenced in the December quarter of 1924, when the weighted averages were 46.66 for males and 46.02 for females, and, excepting for slight increases in 1929 and 1930, the reduction has continued. During 1939 there was an increasing tendency towards reduction in those States in which the 44-hour week had not become the standard. The weighted averages for Australia at 31st December, 1939, were 44.29 for males and 44.36 for females. The effect of changes in hours of labour on the hourly rate of wage as compared with the general increase in the weekly wage is readily seen from the comparative index-numbers given in the following table:—

WEEKLY AND HOURLY INDEX-NUMBERS OF WAGE RATES : ADULT WORKERS.

(Base : Weighted Average for Australia, 30th April, 1914* = 1,000.)

31st December—	Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
MALE WORKERS.								
1935	{ Weekly Wage ..	1,528	1,448	1,605	1,415	1,572	1,470	1,507
	{ Hourly Wage (a) ..	1,703	1,496	1,782	1,476	1,689	1,519	1,623
1936	{ Weekly Wage ..	1,552	1,508	1,609	1,444	1,645	1,512	1,544
	{ Hourly Wage (a) ..	1,731	1,567	1,787	1,500	1,776	1,552	1,670
1937	{ Weekly Wage ..	1,672	1,599	1,682	1,558	1,690	1,580	1,641
	{ Hourly Wage (a) ..	1,878	1,676	1,875	1,602	1,704	1,643	1,779
1938	{ Weekly Wage ..	1,725	1,656	1,740	1,581	1,790	1,605	1,696
	{ Hourly Wage (a) ..	1,935	1,741	1,934	1,638	1,968	1,671	1,840
1939	{ Weekly Wage ..	1,754	1,696	1,768	1,614	1,825	1,624	1,729
	{ Hourly Wage (a) ..	1,963	1,834	1,979	1,692	2,001	1,717	1,903

FEMALE WORKERS.

1935	{ Weekly Wage ..	1,654	1,626	1,767	1,561	1,808	1,651	1,655
	{ Hourly Wage ..	1,848	1,758	1,971	1,721	1,947	1,759	1,818
1936	{ Weekly Wage ..	1,677	1,722	1,780	1,594	1,873	1,661	1,708
	{ Hourly Wage ..	1,875	1,833	1,985	1,700	2,018	1,803	1,881
1937	{ Weekly Wage ..	1,848	1,810	1,889	1,724	1,877	1,785	1,828
	{ Hourly Wage ..	2,066	1,985	2,107	1,839	1,900	1,938	2,017
1938	{ Weekly Wage ..	1,907	1,862	1,969	1,758	2,000	1,828	1,887
	{ Hourly Wage ..	2,134	2,050	2,196	1,878	2,164	1,991	2,084
1939	{ Weekly Wage ..	1,660	1,906	2,031	1,826	2,049	1,866	1,938
	{ Hourly Wage ..	2,193	2,107	2,267	1,952	2,217	2,032	2,145

(a) See footnote to following table.

* Approximate Weekly Rates—M = 55/1; F = 27/2. Hourly Rates—M = 1/2; F = 0/64.

4. **Weighted Average Nominal Weekly Hours of Labour, Adult Males.**—The following table shows the weighted average nominal hours of labour (exclusive of overtime) in a full working week for adult male workers in each State and Australia at 31st December, 1935 to 1939.

HOURS OF LABOUR.

INDEX-NUMBERS OF WEEKLY HOURS OF LABOUR OF ADULT MALES.

NOTE.—Index-numbers are based on the average hours of labour for Australia at 30th April, 1914 (48.93) = 1,000. Overtime is excluded.

31st December—	Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
1935	Weighted average weekly hours of labour (a) ..	44.18	46.69	43.69	46.63	45.48	46.75	45.26
	Index-numbers ..	903	954	893	953	929	955	925
1936	Weighted average weekly hours of labour (a) ..	44.08	46.41	43.69	46.55	45.30	46.33	45.09
	Index-numbers ..	901	948	893	951	926	947	922
1937	Weighted average weekly hours of labour (a) ..	44.07	46.22	43.68	46.57	45.25	46.24	45.03
	Index-numbers ..	901	945	893	952	925	945	920
1938	Weighted average weekly hours of labour (a) ..	44.01	45.75	43.67	46.31	44.34	46.00	44.82
	Index-numbers ..	899	935	893	946	906	940	916
1939	Weighted average weekly hours of labour (a) ..	43.92	44.61	43.46	45.83	44.33	45.33	44.29
	Index-numbers ..	898	912	888	937	906	926	905

(a) Weighted average working hours per week for all industrial groups excepting Groups XI. (Shipping), and XII. (Agricultural, Pastoral, etc.). Working hours have not been generally regulated by industrial tribunals for occupations classified in Industrial Groups XI. and XII.

5. Nominal and Effective Wages.—(i) *General.* Wages are said to be *nominal* when they represent the actual amounts of money received in return for labour, and are described as *effective* or *real* when expressed in terms of their equivalent purchasing power, that is, their purchasing power over some definite composite unit or regimen the cost of which can be ascertained at different times. The relation between nominal and *effective* or *real* wages was discussed at some length in *Labour Report* No. 6, and was also referred to in *Labour Report* No. 11.

Since it is possible to measure purchasing power over more than one composite unit or regimen it is equally possible to convert any given nominal wage series into more than one series of effective or real wages. Prior to 1936 it was the practice of this Bureau to compute effective wage index-numbers by dividing the nominal wage 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 abandoned the "A" series, the merits of the "C" series for deflating nominal wage rates were strengthened. The "C" series covers food, groceries, rent for four and five-roomed houses, clothing and miscellaneous household requirements. As the compilation of the "A" series was discontinued after the June quarter of 1938, real wages to the end of 1937 are measured in terms of their purchasing power over both the "A" series regimen and the "C" series regimen in the following tables, and over the "C" series only for the subsequent years.

(ii) *Nominal Weekly Wage Index-numbers 1901 to 1939—States.* The following table shows for the period 1901 to 1939 the weighted average nominal weekly rates of wage 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 1901 and 1911 are based on rates current at the end of December, annual averages

not being available. For 1914 and subsequent years, however, the index-numbers are based on the average rates current at the end of the four quarters of each year:—

NOMINAL WAGE INDEX-NUMBERS : ADULT MALES.

(Base : Weighted Average Wage for Australia, 1911 = 1,000.)

State.	1901.	1911.	1914.	1921.	1929.	1933.	1934.	1935.	1936.	1937.	1938.	1939.
New South Wales	858	1,003	1,093	1,862	2,012	1,638	1,617	1,631	1,654	1,723	1,829	1,874
Victoria	796	983	1,062	1,803	1,964	1,502	1,523	1,550	1,583	1,665	1,755	1,808
Queensland	901	997	1,035	1,879	1,976	1,720	1,727	1,731	1,728	1,774	1,854	1,885
South Australia	819	1,017	1,061	1,697	1,861	1,423	1,458	1,493	1,533	1,608	1,688	1,725
Western Australia	1,052	1,113	1,223	1,832	1,960	1,584	1,619	1,680	1,730	1,790	1,876	1,956
Tasmania	719	799	1,027	1,745	1,840	1,519	1,540	1,571	1,610	1,650	1,718	1,738
Australia	848	1,000	1,081	1,826	1,972	1,584	1,590	1,612	1,638	1,707	1,799	1,846

(iii) *Effective or Real Wage Index-numbers in each State, 1901-1939.* In obtaining the effective wage index-numbers in the following tables the nominal wage index-numbers shown above have been divided by the corresponding retail price index-numbers for the capital city and multiplied by 1,000.

The index-numbers for 1901 and 1911 which are based on nominal rates of wage current at the end of December may be taken as substantially accurate, since the movement in wages during the course of any one year prior to 1914 was comparatively slight.

EFFECTIVE OR REAL WAGE INDEX-NUMBERS FOR ADULT MALES (FULL WORK).

Measured in terms of purchasing power over the "A" series regimen.

(Base : Weighted Average Real Wage in Australia in 1911 = 1,000.)

State.	1901.	1911.	1914.	1921.	1929.	1931.	1932.	1933.	1934.	1935.	1936.	1937.
New South Wales	961	973	906	1,079	1,050	1,160	1,150	1,138	1,101	1,095	1,090	1,107
Victoria	915	1,037	961	1,038	1,084	1,162	1,126	1,139	1,114	1,092	1,075	1,099
Queensland	1,172	1,090	1,038	1,244	1,220	1,345	1,376	1,417	1,377	1,323	1,261	1,237
South Australia	948	957	929	1,027	1,067	1,178	1,133	1,152	1,144	1,149	1,143	1,151
Western Australia	1,024	1,023	1,070	1,139	1,143	1,232	1,212	1,246	1,221	1,260	1,251	1,253
Tasmania	827	838	942	977	1,064	1,104	1,067	1,094	1,086	1,099	1,094	1,088
Australia	964	1,000	948	1,076	1,082	1,185	1,168	1,178	1,148	1,135	1,121	1,133

Since the "C" series index-numbers were not compiled for periods prior to November, 1914, it has been assumed for the purpose of the following table that fluctuations between 1911, the base of the table, and 1914 in the "C" series would have been similar to the fluctuations observed in the "A" series.

EFFECTIVE OR REAL WAGE INDEX-NUMBERS FOR ADULT MALES (FULL WORK).

Measured in terms of purchasing power over the "C" series regimen.

(Base : Weighted Average Real Wage in Australia in 1911 = 1,000.)

State.	1911.	1914.	1921.	1929.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.		
New South Wales	925	1,073	1,130	1,210	1,206	1,186	1,157	1,153	1,150	1,168	1,207	1,207	
Victoria	954	1,084	1,164	1,200	1,150	1,147	1,146	1,134	1,131	1,155	1,180	1,180	
Queensland	1,022	1,227	1,290	1,336	1,366	1,382	1,366	1,338	1,296	1,277	1,311	1,306	
South Australia	914	1,034	1,099	1,137	1,079	1,086	1,091	1,097	1,101	1,128	1,146	1,147	
Western Australia	1,043	1,096	1,152	1,189	1,158	1,177	1,177	1,221	1,219	1,242	1,281	1,308	
Tasmania	902	984	1,108	1,120	1,094	1,110	1,109	1,115	1,128	1,141	1,167	1,153	
Australia	1,000	948	1,087	1,151	1,210	1,190	1,187	1,173	1,169	1,162	1,178	1,209	1,211

In the table above, the effective wage index-numbers are computed to the one base, that of Australia for 1911. As the index-numbers are comparable in all respects, comparisons may be made as to the increase or decrease in the effective wage index-number for any State over any period of years.

(iv) *Effective or Real Wage Index-numbers in the Commonwealth, 1901-39.* In the following table similar index-numbers are given for Australia as a whole. These are obtained by dividing the nominal wage index-numbers for Australia by the corresponding retail price index-numbers for the Six Capital Cities and multiplying by 1,000.

NOMINAL AND EFFECTIVE OR REAL WAGE INDEX-NUMBERS (FULL WORK).

(Base : *Weighted Average Real Wage in Australia in 1911 = 1,000.*)

Year.	Nominal Weekly Wage Index-numbers.	Retail Price Index-numbers.		Effective or Real Wage Index-numbers, i.e., Relative Purchasing Power over Regimen of—	
		"A" Series (Food, Groceries and Rent of All Houses).	"C" Series (All Items).	"A" Series.	"C" Series.
1901	848	880	..	964	..
1910	955	970	..	985	..
1911	1,000	1,000	(1,000)	1,000	(1,000)
1912	1,051	1,101	..	955	..
1913	1,076	1,104	..	975	..
1914	1,081	1,140	1,140	948	948
1915	1,092	1,278	1,297	854	842
1916	1,144	1,324	1,319	864	867
1917	1,226	1,318	1,406	930	872
1918	1,270	1,362	1,501	932	846
1919	1,370	1,510	1,695	907	808
1920	1,627	1,785	1,935	911	841
1921	1,826	1,697	1,680	1,076	1,087
1922	1,801	1,600	1,619	1,126	1,112
1923	1,805	1,700	1,664	1,062	1,085
1924	1,840	1,681	1,637	1,095	1,124
1925	1,861	1,722	1,654	1,081	1,125
1926	1,914	1,786	1,677	1,072	1,141
1927	1,946	1,766	1,662	1,102	1,171
1928	1,963	1,760	1,675	1,115	1,172
1929	1,972	1,822	1,713	1,082	1,151
1930	1,939	1,683	1,618	1,152	1,198
1931	1,752	1,479	1,448	1,185	1,210
1932	1,639	1,403	1,377	1,168	1,190
1933	1,584	1,345	1,335	1,178	1,187
1934	1,590	1,385	1,355	1,148	1,173
1935	1,612	1,420	1,380	1,135	1,169
1936	1,638	1,461	1,409	1,121	1,162
1937	1,707	1,507	1,448	1,133	1,178
1938	1,799	(a)	1,488	(a)	1,209
1939	1,846	(a)	1,526	(a)	1,211

(a) Not available.

NOTE.—For years prior to 1914, the nominal wage index-numbers relate to the end of the year only, but from 1914 onward these figures, in addition to those for retail prices, are averages for the whole year.

§ 3. Basic Wages in Australia.

1. **General.**—Basic wages in Australia are fixed by various industrial tribunals operating under Commonwealth and State Arbitration Acts, and are varied from time to time according to changes in cost of living, constitution of the family unit, etc. In the industrial legislation of New South Wales, Queensland, South Australia and Western Australia, provision is made for the tribunals appointed under the Acts to determine the basic rates of wage to be paid to adult unskilled workers. In Tasmania provision for the declaration of a basic rate of wage is not included in the industrial Acts in force. The Wages Board system operates in this State, and each Wages Board determines the rate of wage to be paid to the unskilled worker when the determination for an industry or calling is under review. In Victoria, however, the same Wages Board system exists, but by amendments of the Factories Act, operative from 17th October, 1934, Wages Boards are obliged to adopt the same basic wage as that determined by the Commonwealth Arbitration Court for similar industries. As the power of the Commonwealth Arbitration Court is limited by the Constitution to the settlement, by conciliation and arbitration, of industrial disputes extending beyond the limits of any one State, no similar provision is to be found in the Commonwealth Conciliation and Arbitration Act. In practice, the Court does declare a Commonwealth basic wage and uses the wage so declared as a basis for all awards made by it in the exercise of its jurisdiction. That is, upon a new basic wage being declared, the awards made in the settlement of all interstate industrial disputes are re-opened and amended accordingly. In addition to the "basic" wage, these tribunals also determine what is known as the "secondary" wage—"the extra payment to be made for trained skill or other exceptional qualities necessary for an employee exercising the functions required."* The term "minimum" wage, on the other hand, is used to express the lowest rate payable in a particular industry, and is either equal to, or greater than, the "basic" wage.

2. **The Commonwealth Basic Wage.**—(i) *General.* The doctrine of a basic wage was propounded as far back as 1890 by Sir Samuel Griffith, Premier of Queensland, and the same principle was enunciated in the New South Wales Arbitration Court in somewhat similar terms by Mr. Justice Heydon in 1905. In spite, however, of these pronouncements and the fact that wage-fixing tribunals had been in operation as early as 1896 (in the State of Victoria), it was not until 1907 that the first basic wage, as such, was declared by a Court in Australia, and was made by Mr. Justice Higgins, President of the Commonwealth Court of Conciliation and Arbitration. The wage declared was defined as the lowest wage which can be paid to an unskilled labourer on the basis of "the normal needs of an average employee regarded as a human being living in a civilized community."† This 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, of the Sunshine Harvester Works, Victoria, from which was derived the title of the "Harvester Wage" by which it is popularly known. The rate of wage declared in this case was 7s. per day or £2 2s. per week for Melbourne, the amount considered reasonable for "a family of about five."‡ The constituent parts of this amount were £1 5s. 5d. for food, 7s. for rent, and 9s. 7d. for all other expenditure.

The "Harvester" basic rate was adopted by the Commonwealth Arbitration Court for incorporation in its awards, and practically the same rates continued until 1913, when the Court took cognizance of the 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. These index-numbers had been taken back to 1901, with the year 1911 as base, and disclosed not only considerable percentage increases since 1907, but also large disparities in the relative purchasing power of money in the various towns. The basic rates for towns were thereafter fixed on their respective index-numbers, taking the index-number 875 for Melbourne for the year 1907 as being equivalent to the "Harvester" rate of 42s. per week, or the base of the table 1,000 as being equivalent

* Mr. Justice Higgins—*A New Province of Law and Order.*

† *Ibid.*

‡ See page 703 for Court's interpretation in 1940 Basic Wage Inquiry of the "family unit."

to 48s. per week. Exceptions were made in the case of many country towns, where certain "loadings" were applied to counterbalance their lower index-numbers due to cheaper rentals.*

In 1922 an amount known as the "Powers' 3s."† was added as a general "loading" to the weekly wage for the purpose of securing to the worker during a period of rising prices the full equivalent of the "Harvester" standard. In the same year the system was instituted of making regular quarterly adjustments of the basic wage to accord with variations in purchasing power as disclosed by the "A" Series retail price index-numbers, and of basing the adjustments on the index-number for the quarter in place of that for the previous calendar year or the year ended the preceding quarter.

The Commonwealth Conciliation and Arbitration Act provides that the "basic" wage, or any alteration thereof including the principles on which it is computed, together with any variation or interpretation of any award involving any such alteration, shall be considered by a Court constituted by the Chief Judge and not less than two other Judges, and must be approved by a majority of the members of that Court. By a judgment of the High Court on 21st April, 1933, the "basic" wage is taken to mean for the foregoing purpose, not only the "Harvester" wage but any "loadings" forming part of the primary wage of an unskilled labourer. A "loading" is defined as an addition to the "basic" wage as compensation for some peculiar condition of labour or environment, and not by way of "margin for skill." The wage payable for skilled labour is assessed on the basis of the "basic" wage, including "loadings."

The adequacy or otherwise of the "Harvester" standard has been the subject of much discussion, the author of the judgment himself urging on several occasions the need for its review. The abnormal conditions during and for some time after the War of 1914-19 hindered such a review which was regarded as less urgent by reason of the fact that wages throughout Australia were being automatically adjusted to changes in retail prices. A Royal Commission (referred to later) was appointed in 1920 to assess a basic wage, but its recommendations were not carried out.

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 by employers for some greater measure of reduction of wages than that afforded by the automatic adjustments to falling retail prices. An account of the proceedings which resulted in the Court reducing all wages under its jurisdiction by 10 per cent. from 1st February, 1931, is given in *Labour Report* No. 23, page 74. Reference is also made to the Court's refusal in June, 1932, and May, 1933, to remove this special reduction.

(ii) *Basic Wage Inquiry*, 1934. The "Harvester" standard, adjusted to retail price variations, continued as the theoretical basis of the wage of the Commonwealth Court until 30th April, 1934, when it was superseded by a judgment delivered on 17th April, 1934, full particulars of which appear in *Official Year Book* No. 29, 1936, page 545. The basic wage declared on this occasion (subsequently referred to as the "Needs" Basic Wage 1934") was as follows for the six capital cities:—

		<i>s.</i>	<i>d.</i>			<i>s.</i>	<i>d.</i>		
Sydney	67	o	Adelaide	..	..	64	o
Melbourne	64	o	Perth	..	..	66	o
Brisbane	61	o	Hobart	..	..	67	o

Six Capital Cities, 65s. od.

The 10 per cent. special reduction in wages referred to above ceased to operate upon the introduction of the new rates, and the basis of the periodical adjustments to retail price variations was transferred from the "A" Series to the "C" Series of Index-numbers. The latter Series covers Food and Groceries; Rent of 4-roomed and 5-roomed Houses; Clothing; Fuel; Light; Household Utensils; Household Drapery; Fares; and other Miscellaneous household requirements. The base of the table (1,000) was taken by the Court as equal to 81s. per week. This gave the above rates for the capital

* As these indexes covered only about 60 per cent. of household expenditure, a low index due to low rentals would wrongly presume low costs in the remaining uninvestigated 40 per cent. of household expenditure and *vice versa*.

† Awarded by Mr. Justice Powers in the Gas Workers' case.

cities, which are proportionate to their respective index-numbers. In effect, the new rate for the Six Capital Cities was the same as that previously paid under the "A" Series, without the "Powers' 3s.," and without the 10 per cent. reduction. Certain towns gained and others lost in comparison with rates under the "A" Series, owing to the different relationship of towns under the "A" and the "C" Series.

(iii) *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 8s. to 93s. which on current index-numbers would have represented an average increase of about 10s. per week. The hearing extended from 10th May to 4th June, 1937, and the Court delivered judgment on 23rd June. The chief features of the judgment were—

(a) Various amounts were added to the basic wage not as an integral, and therefore adjustable, part of that wage, but as "loadings" on the rates that would have been payable under the "shilling table" as determined by the 1934 judgment. The latter was referred to in the judgment as the "needs" portion of the total resultant basic wage. The "loadings" and resultant "total basic wages" for the six capital cities were as follows:—

City.	"Needs" Basic Wage.		"Loading."		Total Basic Wage.	
	s.	d.	s.	d.	s.	d.
Sydney	72	0	6	0	78	0
Melbourne	69	0	6	0	75	0
Brisbane	68	0	6	0	74	0
Adelaide	68	0 (a)	4	0	72	0
Perth	70	0 (a)	4	0	74	0
Hobart	70	0 (b)	4	0	74	0
Six Capitals	70	0	5	0	75	0

(a) An additional 1s. was actually being paid under the "2s. minimum adjustment" provision.

(b) One shilling less was being paid under the "2s. minimum adjustment" provision.

The above were not to apply to railway employees, to whom the Court granted "loadings" of 5s. in New South Wales and Victoria, and 3s. in South Australia and Tasmania. Workers in the provincial towns were to receive "loadings"—6s. in New South Wales, Victoria and Queensland; and 4s. in South Australia, Western Australia and Tasmania. Wages based on "combination" index-numbers covering 4, 5 or 6 capital cities, or the 30 towns, would receive a "loading" of 5s. per week. The Maritime Workers were granted a "loading" of 21s. 6d. per month, and the Pastoral Workers received increases proportionate to the increase of the flat basic rate, from 68s. to 77s. in respect of the basis of piece work rates. Station hands received an increase of 3s. per week.

The "loadings" were to come into operation by instalments as follows:—

"Loading."	Instalments.	Date of Operation. (First pay period to begin in—)
s. d.	s. d.	
6 0	3 0	July, 1937
	3 0	October, "
5 0	3 0	July, "
	2 0	October, "
4 0	2 0	July, "
	2 0	October, "
3 0	2 0	July, "
	1 0	October, "

The Maritime, Pastoral and Gas Workers' increases were to become fully operative in the first pay period in July.

(b) The former proviso that no adjustment of wages should take place unless the amount of variation reached at least 2s. was rescinded in favour of minimum variations of 1s. per week.

(c) The general policy laid down in the previous judgment in regard to rates for country towns was retained, with the exception that the rates for Geelong and Warrnambool were made the same as those for Melbourne

(d) The basis of the adjustment of wages 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.

(e) Female and junior rates were left for adjustment by individual Judges when dealing with specific awards.

The main parts of the judgment are reprinted in Official Year Book No. 30.

(iv) "*Lug*" in *Adjustments*. The Commonwealth Court on 19th December, 1939, heard an application by the unions that the date of adjustment of the basic wage in accordance with the variations in the "Court" Series of index-numbers be brought nearer to the period upon which the variation was based. In a judgment delivered on the same day, the Court directed that such adjustments be made one month earlier. The effect, therefore, was to make future adjustments operative from the beginning of the first pay-period to commence in a February, a May, an August or a November.

(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 are based) from 81s. to 100s per week, and the abolition of the present "Prosperity" loadings, which would be regarded as incorporated in the new rate mentioned. The hearing was interrupted for a period of ten weeks owing to the serious illness of the Chief Judge (the Hon. Sir George S. Beeby), but was completed on 28th November, 1940. Judgment was delivered on 7th February, 1941, wherein the Court unanimously refused to grant any increase, and decided that the application should not be dismissed but stood over for further consideration after 30th June, 1941. The application was refused mainly owing to the uncertainty of the economic outlook under existing war conditions.

In regard to the popular idea that the basic wage of the Commonwealth Court of Conciliation and Arbitration was identified with a specific family unit, the Chief Judge made the following statements to clarify the position: "The Court has always conceded 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. That, no doubt, is the object, but the adoption of something like the real average family as the unit to be provided for is not without its use in the attainment of that object. There is no clear means of measuring the general wage-paying capacity of the total industry of a country. All that can be done is to approximate, and one of the methods of approximation is to find out the actual wage upon which well-situated labourers are at the time maintaining the average family unit. We may be pardoned for saying that Mr. Justice Higgins very wisely used this criterion in the Harvester case. Moreover, if the average-sized families of such well-situated labourers have become accustomed to enjoy, and do actually enjoy, a certain standard of living in our community, it may reasonably be assumed that such a standard for all labourers is probably not beyond the capacity of industry in general to provide. Therefore in determining the amount of a living or basic wage there is sound economic warranty for the ascertainment of the real average family unit and of the cost of providing something like the standard which such families of well-employed

labourers have already reached. But obviously, if the real average family unit is departed from, or a standard is sought for the likely maintenance of which experience gives no reason to hope, then an unrealizable wage-level may be ordained It may be that in the light of past experience the Court should conduct a specific inquiry as to the cost of living of an average family, but under war conditions, such an inquiry would be futile. More than ever before wage fixation is controlled by the economic outlook."

The Chief Judge further stated: "I was impressed by the new evidence and argument as to the inadequacy of the earnings of the lower-paid wage earners with families. On our accepted standards of living, looking at it from the needs point of view only, I regard the present basic wage as adequate for a family unit of three persons, but think it offers only a meagre existence for a family unit of four. When the unit gets beyond four hardship is often experienced." He suggested that the more logical system would be to grade the basic wage according to family responsibilities and that, notwithstanding the increase in aggregate wages, the benefits resulting from a re-apportionment of national income to increase the wages of those with more than one dependent child would more than offset the inflationary tendency of provision for a comprehensive scheme of child endowment, and that if a scheme of this nature were established, as recently announced by the Commonwealth Government,* future fixations of the basic wage would be greatly simplified. The other two Judges (O'Mara, J., and Piper, J.), in separate judgments, agreed with that of the Chief Judge, particularly in regard to the need for a child endowment scheme as a solution of the main problem.

(vi) *Current Federal Basic Wage Rates.* The basic wage rates of the Commonwealth Court for adult males, including the "loadings" granted in 1937, operative from 1st February, 1941, are as follows:—

	s.	d.		s.	d.
New South Wales—			South Australia—		
Sydney	88	0	Adelaide	82	0
Newcastle (a) .. .	88	0	Five Towns	81	0
Broken Hill	88	0			
Five Towns	87	0	Western Australia—		
			Perth	81	0
Victoria—			Kalgoorlie	96	0
Melbourne			Geraldton	87	0
Geelong			Five Towns	82	0
Warrnambool					
Mildura	86	0	Tasmania—		
Yallourn	92	6	Hobart	83	0
Five Towns	86	0	Launceston	81	0
			Queenstown	82	0
Queensland—			Five Towns	82	0
Brisbane	82	0			
Five Towns	82	0	Thirty Towns	85	0
			Six Capital Cities .. .	85	0

(a) Based on Sydney.

With the exception of those mentioned above, the rate for provincial towns is 3s. less than that of their respective capital cities. The rate for adult females—prescribed by the individual judges—is approximately 54 per cent. of the adult male rate.

3. *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. The Board of Trade was established in 1918 with power to determine the living wage for adult male and female employees in the State; the Board made numerous declarations from 1918 to 1925, but ceased to function after the Industrial Arbitration (Amendment) Act 1926 established the Industrial Commission of New South Wales, which exercised the powers of the Board of Trade from 15th April, 1926.

* Legislation covering a scheme to become operative on 1st July, 1941, was actually passed by the Commonwealth Parliament on 3rd April, 1941: see page 710 for details.

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. With the adoption in 1937 of the Commonwealth basic wage referred to below, however, the identification of a specified family unit with the basic wage disappeared.

Employees in rural industries are not covered by the rates shown in the following table; a living wage for rural workers of £3 6s. per week was in force for twelve months from October, 1921, and a rate of £4 4s. operated from June, 1927, to December, 1929, when the power of industrial tribunals to fix a living wage for rural workers was withdrawn.

The variations in the living wages determined by the industrial tribunals of New South Wales up to 27th April, 1937, are shown in the following table. Thereafter changes are made automatically in accordance with the procedure outlined in the next paragraph, and the latest current rate payable will be found in the table in par. vi of this section.

BASIC WAGE VARIATIONS IN NEW SOUTH WALES. (State Jurisdiction.)

Male.			Female.		
Date of Declaration.	Basic Wage per Week.		Date of Declaration.	Basic Wage per Week.	
	£	s. d.		£	s. d.
16th February, 1914	2	8 0			
17th December, 1915	2	12 6			
18th August, 1916	2	15 6			
5th September, 1918	3	0 0	17th December, 1918	1	10 0
8th October, 1919	3	17 0	23rd December, 1919	1	19 0
8th October, 1920	4	5 0	23rd December, 1920	2	3 0
8th October, 1921	4	2 0	22nd December, 1921	2	1 0
12th May, 1922	3	18 0	9th October, 1922	1	19 6
10th April, 1923	3	19 0	(a)	2	0 0
7th September, 1923	4	2 0		2	1 6
24th August, 1925	4	4 0		2	2 6
27th June, 1927	4	5 0		2	6 0
20th December, 1929	4	2 6		2	4 6
26th August, 1932	3	10 0		1	18 0
11th April, 1933	3	8 6		1	17 0
20th October, 1933	3	6 6		1	16 0
26th April, 1934	3	7 6		1	16 6
18th April, 1935	3	8 6		1	17 0
24th April, 1936	3	9 0		(b)	17 6
27th October, 1936	3	10 0		1	18 0
27th April, 1937	(c)	3 11 6		1	18 6

(a) Dates of declarations from 1923 on were the same as those for male rate.

(b) Rate declared, £1 15s. 6d., but law amended to provide a rate for females at 54 per cent. of that for males.

(c) See below.

Following on the judgment of the Commonwealth Arbitration Court referred to on page 702, the Government of New South Wales decided to bring the State Basic Wage into line with the Commonwealth rates ruling in the State, and secured an amendment of the Industrial Arbitration Act to give effect thereto. The Act (No. 9 of 1937) was passed on 7th October, 1937, and was expressed to come into operation from the commencement of the first pay period in October, practically from 1st October, 1937. The general principles laid down by the Commonwealth Court were followed as closely as practicable, and provision was made for the automatic adjustment of wages in conformity with variations of retail prices as shown by the Commonwealth Court's "All Items" Retail Price Index-numbers, shortly known as the "Court" Series of Index-numbers. The Commonwealth Court's principle of treating the "prosperity loadings" as a separate and non-adjustable part of the total basic wage was adopted. The provisions of the main Acts for the periodic declaration of the living wage by the Industrial Commission were repealed, but the amending Act placed on the Commission the responsibility of altering all awards and agreements in conformity with the intentions of the new Act;

to define boundaries within which the various rates are to operate; and to specify the appropriate "Court" Series retail price index-numbers to which they are to be related.

Compared with State adult basic wages of £3 11s. 6d. per week for males, and £1 18s. 6d. for females operative at the time, the alteration represented for males increases of 6s. 6d. in Sydney; 3s. 6d. in Country districts (with certain exceptions); and 4s. 6d. for railway and other Crown employees as defined by the Act. For females the increases were 54 per cent. of the foregoing, and amounted to 3s. 6d., 2s., and 2s. 6d., respectively.

The rates applicable in the metropolitan area from 1st February, 1941, are £4 8s. for males and £2 7s. 6d. for females.

The principle of supplementing wages by a payment in respect of dependent children under fourteen years of age is operative in New South Wales, and a brief account of the main features of the system appears in § 4, par. 2 hereafter.

(ii) *Victoria and Tasmania.* A State basic rate of wage is not declared in Victoria and Tasmania. In these States the Wages Board system of wage fixation is in operation, and each Board determines the minimum rate of wage to be paid in the industry or calling under review. In the majority of cases the practice of the Commonwealth Arbitration Court of adjusting wages in accordance with variations in retail prices has been followed in the past by these bodies. In the case of Victoria, by amendments of the Factories and Shops Act No. 4275 of 1934 and No. 4461 of 1936, it is now obligatory on all Wages Boards to adopt such provisions of Commonwealth Awards which such Boards are under the Factory and Shops Acts empowered to include in their determinations. The Secretary of Labour is also empowered under this Act to make adjustments of wages according to variations in retail price index-numbers without calling the Board together. The latest Commonwealth adult rate for Melbourne is 86s. per week (operative from 1st February, 1941), and for Hobart 83s. per week (operative from 1st February, 1941). Female rates are roughly 54 per cent. of those rates.

(iii) *Queensland.* The first formal declaration by the Industrial Arbitration Court in this State of a basic wage was gazetted on 24th February, 1921. Prior to this declaration the rate of £3 17s. per week for adult males had been generally recognized by the Court in its awards as the basic or living wage. The basic wage is nominally intended to provide for the needs of a man, his wife and three children. The variations in the adult basic wages determined by the Industrial Arbitration Court are shown below:—

BASIC WAGE VARIATIONS IN QUEENSLAND. (*State Jurisdiction.*)

Date of Operation.	Adult Basic Wage.					
	Male.			Female.		
	£	s.	d.	£	s.	d.
1st March, 1921	4	5	0	2	3	0
1st March, 1922	4	0	0	2	1	0
28th September, 1925 (a)	4	5	0	2	3	0
1st August, 1930	4	0	0	2	1	0
1st December, 1930	3	17	0	1	19	6
1st July, 1931	3	14	0	1	19	0
1st April, 1937	3	18	0	2	1	0
1st April, 1938	4	1	0	2	3	0
7th August, 1939	4	4	0	2	5	0
31st March, 1941	4	9	0	2	8	0

(a) Fixed by Basic Wage Act.

The rates shown above are applicable throughout the South-Eastern Division of the State; allowances are added for the following divisions—Northern, 10s.; North-Western, 17s. 4d.; Mackay, 5s. 6d.; and South-Western, 7s. 4d. Half of these allowances are granted to females.

(iv) *South Australia.* The Industrial Code 1920-1937 provides that the Board of Industry shall after public inquiry declare the living wages to be paid to adult male and female employees. Prior to the passing of this Act the living wage was declared by the Industrial Court, the first award, 7s. per day, being made by Mr. Justice Gordon in the Brushmakers' Case in December, 1908.

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. per week.

The family unit is 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 variations in the living wages determined by the Board of Industry are shown below :—

BASIC WAGE VARIATIONS IN SOUTH AUSTRALIA. (*State Jurisdiction.*)

Male.			Female.		
Date of Operation.	Basic Wage per Week.		Date of Operation.	Basic Wage per Week.	
	£	s. d.		£	s. d.
4th August, 1921 ..	3	19 6	1st September, 1921 ..	1	15 0
27th April, 1922 ..	3	17 6	..	..	..
8th November, 1923 ..	3	18 6	..	..	..
15th May, 1924 ..	4	2 0	13th November, 1924 ..	1	18 0
13th August, 1925 ..	4	5 6	3rd September, 1925 ..	1	19 6
30th October, 1930 ..	3	15 0	15th January, 1931 ..	1	15 0
10th September, 1931 ..	3	3 0	24th December, 1931 ..	1	11 6
7th November, 1935 ..	3	6 0	16th January, 1936 ..	1	13 0
7th January, 1937 ..	3	9 6	29th April, 1937 ..	1	14 9
25th November, 1937 ..	3	14 0	25th November, 1937 ..	1	16 6
5th January, 1939 ..	3	18 0	5th January, 1939 ..	1	18 0
28th November, 1940 ..	4	4 0	28th November, 1940 ..	2	1 0

(v) *Western Australia.* The Industrial Arbitration Act 1912-1937 provides that the Court of Arbitration shall determine and declare a basic wage to operate from 1st July of each year and, wherever and whenever necessary, differential basic rates in special or defined areas of the State. In an amending Act of 1930 provision is made for quarterly adjustments when the Government Statistician reports a variation in the cost of living of 1s. or more per week compared with the previous quarter.

The first declaration of the basic wage by the Court of Arbitration since 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. The variations in the annual declarations of the Court of Arbitration are shown in the following table :—

BASIC WAGE VARIATIONS IN WESTERN AUSTRALIA. (*State Jurisdiction.*)

Date of Operation.	Metropolitan Area.		South-West Land Division (excluding Metropolitan Area.)		Other Parts of State.			
	Male.	Female.	Male.	Female.	Male.	Female.		
	£	s. d.	£	s. d.	£	s. d.		
1st July, 1926 ..	4	5 0	2	5 11	4	5 0	2	5 11
.. .. 1929 ..	4	7 0	2	7 0	a4	7 0	a2	7 0
.. .. 1930 ..	4	6 0	2	6 5	4	5 0	2	5 11
.. .. 1931 ..	3	18 0	2	2 2	3	17 0	2	1 8
.. .. 1932 ..	3	12 0	1	18 11	3	13 6	1	19 8
.. .. 1933 ..	3	8 0	1	16 9	3	9 6	1	17 6
.. .. 1934 ..	3	9 6	1	17 6	3	10 0	1	17 10
.. .. 1935 ..	3	10 6	1	18 1	3	11 2	1	18 5
.. .. 1936 ..	3	10 6	1	18 1	3	11 9	1	18 9
.. .. 1937 ..	3	13 9	1	19 10	3	14 8	2	0 4
.. .. 1938 ..	4	0 0	2	3 2	4	1 0	2	3 9
.. .. 1939 ..	b4	2 2	b2	4 4	4	3 1	2	4 10
.. .. 1940 ..	4	2 8	2	4 8	4	3 3	2	4 11
					4	16 3	2	12 0

(a) Excluding Gold-fields areas, where rates were the same as those operating from 1st July, 1926.

(b) Applicable from 24th April, 1939.

The latest rates payable (applicable from 28th April, 1941), in accordance with the quarterly adjustments declared by the Court are—Metropolitan area, males, 88s. od., females, 47s. 6d.; South-West Land Division (excluding Metropolitan area), males, 89s. 3d., females, 48s. 2d.; other parts of State, males, 103s. 6d., females, 55s. 11d.

(vi) *Current State Basic Wage Rates.* In the following table are given the current basic wage rates declared by the various State tribunals:—

BASIC WEEKLY WAGE RATES FIXED BY STATE INDUSTRIAL TRIBUNALS.

State.	Basic Wage.		Date of Operation.	Family Unit (for Male Rate).
	Males.	Females.		
	£ s. d.	£ s. d.		
New South Wales ..	(a) 4 8 0	(a) 2 7 6	1.2.41	(e)
Victoria ..	(b)	(b)	(b)	(b)
Queensland ..	(c) 4 9 0	(c) 2 8 0	31.3.41	Man, wife and three children
South Australia ..	4 4 0	2 1 0	28.11.40	Man, " "
Western Australia ..	(d) 4 8 0	(d) 2 7 6	28.4.41	Man, wife and two children
Tasmania ..	(b)	(b)	(b)	(b)

(a) Sydney, Newcastle, Port Kembla-Wollongong and Broken Hill. Elsewhere, males £4 5s., females £2 6s. od. Male wage plus child allowances. (b) None declared, but follow Federal rates to a large extent. (c) South-Eastern Division. Allowances are added for the following Divisions—Northern, 10s.; North-Western, 17s. 4d.; Mackay, 5s. 6d.; and South-Western, 7s. 4d. Half of these allowances are granted to females. (d) Metropolitan Area. Basic wage for Gold-fields Areas and portions of State exclusive of the South-West Land Division—males £5 3s. 6d.; females £2 15s. 11d.; South-West Land Division (excluding Metropolitan Area)—males £4 9s. 3d.; females £2 8s. 2d. (e) Commonwealth Basic Wage operative—no defined family unit.

4. **Royal Commission on the Basic Wage, 1920.**—The Commonwealth basic wage referred to in par. 2 (i) above was made operative in other parts of Australia on the basis of the relative retail price index-numbers applicable to the locality, but only one comprehensive attempt has been made by the Commonwealth authorities to ascertain specifically what the actual requirements were in the various States according to reasonable standards of comfort, including all matters comprised in the ordinary expenditure of a household in respect of a family consisting of a man, wife and three children under fourteen years of age.

The attempt referred to was made by a Royal Commission, and its report, issued in 1920, recommended the following amounts for the various capital cities:—

	£	s.	d.
Sydney
Melbourne
Brisbane
Adelaide
Perth
Hobart
Six Capitals (Weighted Average)

The recommendations of this Commission were not carried out owing largely to the marked advance of the amounts suggested over ruling rates* and the grave doubts expressed as to the ability of industry to pay such rates.

§ 4. Child Endowment in Australia.

1. **General.**—The principle of supplementing wages by a payment in respect of dependent children under fourteen years of age has become very prominent in Australia in recent years, and is actually in operation in certain instances. The system has been in force in various forms in England and on the Continent as far back as 1795, the first instance occurring in England in that year.†

* The "Harvester" equivalent for Melbourne at the time (September quarter, 1920) was £4 13s. per week, but only £3 18s. to £4 2s. was being paid on the basis of an annual index-number.

† A complete survey of the systems in force in various countries is contained in Eleanor Rathbone's *Disinherited Family: A Plea for the Endowment of the Family and The Case for Family Allowances.*

2. **New South Wales.**—The first attempt in Australia to institute the system was made in New South Wales in 1919, when a Bill was introduced into the State Parliament to provide a flat basic wage for a man and wife, and an allowance of 5s. per week for each child, the latter rate to be reduced on a sliding scale and to cease automatically when the income reached an amount of £3 per week above the basic wage. The Bill was rejected, but the subject again came up in the Session of 1926–27, when Acts,* which have been amended during subsequent years, provided for the payment of child allowances. The original Act was assented to on 11th April, 1927. These measures provided for (a) the declaration of a basic wage for a man and wife,† and (b) the payment of an allowance of 5s. per week in respect of each dependent child, subject to the provision that child allowances would be paid only to the extent to which the total earnings of the worker and his family fall short of the sum represented by the *basic wage* plus child allowance at the rate of 5s. per week for each child under the age of fourteen years. Thus, a worker with three dependent children receiving £5 by way of wages would not be entitled to the allowance, but would receive it in respect of a fourth child. These payments in New South Wales commenced to operate from 23rd July, 1927. The basic wage was determined for a family unit of a man, wife and one child on 20th December, 1929, and an amending Act, assented to on 23rd December, 1929, excluded one child in each family from endowment. The fund from which child endowment payments were originally made was created by a levy on the wages bill of employers. The rate of tax from employers during the year 1930 was fixed at 1 per cent. From 1st July, 1931, the rate was fixed at 2 per cent., and from 1st January, 1932, at the rate of 5d. in the £1 on all wages above £3 per week. The levy was discontinued as from 1st January, 1934, the cost of endowment being met from the Special Income and Wages Tax, which is also used for other social services.

3. **Commonwealth Public Service.**—The first system of child endowment in Australia was instituted within the Commonwealth Public Service. It came into operation on 1st November, 1920, when, following on the recommendations of the Royal Commission on the Basic Wage,‡ the Commonwealth Government decided to pay a basic wage of £4 a week in certain cases and child allowances to officers at the rate of 5s. per week for each dependent child under fourteen years of age, with a limitation of salary plus allowance of £400 per annum. As the result of proceedings before the Public Service Arbitrator in 1923, these allowances were confirmed as a permanent part of the salary scheme, and the necessary fund to meet them was created by deducting the average value of the payment from the basic wage of all adult officers. In effect, therefore, the officers are themselves providing the fund from which the allowance is paid. The deduction was originally £11 per annum, but is now £12. The payment is now limited to officers receiving up to £500 per annum inclusive of the allowance. Details regarding the introduction and method of calculating the payments under this scheme have been published in previous issues of the Official Year Book and will be found also in the *Labour Reports* issued by this Bureau.

4. **National Scheme.**—The Commonwealth Government, in June, 1927, called a conference at Melbourne of the Premiers of the several States to consider the question from a national standpoint. The Prime Minister submitted various estimates of cost of endowing dependent children under fourteen years of age in Australia at 5s. per week. After discussion, it was decided to refer the matter to a Royal Commission, to be appointed by the Commonwealth Government.

The Commission submitted its report on 15th December, 1928. It was not unanimous in its findings, and the opinions and recommendations of the members were

* Family Endowment Act 1927; Finance (Family Endowment Tax) Act 1927; Industrial Arbitration (Living Wage Declaration) Act 1927 and subsequent amendments.

† This was subsequently declared at £4 5s. per week for adult males and £2 6s. per week for adult females. A separate rate for rural employees was declared later at £4 4s. per week.

‡ The Chairman of the Commission (Mr. A. B. Piddington, K.C.), in a supplementary report, had suggested that the wage recommended (£5 16s.) be split up into a flat basic wage of £4 and a Child Endowment of 12s. per week for each dependent child, the fund for the payment of this allowance to be created by a tax on employers of 10s. 9d. per employee per week.

embodied in two separate reports, which dealt exhaustively with the constitutional aspects, existing systems, industrial legislation, the basic wage, standard of living, regulation of wages, working conditions and cognate matters.

At the conference of Commonwealth and State Ministers held at Canberra during May, 1929, the Prime Minister stated that the Commonwealth Government was not prepared to adopt a scheme financed entirely from the proceeds of taxation, as had been recommended in the minority report. The Commonwealth Government agreed with the majority of the Commission that child endowment could not be separated from the control of the basic wage—a power which the Commonwealth did not possess and which the States were not prepared to relinquish. The Government, therefore, did not propose to establish any system of child endowment. It was generally agreed that any scheme which would increase the charges upon industry would be unwise at that particular time. The matter of child endowment was accordingly left to be dealt with as the State Governments should think proper.

The findings and recommendations in the *majority* and *minority* reports are given in *Labour Report*, No. 19.

Early in 1941, the Commonwealth Government announced its intention to introduce a scheme of Child Endowment throughout Australia. The necessary legislation* was introduced into Parliament on 27th March, and the passage through all stages was completed on 3rd April, 1941. The main features of the scheme, which will operate from 1st July, 1941, are as follows:—

(a) Payment at the rate of 5s. per week for all children under the age of sixteen in excess of one child in each family, provided the persons claiming the endowment, and the child in respect of whom the endowment is claimed, have resided in Australia for the period of twelve months preceding the date of claim.

(b) The endowment is payable to the mother of the child, or to such persons as are prescribed.

(c) The scheme will be financed partly from Consolidated Revenue; partly from the abolition of the exemptions from taxation in respect of children after the first and the major part from a tax of 2½ per cent. of all pay-rolls in excess of £20 per week.

(d) The general administration of the Act is under the control of the Secretary, Department of Social Services, and use is to be made of the machinery of the Invalid and Old-age Pensions Act.

The scheme at the outset is estimated to cost £13,000,000 per annum and apply to approximately 1,000,000 children. The number of "first" children excluded is estimated to be approximately 830,000 or 45 per cent. of the total children under sixteen years of age. Investigation showed that 60 per cent. of married males had only one child.

D.—EMPLOYMENT.

§ 1. Industrial Disputes.

1. **General.**—Information with regard to the collection of particulars and the methods of tabulation of industrial disputes involving stoppage of work has appeared in previous issues of the Official Year Book, and is also given in the annual *Labour Reports* of this Bureau.

In *annual* tabulations particulars are included of all disputes which either *commenced* or were *current* during the year under review. As regards "number of disputes", "establishments involved", and "workpeople involved", therefore, duplication will

* Act No. 8, 1941 (Child Endowment Act); Act No. 2, 1941 (Pay-roll Assessment Act); and Act No. 3, 1941 (Pay-roll Tax Act).

take place in respect of those disputes which started in and were unsettled at the end of a preceding year; the number involved will, however, be indicated in a footnote, to permit of due allowance being made in any calculations made from the tables.

2. Industrial Disputes Involving Stoppage of Work, Classified in Industrial Groups, 1939.—The following tables give particulars of industrial disputes which either commenced or were current during 1939, classified according to industrial groups.

INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO INDUSTRIAL GROUPS, 1939.

Class.	Industrial Group.	Num-ber.	Estab-lish-ments In-volved.	Workpeople Involved.			Working Days Lost.	Esti-mated Loss in Wages.
				Directly.	In-directly.	Total.		
NEW SOUTH WALES.								
II.	Engineering, metal works, etc.	5	14	670	4,839	5,509	55,191	52,350
III.	Food, drink, etc.	3	3	1,939	..	1,939	22,287	14,600
IV.	Clothing, textiles, etc.	1	1	158	..	158	316	378
VI.	Other manufacturing	2	2	214	262	476	18,184	9,375
VII.	Building	3	3	41	16	57	503	424
VIII.	(a) Coal-mining	357	418	132,587	4,106	136,693	274,261	318,577
	(b) Other mining, quarries, etc.	1	1	95	..	95	380	400
IX.	Railway and tramway services	1	1	44	..	44	1,056	800
XI.	Shipping, wharf labour, etc.	1	1	1,663	..	1,663	29,934	17,414
XIV.	Miscellaneous	12	16	1,890	7	1,897	8,011	5,012
	Total	386	460	139,301	9,230	148,531	410,183	419,330
VICTORIA.								
III.	Food, drink, etc.	1	1	20	..	20	20	16
IV.	Clothing, textiles, etc.	2	2	58	..	58	98	42
VI.	Other manufacturing	1	1	68	..	68	272	118
VIII.	(a) Coal-mining	1	1	1,000	..	1,000	16,000	15,500
XIV.	Miscellaneous	5	5	843	180	1,023	10,923	4,270
	Total	10	10	1,989	180	2,169	27,343	19,946
QUEENSLAND.								
V.	Books, printing, etc.	1	2	132	..	132	396	400
VIII.	(a) Coal-mining	2	2	80	2	82	764	913
XIV.	Miscellaneous	2	2	161	..	161	710	440
	Total	5	6	373	2	375	1,870	1,753
SOUTH AUSTRALIA.								
II.	Engineering, metal works, etc.	1	1	25	5	30	1,590	1,311
XIV.	Miscellaneous	1	1	145	..	145	290	105
	Total	2	2	170	5	175	1,880	1,416
WESTERN AUSTRALIA.								
II.	Engineering, metal works, etc.	2	2	148	1	149	590	450
III.	Food, drink, etc.	1	1	244	35	279	9,765	4,500
VIII.	(b) Other mining, quarries, etc.	3	3	696	109	805	3,425	4,328
XI.	Shipping, wharf labour, etc.	1	1	20	..	20	320	300
	Total	7	7	1,108	145	1,253	14,100	9,576

INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO INDUSTRIAL GROUPS, 1939—continued.

Class.	Industrial Group.	Number.	Estab- lish- ments In- volved.	Workpeople Involved.			Working Days Lost.	Esti- mated Loss in Wages.
				Directly.	In- directly.	Total.		
TASMANIA.								£
VIII.	(a) Coal-mining	2	2	17	..	17	42	43
XI.	Shipping, wharf labour, etc. ..	1	1	16	..	16	64	..
XIV.	Miscellaneous	1	1	20	..	20	60	50
	Total	4	4	53	..	53	166	93
NORTHERN TERRITORY.								
IX.	Railway and tramway services	2	16	234	40	274	3,642	3,600
AUSTRALIA.								
II.	Engineering, metal works, etc. . .	8	17	843	4,845	5,688	57,371	54,111
III.	Food, drink, etc.	5	5	2,203	35	2,238	32,072	19,116
IV.	Clothing, textiles, etc.	3	3	216	..	216	414	420
V.	Books, printing, etc.	1	2	132	..	132	396	400
VI.	Other manufacturing	3	3	282	262	544	18,456	9,493
VII.	Building	3	3	41	16	57	563	424
VIII.	(a) Coal-mining	362	423	133,684	4,108	137,792	291,067	335,033
	(b) Other mining, quarries, etc.	4	4	791	109	900	3,805	4,728
IX.	Railway and tramway services	3	17	278	40	318	4,698	4,400
XI.	Shipping, wharf labour, etc. . .	3	3	1,699	..	1,699	30,318	17,714
XIV.	Miscellaneous	21	25	3,059	187	3,246	19,994	9,877
	Total*	416	505	143,228	9,602	152,830	459,154	455,716

* The following dispute commenced in and was uncompleted at the end of the year, 1938, and in respect of "Number of Disputes," and "Number of Establishments," is duplicated in the figures for 1939, namely:—

State.	Number of Disputes.	Number of Establishments.	Number of Workers Involved.
New South Wales	1	1	1,663

3. Industrial Disputes, Australia, 1935 to 1939.—The following table gives particulars of the number of industrial disputes, the number of workpeople involved, and the losses in working days and wages caused by disputes which either commenced or were current during each of the years 1935 to 1939, classified according to industrial groups.

Satisfactory comparisons of the frequency of industrial disputes in classified industries can be made only after omitting those which are recorded for coal-mining (Group VIII(a)). For 1913 the proportion of disputes in the mining industry represented practically 50 per cent. of the total number recorded. In subsequent years the proportion remained high, ranging from 45 per cent. in 1917 and 1918 to as much as 87 in 1939. In the past,

five years working days lost through dislocations involving workpeople engaged in coal-mining amounted to 1,914,372, representing 57 per cent. of the total loss of working days during the period :—

INDUSTRIAL DISPUTES : AUSTRALIA.

Year.	Manu- facturing. (Groups I. to VI.)	Build- ing. (Group VII.)	Mining (Group VIII.)		Transport, Land and Sea. (Groups IX. to XI.)	Miscel- laneous. (Groups XII. to XIV.)	ALL GROUPS.
			Coal- mining.	Other Mining, etc.			
1935 ..	21	4	108	9	21	20	183
1936 ..	30	3	171	13	3	15	235
1937 ..	59	2	249	12	6	14	342
1938 ..	43	3	314	6	4	6	376
1939 ..	20	3	362	4	6	21	416
1935-39 ..	173	15	1,204	44	40	76	1,552

NUMBER.

WORKPEOPLE INVOLVED.

1935 ..	4,086	49	31,510	2,795	6,142	2,731	47,322
1936 ..	5,480	581	45,600	7,022	375	1,529	60,587
1937 ..	17,353	30	72,492	3,543	574	2,181	96,173
1938 ..	12,822	4,270	122,379	1,820	1,870	793	143,954
1939 ..	8,818	57	137,792	900	2,017	3,246	152,830
1935-39 ..	48,559	4,987	409,782	16,080	10,978	10,480	500,866

WORKING DAYS LOST.

1935 ..	62,423	1,294	162,633	64,824	100,774	103,176	495,124
1936 ..	199,641	2,337	224,113	37,582	8,087	25,488	497,248
1937 ..	244,869	150	307,699	20,736	2,959	10,668	557,111
1938 ..	294,062	34,520	928,860	20,224	59,068	1,260	1,337,994
1939 ..	108,709	563	291,067	3,805	35,016	19,994	450,154
1935-39 ..	879,704	38,894	1,914,372	147,171	205,904	160,586	3,346,631

ESTIMATED LOSS IN WAGES.

1935 ..	£ 47,079	£ 1,143	£ 164,648	£ 57,791	£ 61,249	£ 58,686	£ 390,596
1936 ..	160,259	1,840	249,767	30,408	5,480	15,065	468,825
1937 ..	165,018	211	313,052	20,133	2,572	5,159	506,745
1938 ..	239,222	31,847	973,659	23,103	35,062	927	1,303,820
1939 ..	83,540	424	333,033	4,728	22,114	9,877	453,716
1935-39 ..	695,718	35,471	2,036,159	142,163	126,477	89,714	3,125,702

4. Summary of Disputes (involving Stoppage of Work), 1935 to 1939.—The following table gives particulars of the number of industrial disputes in each State in the years 1935 to 1939 together with the workpeople involved, the working days lost, and the estimated loss in wages:—

INDUSTRIAL DISPUTES : SUMMARY.

State or Territory.	Year.	Number.	Establishments Involved.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
				Directly.	In-directly.	Total.		
								£
New South Wales	1935	134	162	31,350	2,055	33,405	301,345	237,707
	1936	188	231	50,557	1,728	52,285	432,513	414,375
	1937	296	391	84,323	3,515	87,838	434,617	403,158
	1938	340	483	116,378	8,160	124,538	1,029,427	1,012,915
	1939	386	460	139,301	9,230	148,531	410,183	419,330
Victoria	1935	20	30	7,658	243	7,901	45,713	31,280
	1936	10	22	1,599	224	1,823	12,251	9,899
	1937	11	11	3,770	44	3,814	70,753	57,182
	1938	19	38	7,678	2,612	10,290	104,336	87,595
	1939	10	10	1,989	180	2,169	27,313	19,946
Queensland	1935	13	29	1,794	201	1,995	73,351	57,960
	1936	12	12	1,052	194	1,246	14,953	12,325
	1937	10	11	792	203	995	15,681	15,699
	1938	5	9	2,657	..	2,657	87,539	87,379
	1939	5	6	373	2	375	1,870	1,753
South Australia	1935	3	5	340	..	340	2,463	1,557
	1936	1	1	101	..	101	505	400
	1937	6	15	1,257	52	1,309	3,951	2,464
	1938	2	2	73	52	125	249	223
	1939	2	2	170	5	175	1,880	1,416
Western Australia	1935	11	29	3,597	6	3,603	71,976	61,901
	1936	19	49	3,408	1,309	4,717	32,408	27,714
	1937	12	45	1,445	220	1,665	14,397	12,570
	1938	7	21	2,994	650	3,644	43,768	43,278
	1939	7	7	1,108	145	1,253	14,100	9,578
Tasmania	1935	1	1	70	4	74	148	91
	1936	4	4	369	6	375	3,718	3,212
	1937	4	7	374	5	379	17,016	14,964
	1938	2	4	2,200	..	2,200	72,175	72,030
	1939	4	4	53	..	53	166	93
Northern Territory	1935	1	1	4	..	4	128	100
	1936	1	1	32	8	40	1,200	900
	1937	3	3	160	13	173	696	708
	1938	1	1	500	..	500	500	400
	1939	2	16	234	40	274	3,642	3,600
Aust. Cap. Territory	1935	..	..	..	..	..	..	..
	1936	..	..	..	..	..	..	..
	1937	..	..	..	..	..	..	..
	1938	..	..	..	..	..	..	..
	1939	..	..	..	..	..	..	..
Australia	1935	183	257	44,813	2,509	47,322	495,124	390,596
	1936	235	320	57,118	3,469	60,587	497,248	468,825
	1937	342	483	92,121	4,052	96,173	557,111	506,745
	1938	376	558	132,480	11,474	143,954	1,337,994	1,303,820
	1939	416	505	143,228	9,602	152,830	459,154	455,716

Detailed information in regard to the disputes during the years 1935 to 1939 and previous years is given in the *Labour Reports* issued by this Bureau.

5. **Particulars of Principal Disputes in 1939.**—(i) *General.* The preceding tables show the number and effect of all disputes for 1939 classified according to Industrial Groups. Increases occurred in several of the principal groups during 1939 in respect of workpeople involved, but the number of working days and amount of wages lost showed a substantial decrease. Of the total number of disputes no less than 87 per cent. were in connexion with the coal-mining industry, mostly in New South Wales. Wages lost in this industry in New South Wales were estimated at £318,577, or 70 per cent. of the total estimated loss of wages in Australia, namely, £455,716. Brief particulars are given in the following paragraphs of the disputes mainly responsible for losses in working days and wages in 1939.

(ii) *Interstate.*—Disputes which extend beyond the limits of a single State, while in some cases extensive, are comparatively few in number. These disputes rarely start on an interstate basis, but develop into such through the interdependence of trade union organizations. During 1939 no disputes of an interstate character occurred.

(iii) *New South Wales.*—A proposed reduction in bonus rates was given as the cause of a dispute involving about 400 rubber workers at the works of the Dunlop-Perdriau Rubber Co. Ltd. at Drummoyne in April, 1939. Efforts to settle the dispute by direct negotiations were unavailing, and the employees refused to obey an order by the union that they return to work. An application by the employers to the Commonwealth Court of Conciliation and Arbitration for the de-registration of the union and the suspension or cancellation of an award of the Court was adjourned pending the result of a compulsory conference called by Judge Drake-Brockman. This conference succeeded in settling the dispute and work was resumed after a stoppage of about six weeks, the application for de-registration being allowed to stand over.

A stoppage involving about 300 coal-miners at Elrington Colliery in April, 1939, was reported to have been caused by the failure of the management to adhere to the principle of "seniority" when manning the coal-loader. The dispute lasted for about ten weeks and was finally settled by negotiations between the management and representatives of the employees.

The dismissal of an employee who was alleged to be unfit for work was given as the cause of a stoppage involving coal-miners at the Pelton Colliery, Bellbird, in May, 1939. Several attempts to arrive at a satisfactory settlement of the dispute were unsuccessful, and the mine remained idle for nearly three months. Finally a settlement was arrived at by the management undertaking to find suitable work for the employee, and work was resumed.

A claim by engine-drivers and firemen for higher wages and improved working conditions was the cause of a stoppage of work by the employees of ten engineering and metal trade firms in Sydney in May, 1939. Negotiations between the employers and employees having failed to effect a settlement, a compulsory conference was ordered by Judge O'Mara of the Commonwealth Court of Conciliation and Arbitration. At this conference both sides agreed to accept the terms of settlement, which provided that the grievances of the employees should be referred to the Court. Besides approximately 120 engine-drivers directly involved in the dispute about 1,500 other persons in the industry were idle for nine days.

More than 3,000 persons employed in the mining industry at Broken Hill were thrown idle by a dispute involving about 40 engine-drivers and firemen at the Central Power Station in June, 1939. The cause of the dispute was the alleged unfair treatment by the manager of a member of the union. After a stoppage of about two weeks, negotiations between the management and representatives of the union brought about a settlement of the dispute, the management agreeing to give the employee concerned six months' trial on the job to which he considered he was entitled.

As a protest against the "National Register" coal-mining employees in New South Wales stopped work for one day in July, 1939. There was no dispute with the employers and work was resumed next day without negotiations.

Objection to the action of the Commissioner in transferring a man to a lighter job was given as the cause of a dispute affecting employees of the Metropolitan Meat Industry Commission at Homebush abattoirs in November, 1939. Approximately 200 sheep slaughtermen ceased work, and an application was made by the employers to the Industrial Commission for the de-registration of the union and cancellation of the preference clause in the award. A conference convened by Mr. Justice Cantor failed to find a basis for settlement of the dispute, and the Industrial Commission decided that the union would be de-registered and the preference clause abolished unless work was resumed immediately. As a protest against this decision the remainder of the employees (about 1,300) ceased work. A conference was then called by the Minister for Labour and Industry (Mr. Gollan) and terms of settlement were agreed to by representatives of the parties involved. These terms provided that if work was resumed the employers would not oppose re-registration of the union and restoration of the preference clause, and that minor points in dispute would be discussed at a conference of the parties after work was resumed. The employees returned to work after a stoppage lasting more than two weeks.

(iv) *Victoria*.—Objection to a clause in the interim award, which provided for an eight-hour day exclusive of half an hour meal break instead of an eight-hour day inclusive of the meal break as provided in the old award, was the cause of a dispute at the State Coal-mine, Wonthaggi, in July, 1939. After a stoppage of about three weeks the employees decided to accept the terms for settlement arrived at by a compulsory conference convened under the authority of the Commonwealth Conciliation and Arbitration Act. The terms provided that surface hands should work the eight-and-a-half-hour shift under the new award, on condition that, if the Full Court decided they should only work eight hours, they would be paid for the additional half-hour at ordinary rates as from the date of resumption of work up till the date of the order of the Full Arbitration Court.

(v) *Western Australia*.—Failure by the employees to obtain an agreement involving shorter hours and increased wages was given as the cause of a stoppage of work in the biscuit manufacturing industry at Fremantle in July, 1939. The dispute, which involved nearly 300 workers and lasted for about six weeks, was finally settled by intervention of the President of the State Arbitration Court. The most important of the terms of settlement was that the employers agreed to retire from a long-dated agreement under which the employees carried on for years and to negotiate for a new award.

6. **Duration of Industrial Disputes, 1939.**—The following table gives particulars of industrial disputes during 1939 according to certain adopted limits of duration:—

INDUSTRIAL DISPUTES : DURATION, AUSTRALIA, 1939.

Limits of Duration.	Number.	Workpeople Involved.			Working Days Lost.	Estimated Loss in Wages.
		Directly.	Indirectly.	Total.		
						£
1 day and less	230	96,184	1,191	97,375	97,375	106,970
2 days and more than 1 day	60	16,398	872	17,270	34,540	35,648
3 days and more than 2 days	38	10,103	1,374	11,477	34,431	36,427
Over 3 days and less than 1 week (6 days)	34	7,540	494	7,944	36,387	37,056
1 week and less than 2 weeks	34	6,864	2,169	9,033	75,323	67,730
2 weeks and less than 4 weeks	10	5,002	3,224	8,226	116,182	116,882
4 weeks and less than 8 weeks	6	618	307	925	25,463	15,908
8 weeks and over	4	519	61	580	39,453	39,089
Total	416	143,228	9,602	152,830	459,154	455,716

7. Causes of Industrial Disputes, 1913 to 1939.—The following table shows the principal causes of the industrial disputes which occurred in 1913 and from 1934 to 1939:—

INDUSTRIAL DISPUTES: CAUSES, AUSTRALIA.

Causes of Dispute.	1913.	1934.	1935.	1936.	1937.	1938.	1939.
NUMBER.							
1. Wages—							
(a) For increase	42	10	9	16	28	10	13
(b) Against decrease ..	4	3	5	1	1	2	4
(c) Other wage questions ..	31	31	44	48	77	67	58
2. Hours of Labour—							
(a) For reduction	3	..	..	1	2	2	12
(b) Other disputes re hours ..	7	6	2	4	4	1	9
3. Trade Unionism—							
(a) Against employment of non-unionists	8	4	4	4	5	5	1
(b) Other union questions ..	5	8	12	16	24	43	48
4. Employment of particular Classes or Persons	44	52	53	81	80	106	107
5. Working Conditions	51	25	40	43	72	73	90
6. Sympathetic	5	3	1	5	11	4	1
7. Other Causes	8	13	13	16	38	63	73
Total	208	155	183	235	342	376	416

WORKPEOPLE INVOLVED.

1. Wages—							
(a) For increase	8,633	7,210	2,161	2,014	7,678	967	4,384
(b) Against decrease	503	2,817	339	40	15	914	279
(c) Other wage questions ..	7,160	8,335	11,804	12,930	21,588	21,399	17,094
2. Hours of Labour—							
(a) For reduction	460	..	..	20	429	4,050	4,150
(b) Other disputes re hours ..	1,819	309	1,601	488	1,474	36	3,383
3. Trade Unionism—							
(a) Against employment of non-unionists	5,370	383	581	1,612	3,542	1,659	21
(b) Other union questions ..	1,418	2,184	2,532	4,011	5,889	13,241	16,030
4. Employment of particular Classes or Persons	11,370	15,638	11,497	22,078	20,401	30,020	28,691
5. Working Conditions	10,785	6,062	11,298	10,985	17,854	40,206	28,002
6. Sympathetic	947	1,045	22	1,062	3,233	1,260	2,600
7. Other Causes	1,758	6,873	5,487	4,447	14,068	30,202	48,106
Total	50,283	50,858	47,322	60,587	96,173	143,954	152,830

WORKING DAYS LOST.

1. Wages—							
(a) For increase	100,069	108,277	72,567	33,439	144,372	32,390	24,115
(b) Against decrease	9,438	35,459	1,621	120	30	7,340	4,472
(c) Other wage questions ..	78,183	40,219	73,020	32,068	107,904	116,468	67,550
2. Hours of Labour—							
(a) For reduction	2,774	..	..	340	1,897	34,300	21,636
(b) Other disputes re hours ..	15,111	1,748	48,878	9,577	4,442	900	10,752
3. Trade Unionism—							
(a) Against employment of non-unionists	91,002	3,263	2,615	7,509	20,750	2,906	63
(b) Other union questions ..	32,388	10,774	11,696	9,616	9,569	80,280	52,086
4. Employment of particular Classes or Persons	191,723	110,166	144,453	266,310	138,428	104,454	81,101
5. Working Conditions	73,562	26,223	64,612	119,475	85,746	744,747	108,409
6. Sympathetic	24,066	11,174	44	10,209	11,230	4,440	2,600
7. Other Causes	5,212	23,083	75,618	8,585	32,743	210,369	86,370
Total	623,528	370,386	495,124	497,248	557,111	1,337,994	459,154

The main causes of industrial disputes are "Wage" questions, "Working Conditions," and "Employment of Particular Classes or Persons." In each of the years 1913 to 1925 with the exception of 1922, the number of dislocations concerning "Wages" exceeded those caused by any other question, and varied between a minimum proportion of 26 per cent. in 1922 and a maximum of 45 per cent. in 1916. Since 1925 the number of disputes concerning "Wages" has averaged 24 per cent. of the total number for each year. The majority of the dislocations of work classified under the heading, "Employment of Particular Classes or Persons," are stoppages for the purpose of protesting against the dismissal of certain employees, who, in the opinion of their fellow-workers, have been unfairly treated or victimized. This class of dispute occurs very frequently in the coal-mining industry, and has been the principal cause of industrial disturbance in most of the years since 1925, averaging 31 per cent. of the total number for each year during that period. The number of disputes over "Trade Union" questions has represented a fairly uniform proportion of the total number of disputes during the years under review, while stoppages of work concerning "Hours of Labour" increased during 1926 and 1927, but have been relatively unimportant during recent years.

8. Results of Industrial Disputes.—The results of industrial disputes during each of the past six years are given in the following table :—

INDUSTRIAL DISPUTES CLASSIFIED ACCORDING TO RESULTS: AUSTRALIA.

Year.	Number.				Workpeople Involved.				Working Days Lost.			
	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.	In Favour of Workpeople.	In Favour of Employer.	Compromise.	Indefinite.
1934..	29	102	14	9	7,025	31,220	9,620	2,729	40,048	179,126	126,081	19,059
1935..	44	105	17	15	9,312	30,338	4,359	3,179	67,933	346,666	62,007	10,194
1936..	44	165	7	19	13,997	40,279	908	5,403	248,363	179,748	7,027	62,110
1937..	86	206	7	41	23,939	58,666	713	12,273	192,181	285,755	3,744	37,395
1938..	94	229	18	34	24,953	75,100	6,037	36,201	90,375	149,959	45,205	1,022,521
1939..	75	302	19	20	22,517	117,445	6,233	6,635	104,192	256,602	43,509	54,791

9. Methods of Settlement.—The following table gives a classification of the methods of settlement according to the adopted schedule :—

INDUSTRIAL DISPUTES: METHODS OF SETTLEMENT, AUSTRALIA.

Methods of Settlement.	1913.	1934.	1935.	1936.	1937.	1938.	1939.
NUMBER.							
Negotiation—							
Direct between employers and employees or their representatives	119	84	130	174	265	245	277
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act	17	2	3	16	9	17	17
Under State Industrial Act—							
By intervention, assistance, or compulsory conference	19	10	7	3	6	3	5
By reference to Board or Court	22	9	6	6	4	9	2
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference	4	5	5	2	2	9	6
By filling places of workpeople on strike or locked out	13	2	8	4	5	..	1
By closing-down establishment permanently	1	2	4	..	1	..	2
By other methods	13	40	18	30	48	92	106
Total	208	154	181	235	340	375	416

INDUSTRIAL DISPUTES: METHODS OF SETTLEMENT, AUSTRALIA—*continued.*

Method of Settlement.	1913.	1934.	1935.	1936.	1937.	1938.	1939.
WORKPEOPLE INVOLVED.							
Negotiation—							
Direct between employers and employees or their representatives	23,357	25,469	30,360	44,251	72,430	70,481	80,195
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act ..	3,172	891	285	5,061	2,764	4,845	2,489
Under State Industrial Act—							
By intervention, assistance, or compulsory conference ..	6,505	4,559	3,867	291	1,804	1,844	4,925
By reference to Board or Court ..	12,774	1,666	1,445	1,746	428	5,519	429
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	659	4,335	2,017	339	480	21,289	3,268
By filling places of workpeople on strike or locked out ..	658	138	3,670	141	825	..	20
By closing-down establishment permanently ..	170	444	108	..	86	..	178
By other methods ..	2,988	13,092	5,436	8,758	16,773	38,313	61,326
Total ..	50,283	50,594	47,188	60,587	95,590	142,291	152,830

WORKING DAYS LOST.

Negotiation—							
Direct between employers and employees or their representatives	94,400	182,260	192,903	234,373	396,410	203,175	245,709
By intervention or assistance of distinctive third party—not under Commonwealth or State Industrial Act ..	26,335	20,019	3,211	202,949	18,517	64,220	52,943
Under State Industrial Act—							
By intervention, assistance, or compulsory conference ..	187,871	58,801	117,762	3,047	48,769	11,796	35,647
By reference to Board or Court ..	221,769	10,474	16,961	24,503	7,354	326,881	3,366
Under Commonwealth Conciliation and Arbitration Act—							
By intervention, assistance, or compulsory conference ..	2,105	46,814	24,601	7,152	4,120	629,075	46,450
By filling places of workpeople on strike or locked out ..	14,139	138	74,873	2,581	12,571	..	20
By closing-down establishment permanently ..	20,400	4,486	7,546	..	172	..	3,892
By other methods ..	56,509	41,322	48,943	22,643	31,162	72,913	71,127
Total ..	623,528	364,314	486,800	497,248	519,075	1,308,060	459,154

The majority of disputes are settled by direct negotiations between employers and employees, the proportion so settled since 1913 ranging between 43 per cent. in 1925 and 75 per cent. in 1930. Of the 416 disputes settled during 1939, 277 or 67 per cent. were settled by this method. The proportion of dislocations settled by compulsory conferences or the intervention and assistance of officials under State or Commonwealth Arbitration Acts has varied considerably during the period under review, ranging from 3 per cent. in 1915 to 22 per cent. in 1913. The proportion in 1939 was 3 per cent. In connexion with the comparatively large number of disputes which are classified as having been settled "By other methods," many stoppages of work occur each year, principally at collieries, but the cause of such stoppages is not officially known to the employers or their representatives. Such stoppages usually last for one day, and work is resumed without negotiations for a settlement of the trouble.

§ 2. Fluctuations in Employment.

1. **General.**—The particulars given in the following tables are based upon information furnished by the secretaries of trade unions. The membership of the unions regularly reporting exceeds 470,000, consisting predominantly of males and representing about 54 per cent. of the total trade union membership, and between 20 and 25 per cent. of all wage and salary earners. Unemployment returns are not collected from unions the members of which are in permanent employment, such as railway and tramway employees, and public servants, or from unions whose members are casually employed (wharf labourers, etc.). Very few of the unions pay unemployment benefit, but the majority of the larger organizations have permanent secretaries and organizers who are closely in touch with the members and with the state of trade within their particular industries. In many cases unemployment registers are kept, and provision is made in the rules for payment of reduced subscriptions by members out of work. Seasonal fluctuations in unemployment have been provided for by collecting returns quarterly since 1st January, 1913. The quarterly figures relate to persons who were out of work for three days or more during a specified week in each quarter and exclude persons out of work through strikes and lock-outs, except those outside the industry who are indirectly affected. The yearly figures quoted represent the average of the four quarters.

The value of the percentages of unemployment derived from trade union returns is in the indication they give of the trend of unemployment among trade unionists as reported by secretaries of trade unions.

2. **Unemployment.**—(i) *Summary for Australia, 1935 to 1939.* The following table gives a summary for Australia for the last five years and quarterly for the years 1936 to 1939. Particulars of unemployment percentages in 1940 will be found in the Appendix :—

UNEMPLOYMENT : AUSTRALIA.

Period.	Unions.	Membership.	Unemployed.	
			Number.	Percentage.
1935 Year	396	435,938	71,823	16.5
1936 "	392	441,311	53,992	12.2
1937 "	387	449,588	41,823	9.3
1938 "	390	466,325	40,138	8.7
1939 "	396	476,918	45,967	9.7
1936 March Quarter	395	445,294	59,621	13.4
June "	394	446,564	57,001	12.8
September "	390	436,139	52,482	12.0
December "	390	437,246	46,863	10.7
1937 March "	388	443,446	44,004	9.9
June "	387	447,714	43,584	9.7
September "	387	451,584	42,145	9.3
December "	387	455,608	37,558	8.2
1938 March "	386	462,258	36,751	8.0
June "	386	463,748	39,464	8.6
September "	394	468,174	42,672	9.2
December "	395	471,121	41,667	8.9
1939 March "	395	474,277	45,545	9.6
June "	398	477,149	45,183	9.5
September "	397	478,000	48,888	10.2
December "	392	478,245	44,253	9.3

NOTE.—Similar figures for each of the four quarters of the years since 1912 will be found in the *Labour Reports*. The quarterly figures show the number of persons who were out of work for three days or more during a specified week in each quarter, and the annual figures, the average of the four quarters; the returns do not include persons out of work through strikes or lock-outs, except those outside the industry concerned who are indirectly affected.

The highest percentage of unemployed yet recorded (30.0) was reached in the quarter ended June, 1932.

(ii) *Australia by Industrial Groups.* The next table shows the percentages unemployed in industrial groups. Industries or occupations in which employment is stable, such as railways, and those which are subject to exceptional fluctuations, such as wharf labour, agricultural, pastoral, etc., are not included. Other occupations—domestic, hotel employees, etc.—are included in the "Other and Miscellaneous" group, as their returns are not sufficiently representative:—

UNEMPLOYMENT IN INDUSTRIAL GROUPS: AUSTRALIA, 1939.

Industrial Group.	Number Reporting.		Unemployed.	
	Unions.	Members.	Number.	Percentage.
Manufacturing—				
I. Wood, Furniture, etc. ..	16	18,579	2,956	15.9
II. Engineering, Metal Works, etc.	64	88,168	6,768	7.7
III. Food, Drink, Tobacco, etc. ..	55	42,353	7,346	17.3
IV. Clothing, Hats, Boots, etc. ..	22	43,115	5,325	12.4
V. Books, Printing, etc. ..	13	22,057	913	4.1
VI. Other Manufacturing ..	62	49,683	4,748	9.6
VII. Building	46	53,070	4,685	8.8
VIII. Mining, Quarrying, etc. ..	21	25,982	3,320	12.8
X. Land Transport other than Railway and Tramway Services ..	14	19,557	1,543	7.9
IX., XI., XII., XIII., and XIV. Other and Miscellaneous ..	83	114,354	8,363	7.3
All Groups	396	476,918	45,967	9.7

(iii) *States, 1939.* In making interstate comparisons of unemployment percentages, allowances must be made for the circumstance that the industries included in the returns from trade unions are not quite identical in the various States, and that for some States the returns are a more representative sample than for others. The State percentages shown below, therefore, should not be read as indicating the relative degree of unemployment amongst unionists in the individual States but as an indication of the trend of unemployment as reported by the trade unions.

UNEMPLOYMENT, 1939.

State.	Unions Reporting.		Unemployed.	
	Number.	Members.	Number.	Percentage.
New South Wales	116	202,416	22,225	11.0
Victoria	78	125,628	13,032	10.4
Queensland	45	66,139	3,869	5.9
South Australia	56	39,442	3,672	9.3
Western Australia	66	32,834	2,324	7.1
Tasmania	35	10,459	845	8.1
Australia	396	476,918	45,967	9.7

(iv) *States, 1935 to 1939.* The following table gives the percentages in each State from 1935 to 1939:—

UNEMPLOYMENT : PERCENTAGES.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
	%	%	%	%	%	%	%
1935 Year ..	20.6	14.0	8.7	17.6	13.4	13.2	16.5
1936	15.4	10.7	7.8	10.8	8.1	9.8	12.2
1937	10.9	9.0	7.3	8.2	5.6	7.0	9.3
1938	9.9	8.6	6.4	8.3	5.7	7.9	8.7
1939	11.0	10.4	5.9	9.3	7.1	8.1	9.7
1937 March Quarter	11.8	9.5	7.7	9.5	5.4	7.8	9.9
June	11.4	9.6	7.6	8.3	5.6	6.9	9.7
Sept.	10.5	9.5	7.2	8.4	6.6	7.2	9.3
Dec.	10.1	7.3	6.6	6.5	5.0	7.1	8.2
1938 March	9.6	7.3	6.6	6.9	4.8	5.7	8.0
June	9.8	8.5	7.2	7.5	5.3	7.2	8.6
Sept.	10.0	9.7	6.3	10.0	6.1	8.5	9.2
Dec.	10.1	9.0	5.7	8.8	6.5	10.2	8.9
1939 March	10.6	10.8	6.1	9.3	7.3	7.6	9.6
June	10.6	10.4	5.7	9.5	6.2	9.4	9.5
Sept.	11.6	11.2	5.8	9.4	8.2	8.3	10.2
Dec.	11.1	9.0	5.8	9.1	6.6	7.1	9.3

3. **Seasonal Employment in Australia.**—An investigation concerning the extent of seasonal employment in Australia was made during 1929. The State Statisticians were requested to furnish brief reports regarding the industries and callings in their respective States subject to seasonal fluctuations. From the reports received from these officials, supplemented by information from other sources, particulars were compiled and published in Official Year Book, No. 22, and in *Labour Report*, No. 19.

4. **Direct Measures of Employment.**—(i) *General.* In order to supplement the trade union unemployment percentages, the Commonwealth and the State Statisticians have been making for some years past direct monthly collections of employment in factories and retail stores. In the case of factories, these figures give fairly reliable indexes of the course of employment fully a year before the results of the annual collections become available. In the case of retail stores, the figures yield an index of employment where none existed before. These indexes are also published in the *Monthly Review of Business Statistics* and in quarterly press notices.

(ii) *Index of Employment in Factories.* This index is available monthly from July, 1933. "Factories" include all industrial establishments in which four or more hands are employed, or in which power other than hand is used. The index relates to employees on the pay-roll on the pay-day nearest to the 15th of the month, and includes managers, overseers, clerks and all workers except working proprietors and those engaged solely in the delivery and sale of goods.

Up to June, 1940, the index is based on the results of annual factory censuses, and actual mid-monthly factory employment of all persons is published in the *Production Bulletin* issued by this Bureau. Index-numbers for later months, based on returns from selected representative factories, and subject to subsequent revision, may be obtained from the *Monthly Review of Business Statistics* and quarterly press notices on employment

issued by this Bureau. The number of these "sample" factories and their employees as a percentage of all factory employees in the year 1939-40 are shown at the foot of the table.

For the last three columns of the table the Australian index of employment has been divided by an index of employee population in order to compare the change in employment in factories with the change in the number of persons seeking employment generally. The indexes of employee population are based on the numbers of males and females aged 16 to 64 inclusive. These are found by applying vital and migration statistics to the numbers of males and females at varying ages at the Census date. The total index is obtained by taking a mean of the individual indexes weighted by the numbers of males and females in the employee group (wage and salary earners, unemployed, apprentices, and helpers) at the Census of June, 1933. This gives males about three times the weight of females.

The index of total factory employment, divided by the index of employee population fluctuated between 100 and 105 from 1926-27 to 1928-29 (the base year). It fell to 71 in 1931-32, the peak year of the depression, and then rose steadily each year thereafter to 111.6 in 1938-39. The relative employment in factories was considerably higher in 1938-39 than it was in pre-depression years.

There have been changes in the distribution of factory employment. Thus female factory employment began to increase in 1931-32, a year sooner than male employment, and between 1928-29 and 1936-37 it had increased by 4 per cent. more than male employment, after allowing for the growth of employee population. The figures for 1937-38 show that this difference was reduced to 2 per cent. during that period and this margin was maintained in 1938-39.

(iii) *Index of Employment in Retail Stores.* This index is available as from July, 1933. It is based on employment in a "sample" of retail stores, the number of establishments being shown at the foot of the table. As there is no annual census of employment in retail stores, there is no means of knowing how accurately the movement of employment in these stores represents that in the whole field. Consequently this index is much less reliable than the index of employment in factories. The Australian index is an average of the State indexes weighted by the number of persons returned as engaged in "Commerce" at the Census of June, 1933. This census industry class "Commerce" comprises both wholesale and retail dealing, and it is not possible to obtain separate figures for the latter. The numbers returned at the census as in the employee group in this class were, for Australia: males, 212,000; females, 87,000; total, 299,000. The respective percentages returned as totally unemployed in this group were: males, 18.1 per cent.; females, 10.6 per cent.; total, 15.9 per cent. In addition there was considerable part-time work

Unemployment in the census class "Manufacturing" was 22.1 per cent. compared with 15.9 per cent., quoted above, for "Commerce." In either case the increase in employment has been more than sufficient to absorb those returned as unemployed and working part-time at the census as well as the proportion of the normal growth of employee population ordinarily seeking employment in these classes.

(iv) *Estimates of Total Employment in New South Wales, Queensland, and Tasmania.* The New South Wales Index is published by the Government Statistician of New South Wales, and fuller details may be found in the *Official Year Book of New South Wales*. It refers to all wage and salary earners, and is based on the census record of employment at June, 1933, and receipts of wages tax and records of Government employment since that date.

Owing to the effect of enlistments and entry into wage-earning employment of persons not normally wage earners this index of employment and unemployment has been discontinued since April, 1940. A table showing the approximate number of persons employed in the middle of June in the years 1934 to 1940, with the figures at the Census of June, 1933, is published herein, and corresponding monthly totals are published in the *Monthly Review of Business Statistics*.

The Queensland Index published by the Queensland Bureau of Industry is compiled from census results, unemployed insurance contributions, workers' compensation records, and shop and factory returns. Enlisted men have been excluded from the estimates of employment and adjustments have been made to allow for the effect on employment of home-defence training. The figures shown for the three-monthly periods have been corrected for seasonal variation.

The Tasmanian estimate of employment is published by this Bureau and is compiled from the wages tax returns of private employers in respect of their employees, whether subject to or not subject to tax, and from returns of Commonwealth, State and Local Government employment.

INDEX OF EMPLOYMENT IN FACTORIES.

(Base: Average for Year 1928-29 = 100.)

Period.	New South Wales.			Victoria.			Queensland.			South Australia.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Number of Employees ('000) (a)	120.5	44.6	174.1	98.1	51.2	149.3	35.6	7.8	43.4	29.0	6.4	35.4
1928-29 ..	100	100	100	100	100	100	100	100	100	100	100	100
1929-30 ..	90	91	90	96	98	96	95	94	94	87	89	87
1930-31 ..	68	75	70	78	83	80	83	85	84	63	71	64
1931-32 ..	66	79	69	77	90	81	78	84	79	61	76	64
1932-33 ..	73	86	76	87	101	92	80	92	82	68	84	71
1933-34 ..	82	94	85	96	107	100	86	99	88	77	89	80
1934-35 ..	93	107	97	106	113	108	92	105	94	89	97	91
1935-36 ..	104	116	107	117	119	117	97	110	99	104	110	105
1936-37 ..	112	125	115	123	121	123	103	116	106	110	113	111
1937-38 ..	121	134	124	131	126	130	112	123	114	120	121	121
1938-39 ..	124	137	127	132	127	130	117	127	119	118	124	119
1939-40 ..	127	142	131	139	134	137	120	132	122	120	136	123
1939—												
January ..	122	129	123	130	118	126	107	121	110	120	123	120
February ..	123	136	126	132	129	131	112	129	115	123	126	123
March ..	125	139	128	133	132	133	113	133	117	123	130	125
April ..	124	138	127	132	130	131	111	125	113	120	127	121
May ..	124	137	127	133	127	131	117	128	119	117	126	118
June ..	124	136	127	131	125	129	118	126	120	113	123	115
July ..	125	134	126	131	125	129	121	127	122	117	123	118
August ..	124	137	127	131	128	130	124	130	125	118	125	119
September ..	124	139	128	133	129	132	125	134	126	117	129	119
October ..	127	142	131	137	132	135	126	137	128	117	131	120
November ..	129	145	133	140	134	138	123	137	126	118	134	120
December ..	131	144	134	141	132	138	119	133	121	121	134	124
1940—												
January ..	129	139	132	140	132	137	110	125	113	121	138	124
February ..	129	144	133	141	138	140	111	131	115	121	143	125
March ..	130	149	135	142	140	142	115	138	119	123	144	127
April ..	128	148	133	144	139	143	115	132	118	126	148	130
May ..	124	145	129	143	137	141	121	133	123	123	143	127
June(b) ..	129	145	133	142	135	139	126	130	126	121	141	124
Number of Factories in Sample ..	1,901			100			150			147		
Percentage of Employees (d) in Sample in 1939-40 ..	84			19			45			59		

For footnotes see next page.

INDEX OF EMPLOYMENT IN FACTORIES—continued.

(Base: Average for Year 1928-29 = 100.)

Period.	Western Australia.			Tasmania.			Australia.			Australia divided by Index of Employee Population.		
	M.	F.	T.	M.	F.	T.	M.	F.	T.	M.	F.	T.
Number of Employees ('000)(a)	16.0	3.8	19.8	7.7	2.3	10.0	315.9	116.1	432.0	..	..	..
1928-29 ..	100	100	100	100	100	100	100.0	100.0	100.0	100.0	100.0	100.0
1929-30 ..	94	98	94	105	99	104	92.4	94.6	93.0	91.0	92.9	91.5
1930-31 ..	68	76	69	85	83	84	72.9	79.1	74.6	71.0	76.4	72.4
1931-32 ..	61	75	63	84	87	85	70.4	84.1	74.1	67.7	80.0	71.0
1932-33 ..	68	81	70	86	90	87	77.6	93.1	81.8	73.7	87.3	77.4
1933-34 ..	75	85	77	93	89	92	86.1	99.4	89.7	80.8	92.0	84.0
1934-35 ..	83	92	85	101	97	100	96.3	108.4	99.6	89.4	98.9	92.2
1935-36 ..	99	106	100	112	103	110	107.0	116.2	109.4	98.4	105.0	100.2
1936-37 ..	107	113	108	122	103	118	114.4	121.2	116.3	104.1	108.3	105.3
1937-38 ..	110	116	111	130	108	125	122.9	128.0	124.3	110.7	113.0	111.3
1938-39 ..	110	119	112	137	115	132	124.4	130.0	125.9	110.9	113.4	111.6
1939-40 ..	107	123	110	145	126	140	128.9	136.7	131.0	(c)	(c)	(c)
1939—												
January ..	109	118	111	143	121	138	122.3	122.5	122.4	109.0	106.9	108.4
February ..	110	120	112	146	126	141	124.4	131.2	126.2	110.8	114.3	111.7
March ..	110	119	112	145	124	140	125.6	134.0	127.9	111.8	116.7	113.1
April ..	110	118	111	141	125	137	124.3	132.0	126.4	110.5	114.8	111.7
May ..	110	121	112	139	117	134	125.0	130.3	126.5	111.1	113.7	111.7
June ..	108	120	110	135	120	132	124.2	128.5	125.3	110.3	111.6	110.5
July ..	106	120	109	132	116	129	124.4	128.3	125.4	}		
August ..	107	117	108	133	112	128	124.8	130.6	126.3			
September ..	106	120	109	134	108	128	125.6	132.5	127.4			
October ..	107	124	110	139	113	133	128.6	135.9	130.5			
November ..	108	127	111	144	116	138	130.2	137.9	132.2			
December ..	109	128	112	146	117	140	131.0	136.8	132.5			
1940—												
January ..	107	122	110	151	120	144	129.4	134.4	130.7	}		
February ..	108	123	111	154	134	149	130.0	139.9	132.6			
March ..	109	124	112	152	136	148	131.3	143.3	134.5			
April ..	108	124	111	152	145	151	131.0	142.2	134.0			
May ..	108	124	111	149	147	149	129.4	140.3	132.3			
June (b) ..	106	123	110	147	150	147	131.5	138.8	133.4			
Number of Factories in Sample ..		92			49			2,439			2,439	
Percentage of Employees (d) in Sample in 1939-40 ..		10			56			53			53	

(a) Number of employees in the base year, 1928-29, exclusive of working proprietors and those engaged solely on the delivery and sale of goods. (b) Indexes for later months may be obtained from the *Monthly Review of Business Statistics* and quarterly press notices on employment issued by this Bureau. (c) Not available pending revision. (d) The indexes from July, 1940, published in the *Monthly Review of Business Statistics*, are based on sample returns and will be revised. The samples vary in quality, so these percentages are intended to give only a very rough idea of the relative accuracy of the estimates.

INDEX OF EMPLOYMENT IN RETAIL STORES.

(Base: July, 1933 = 100.)

Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.	Australian Index divided by Index of Employee Population.
1933—July ..	100	100	100	100	100	100	100.0	100.0
1933-34 ..	103	107	101	102	99	106	103.7	103.2
1934-35 ..	111	118	106	108	105	108	111.6	109.8
1935-36 ..	118	130	109	114	110	112	119.4	116.2
1936-37 ..	124	137	111	115	115	119	124.7	120.1
1937-38 ..	130	141	112	115	116	118	128.3	122.2
1938-39 ..	132	142	114	114	116	133	130.0	122.5
1939-40 ..	132	144	117	112	115	139	130.9	(a)
1938—								
July ..	134	139	111	114	120	130	129.4	122.5
August ..	129	135	111	112	113	127	126.0	119.2
September ..	128	137	111	118	114	127	126.7	119.8
October ..	129	142	110	113	115	128	128.0	120.9
November ..	132	146	115	116	116	130	131.3	123.9
December ..	148	165	127	124	131	146	146.9	138.5
1939—								
January ..	129	142	113	111	120	137	128.8	121.3
February ..	134	141	113	112	113	131	129.8	122.2
March ..	129	139	113	111	113	132	127.2	119.6
April ..	129	139	112	111	113	133	127.4	119.7
May ..	131	141	114	111	113	134	128.7	120.8
June ..	130	142	118	113	113	138	129.5	121.4
Average 1938-39	132	142	114	114	116	133	130.0	122.5
1939—								
July ..	133	138	116	110	119	138	129.4	(a)
August ..	129	137	114	109	114	134	126.8	
September ..	129	137	114	112	111	133	126.6	
October ..	130	141	114	109	111	135	128.1	
November ..	133	147	117	111	113	139	131.6	
December ..	148	165	131	127	125	154	147.8	
1940—								
January ..	132	144	117	111	118	144	130.9	
February ..	135	139	114	110	115	138	130.0	
March ..	131	140	114	110	116	137	128.6	
April ..	129	144	116	111	115	137	129.5	
May ..	130	145	116	111	114	139	130.4	
June (b) ..	130	149	116	111	114	138	131.1	
Average 1939-40	132	144	117	112	115	139	130.9	(a)
Number of Establishments now furnishing Returns ..	599	102	120	35	69	14	939	..

(a) Not available pending revision.

(b) Indexes for later months may be obtained from the *Monthly Review of Business Statistics* and quarterly press notices on employment, issued by this Bureau.

EMPLOYMENT AND UNEMPLOYMENT OF ALL AVAILABLE WAGE AND SALARY EARNERS : NEW SOUTH WALES

Period.	Proportion of all who are dependent on and available for employment.			
	Including as employed the full-time equivalent of part-time relief workers.		Including all part-time relief workers as unemployed.	
	Employed.	Unemployed.	Employed.	Unemployed.
	%	%	%	%
1933-June (Census) ..	74.4	25.6	73.5	26.5
1933-34	77.9	22.1	75.9	24.1
1934-35	83.8	16.2	81.2	18.8
1935-36	88.6	11.4	86.1	13.9
1936-37	91.5	8.5	90.0	10.0
1937-38	95.7	4.3	94.5	5.5
1938-39	94.9	5.1	93.8	6.2
1939-June	93.7	6.3	92.6	7.4
1940—				
January	94.4	5.6	93.6	6.4
February	95.1	4.9	94.4	5.6
March	95.6	4.4	94.9	5.1

Owing to the effect of enlistments and entry into wage-earning employment of persons not normally wage-earners, the index of employment and unemployment has been discontinued since April, 1940.

In estimating the increase in the number of persons dependent on employment allowance was made for (a) increase in the proportion of females who were wage earners, and (b) youths who were without occupation but were not recorded in the wage-earning group at the 1933 Census. Adjustment for seasonal variations in employment was not made.

At the Census of 30th June, 1933, 15,142 persons dependent on employment in New South Wales were unemployed by reason of illness, accident, etc., or "voluntarily." This number, representing 1.8 per cent. of all persons dependent on employment, is excluded from the above indexes, which relate to percentages of available wage earners employed and unemployed.

The following table, compiled by the Government Statistician of New South Wales, shows the approximate number of persons employed in the middle week of the months specified.

EMPLOYMENT : NEW SOUTH WALES.

Month.	Total in employment. (a)	Total in private employment.	Total employed in factories.	Number employed by employers with ten or more employees in—			
				Mines.	Retail trade.	Wholesale trade.	Offices and commerce.
1933—June (b) ..	594,273	477,577	139,744	15,504	38,544	17,638	20,340
1934—June ..	639,646	518,645	162,700	(c)	(c)	(c)	(c)
1935—June ..	694,815	567,110	182,200	(c)	(c)	(c)	(c)
1936—June ..	741,934	613,631	199,200	18,995	47,653	22,792	25,543
1937—June ..	800,405	652,947	216,900	18,555	49,877	24,808	24,857
1938—June ..	839,511	688,881	229,000	20,980	51,921	25,212	26,297
1939—June ..	831,555	678,577	238,900	20,873	51,667	25,212	27,277
1940—June (d) ..	856,446	700,155	240,800	21,128	51,622	25,871	28,714

(a) Excluding rationed relief workers. (b) Census of 30th June. (c) Comparable figures not available. (d) Excluding men in the Forces who were not on pay sheets of private employers.

The following table has been compiled by the Queensland Bureau of Industry from census results, unemployed insurance contributions, workers' compensation records, and shop and factory returns. The table gives a comprehensive statement of all persons in work (other than relief work) in Queensland, whether as employees, employers, or independent workers.

EMPLOYMENT : QUEENSLAND.

Period.	Numbers in Work.			
	Employers and workers on own account.	Employees.	Working for no wages.	Total
Average—				
1928-29	86,300	204,400	9,100	299,800
1932-33	93,100	184,600	9,400	287,100
1933-34	94,700	194,700	9,600	299,000
1934-35	96,800	214,500	9,700	321,000
1935-36	98,900	223,500	9,900	332,300
1936-37	100,900	234,500	10,100	345,500
1937-38	103,000	245,800	10,300	359,100
1938-39	105,100	257,700	10,500	373,300
1939-40	106,800	264,500	10,600	381,900
Three months ended				
1939-40—				
July	106,100	265,800	10,500	382,400
August	106,200	263,500	10,600	380,300
September	106,400	261,000	10,600	378,000
October	106,500	260,900	10,600	378,000
November	106,600	262,300	10,600	379,500
December	106,600	261,300	10,600	378,500
January	106,700	264,200	10,600	381,500
February	106,900	267,500	10,600	385,000
March	107,000	268,300	10,600	385,900
April	107,100	267,800	10,600	385,500
May	107,100	265,800	10,600	383,500
June	107,000	267,500	10,700	385,200

In the table above enlisted men have been excluded from the estimates of employment, and adjustments have been made to allow for the effect on employment of home-defence training. The figures shown for the three-monthly periods have been corrected for seasonal variation.

EMPLOYMENT: TASMANIA.

Period.	Private Industry.			Public Authorities.			Total Employment— Public and Private.		
	M.	F.	Total.	M.	F.	Total.	M.	F.	Total.
1936-37 ..	30,858	9,522	40,380	10,708	1,763	12,561	41,656	11,285	52,941
1937-38 ..	34,001	10,685	44,686	10,581	1,825	12,406	44,582	12,510	57,092
1938-39 ..	37,849	12,184	50,033	10,488	1,879	12,367	48,337	14,063	62,400
1939-40 (a) ..	39,059	13,151	52,810	10,725	1,972	12,697	50,384	15,123	65,507
1938-39—									
September ..	35,933	11,477	47,410	10,593	1,875	12,468	46,526	13,352	59,878
October ..	36,417	11,553	47,970	10,701	1,879	12,580	47,118	13,432	60,550
November ..	37,670	11,765	49,435	10,561	1,879	12,440	48,231	13,644	61,875
December ..	38,463	12,376	50,839	10,728	1,843	12,571	49,191	14,219	63,410
January ..	39,006	13,249	52,255	10,249	1,784	12,033	49,255	15,033	64,288
February ..	39,435	12,850	52,285	10,624	1,913	12,537	50,059	14,763	64,822
March ..	41,728	13,616	55,344	10,637	1,903	12,540	52,365	15,519	67,884
April ..	39,825	12,543	52,368	10,187	1,895	12,082	50,012	14,438	64,450
May ..	38,863	12,191	51,054	10,111	1,911	12,022	48,974	14,102	63,076
June ..	36,964	11,883	48,847	10,208	1,925	12,133	47,172	13,808	60,980
1939-40—	(a)	(a)	(a)				(a)	(a)	(a)
July ..	37,236	11,626	48,862	10,100	1,948	12,048	47,336	13,574	60,910
August ..	37,442	11,823	49,265	10,317	1,958	12,275	47,759	13,781	61,540
September ..	37,412	11,982	49,394	10,384	1,950	12,334	47,796	13,932	61,728
October ..	38,210	11,872	50,082	10,665	1,948	12,613	48,875	13,820	62,695
November ..	38,066	12,331	51,300	10,672	1,963	12,635	49,638	14,297	63,935
December ..	40,082	13,341	53,423	10,960	1,955	12,915	51,042	15,296	66,338
January ..	41,951	13,901	55,855	10,828	1,865	12,693	52,779	15,769	68,548
February ..	41,676	13,230	54,906	11,051	1,993	13,044	52,727	15,223	67,950
March ..	42,088	14,918	57,006	11,007	1,999	13,006	53,185	16,017	70,102
April ..	40,792	14,541	55,333	11,060	2,039	13,099	51,852	16,580	68,432
May ..	41,048	14,359	55,407	11,035	2,019	13,054	52,083	16,378	68,461
June ..	39,012	13,883	52,895	10,531	2,024	12,555	49,543	15,907	65,450

(a) Subject to revision.

The table above is compiled from the wages tax returns of private employers in respect of their employees, whether subject to or not subject to tax, and from returns of Commonwealth, State and Local Government employment.

For each month of 1938-39 the figures in the table may be regarded as providing a virtually complete record of total employment based on final collected figures. They are a combination of monthly figures received currently and annually, covering both private and public employment. They are deficient only to the inappreciable extent that some relief and other intermittent workers and domestic workers in private homes are not covered by the monthly returns. On the other hand, to the extent that they embrace the majority of workers subject to intermittent employment over the whole year, they reflect fully the seasonal and all other influences upon employment in Tasmania.

For the months since June, 1939, the figures are estimates based upon the current monthly movements of all public authority employment and of about 44 per cent. of total private employment. For a given month the figure of total private employment of the corresponding month of the previous year is changed in the ratio of the change of the current figure of private employment. The indication of the position for all employment in Tasmania given by this technical procedure must be read in the light of other indications of current change.

5. Special Legislation for the Relief of Unemployment.—The position in regard to unemployment in Australia became so serious during 1930 that the usual methods of providing funds for relief works and sustenance were found to be inadequate. The cessation of loans, and the general depression in industry and business, due mainly to the decline in the prices of primary products, brought about an economic crisis in all States. The number of persons thrown out of work increased rapidly with little prospect of conditions improving during the immediate future. The Commonwealth and State Governments realized that special action was necessary to provide additional funds to relieve the distress caused by continued unemployment, as the money ordinarily available was not sufficient to meet the abnormal conditions.

Special grants to the States were made by the Commonwealth Government, while special legislation relating to the relief of unemployment was enacted in practically all the States. In New South Wales, Victoria and Queensland, the Acts provided for special taxation for the purpose of creating funds for relief works and sustenance for the unemployed. The funds necessary for the relief of unemployment in South Australia, Western Australia and Tasmania were provided from Revenue.

Further references to the special legislation relating to unemployment, rates of tax and sustenance payments will be found in *Labour Reports*, Nos. 22 to 30.

§ 3. Apprenticeship.

In Official Year Book No. 16, pp. 602-3, particulars are given of legislation relating to the question of apprenticeship. Tables are included showing the periods of apprenticeship fixed in the awards of the various industrial tribunals of the States and Commonwealth, also the proportion of apprentices to journeymen and journeywomen. This information has been omitted from the present issue. Reference to legislation covering apprenticeship appears in the Appendix to Official Year Book, No. 23.

E.—ASSOCIATIONS.

§ 1. Labour Organizations.

1. *Registration.*—(i) *Under Trade Union Acts.* The benefits obtained by registering trade unions under the Trade Union Acts in force in the various States are not considered of much value, consequently the statistics of registered trade unions of employees do not accurately represent the position of unionism. Further, the returns for past years are so defective as to be practically valueless, inasmuch as no reliable indication is afforded of the numerical and financial position of the unions. Some of the registered unions fail to supply returns; this non-supply may lead to cancellation of the registration. Others have obtained the cancellation of their certificates of registration, the apparent reason being that they proposed to register under the Commonwealth Conciliation and Arbitration Act or a State Arbitration Act. In Queensland, some of the largest labour unions withdrew from registration during 1911, mainly on account of the necessity for closer restriction of their objects as set forth in their rules, consequent on legal decisions affecting trade unions. In Victoria and in South Australia very few of the existing unions are registered under the Trade Union Acts. It will be seen, therefore, that the available information under this heading is too meagre for statistical purposes.

(ii) *Under Industrial Arbitration Acts.* Information with regard to registrations of employers' associations and trade unions under the various State Industrial Arbitration Acts will be found in previous issues of the Official Year Book. The latest information available as to registrations is as follows:—New South Wales, 190 industrial unions of employers and 156 industrial unions of employees, the membership not being available in either case; Queensland, 17 industrial unions of employers with approximately 15,000 members, and 79 industrial unions of employees with approximately 186,000 members; South Australia, 33 organizations of employers with 26,000 members; Western Australia, 31 organizations of employers with 1,150 members, and 135 organizations of employees with 55,000 members. There is no provision in the South Australian Industrial Acts for the registration of organizations of employers, and in Victoria and Tasmania, where Wages Board systems of wage fixation are in operation, organizations of employers and employees are not required to register. Registration under Commonwealth legislation began in 1906. In that and the four years following, there was but one union of employers; another was registered in 1911. The unions of employees registered were 20 in 1906, with 41,413 members. On 31st December, 1939, there were 32 registered organizations of employers and 144 registered organizations of employees, with a total estimated membership for the latter of 770,000.

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 merely a branch of a British or

International union. 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 leading characteristics of each of these types are briefly outlined in *Labour Report No. 2* (pp. 7-9) issued by this Bureau.

(ii) *Number and Membership.* As already stated, the figures for trade unions registered under the Acts do not represent the position of unionism in Australia. In 1912 the Labour and Industrial Branch of the Commonwealth Bureau of Census and Statistics was established and with the cordial co-operation of the officials of the labour organizations comprehensive figures relating to the development of organized labour are now available. The following table shows the position at the end of 1939 :—

TRADE UNIONS : BRANCHES AND MEMBERS, 1939.

State or Territory.	Number of Separate Unions.	Number of Branches.	Number of Members.
New South Wales	200	598	358,391
Victoria	149	398	216,803
Queensland	114	312	180,653
South Australia	117	178	67,282
Western Australia	141	204	67,833
Tasmania	79	69	22,062
Northern Territory	4	..	761
Australian Capital Territory	15	1	1,685
Total	819	1,760	915,470
Australia (a)	380(a)	2,199(b)	915,470

(a) Allowing for interstate duplication. The figures represent the number of distinct organizations and interstate groups of organizations in Australia—not the total number of organizations which are practically independent and self-governing.

(b) See remarks below.

In the preceding table the number of separate unions in each State refers to the number of unions which are represented in each State, exclusive of branches therein, and each union is counted once only. Except in the last line, the number of branches indicates the number of branches of State head offices, which may, of course, themselves be branches of an interstate or larger organization. In taking the total number of separate unions in Australia (see last line but one), it is obvious that, in the case of interstate and similar unions, there will be duplication, since each such union is counted once in each State in which it has any branches. In the figures given in the last line, allowance has been made for this duplication. State branches of interstate or federated unions, as well as sub-branches within a State, are included under the heading "Branches" in the third column—last line. The scheme of organization of these interstate or federated unions varies greatly in character, and the number of separate Commonwealth unions does not, therefore, fairly represent the number of practically independent organizations in Australia. In some of these unions the State organizations are bound together under a system of unification and 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. There are, therefore, 380 distinct organizations and interstate groups of organizations in Australia, having 2,199 State branches and sub-branches, and a total of 915,470 members.

(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 last five years. The number of unions specified refers to the number of different unions represented in each

State and, while interstate or federated unions are counted once in each State in which they are represented, sub-branches within a State are not counted :—

TRADE UNIONS : INDUSTRIAL GROUPS, AUSTRALIA.

Industrial Groups.	1935.	1936.	1937.	1938.	1939.
NUMBER OF UNIONS.					
Manufacturing—	(a)	(a)	(a)	(a)	(a)
I. Wood, Furniture, etc. . .	17 (4)	17 (4)	17 (4)	17 (4)	17 (4)
II. Engineering, Metal Works, etc. . .	61 (21)	63 (21)	63 (22)	63 (22)	64 (22)
III. Food, Drink, Tobacco, etc. . .	63 (32)	69 (33)	70 (35)	70 (34)	72 (35)
IV. Clothing, Hats, Boots, etc. . .	24 (11)	24 (11)	24 (11)	26 (12)	26 (12)
V. Books, Printing, etc. . .	15 (9)	14 (8)	14 (7)	14 (8)	14 (8)
VI. Other Manufacturing . . .	73 (34)	73 (35)	73 (36)	73 (36)	71 (37)
VII. Building . . .	49 (26)	49 (27)	49 (27)	49 (28)	48 (28)
VIII. Mining, Quarrying, etc. . .	16 (13)	16 (13)	15 (12)	15 (12)	16 (13)
IX. Railway and Tramway Services . .	52 (30)	50 (29)	50 (28)	50 (27)	51 (29)
X. Other Land Transport . . .	10 (4)	11 (4)	12 (5)	13 (6)	13 (6)
XI. Shipping, etc. . .	55 (22)	55 (21)	55 (21)	55 (20)	60 (21)
XII. Pastoral, Agricultural, etc. . .	10 (7)	11 (7)	9 (8)	9 (6)	9 (5)
XIII. Domestic, Hotels, etc. . .	19 (14)	20 (15)	20 (15)	20 (16)	19 (18)
XIV. Miscellaneous—					
(i) Banking, Insurance and Clerical . . .	32 (19)	32 (16)	32 (16)	32 (16)	33 (20)
(ii) Public Service . . .	148 (47)	148 (48)	148 (47)	148 (50)	147 (50)
(iii) Retail and Wholesale . . .	8 (8)	8 (8)	8 (8)	8 (8)	15 (8)
(iv) Municipal, Sewerage and Labouring . . .	16 (11)	16 (11)	16 (11)	16 (12)	20 (11)
(v) Other Miscellaneous . . .	108 (42)	108 (43)	108 (45)	123 (49)	124 (53)
Total . . .	776 (354)^a	784 (356)^a	783 (358)^a	801 (366)^a	819 (380)^a

NUMBER OF MEMBERS.

Manufacturing—					
I. Wood, Furniture, etc. . .	27,079	25,365	27,465	27,831	27,990
II. Engineering, Metal Works, etc. . .	76,070	79,047	83,993	94,228	99,731
III. Food, Drink, Tobacco, etc. . .	68,292	72,129	76,702	75,753	80,328
IV. Clothing, Hats, Boots, etc. . .	59,484	62,269	66,323	66,427	68,847
V. Books, Printing, etc. . .	18,808	19,425	20,461	21,661	22,303
VI. Other Manufacturing . . .	44,388	46,832	49,323	48,410	52,074
VII. Building . . .	51,034	56,727	59,484	47,933	45,651
VIII. Mining, Quarrying, etc. . .	35,636	40,184	43,912	43,429	48,812
IX. Railway and Tramway Services . .	97,443	94,944	97,435	104,523	105,938
X. Other Land Transport . . .	19,339	10,287	15,829	18,969	19,488
XI. Shipping, etc. . .	26,388	27,346	27,611	28,780	28,760
XII. Pastoral, Agricultural, etc. . .	28,782	31,869	34,624	38,424	40,276
XIII. Domestic, Hotels, etc. . .	19,043	16,091	15,933	12,835	13,177
XIV. Miscellaneous—					
(i) Banking, Insurance and Clerical . . .	34,405	35,315	36,044	37,639	39,013
(ii) Public Service . . .	82,776	83,484	84,716	86,797	89,848
(iii) Retail and Wholesale . . .	32,619	32,178	33,055	34,140	36,290
(iv) Municipal, Sewerage and Labouring . . .	38,026	39,603	40,948	45,126	46,552
(v) Other Miscellaneous . . .	38,118	41,723	41,425	52,233	50,392
Total . . .	790,830	814,809	856,283	885,158	915,470

(a) Allowing for interstate duplication.

(iv) *Trade Unions: Numbers of Male and Female Members and Percentages to total Employees, Australia.* The estimated numbers of male and female wage and salary earners (including unemployed) aged 20 years and over have been obtained by increasing the numbers of such persons enumerated at the 1933 Census in ratio to the annual increases in males and females aged 20 to 64 years. Similarly, for wage and salary earners (including unemployed) under 20 years the numbers of such persons at the 1933 Census have been increased in ratio to the annual increases in males and females 15 to 19 years. Further, allowance has been made for (a) increase in the proportion of females who are wage and salary earners and (b) youths who were without occupation but were not recorded in the wage-earning group at the 1933 Census.

Revised Estimates of Employee Population.

Following on tabulation of the results of the National Register of July, 1939, and a further analysis of grades of occupation of persons under age 20 years, as classified at the Census of 1933, it was found necessary to revise the estimated numbers in the wage and salary earning group. These revised estimates are shown below as at December in each year 1935 to 1939. The numbers include all who would normally be classifiable as "available" wage and salary earners (excluding unpaid helpers but including persons unemployed from any cause):—

TRADE UNIONS : NUMBER OF MALE AND FEMALE MEMBERS AND PERCENTAGE TO TOTAL EMPLOYEES, AUSTRALIA.

Particulars.	1935.	1936.	1937.	1938.	1939.
MALES.					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	1,432,900	1,451,600	1,470,200	1,488,200	1,507,500
No. of Members of Unions ..	662,447	685,795	720,587	748,749	778,336
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	46.2	47.2	49.0	50.3	51.6
Junior Wage and Salary Earners (under 20)	263,400	265,400	268,600	273,200	275,600
FEMALES.					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	389,700	397,600	404,700	410,900	417,600
No. of Members of Unions ..	128,383	129,014	135,696	136,409	137,134
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	32.9	32.4	33.5	33.2	32.8
Junior Wage and Salary Earners (under 20)	173,600	176,400	179,900	183,900	187,200
TOTAL.					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	1,822,600	1,849,200	1,874,900	1,899,100	1,925,100
No. of Members of Unions ..	790,830	814,809	856,283	885,158	915,470
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	43.4	44.1	45.7	46.6	47.6
Junior Wage and Salary Earners (under 20)	437,000	441,800	448,500	457,100	462,800

The following table shows separately for males and females (a) the number of members of trade unions; (b) the estimated number of wage and salary earners of each sex 20 years of age and over in all professions, trades and occupations; and (c) the percentage of the former (a) on the latter (b) at the end of each year, 1935 to 1939. The estimated number of wage and salary earners includes all persons 20 years of age and over in receipt of wages or salary, as well as those unemployed, and therefore embraces a large number of adults who are not eligible for membership of any trade union, such as certain persons employed in professional occupations, as well as others who, while eligible for membership so far as the nature of their trade or occupation is concerned, do not reside in a locality which is covered by any union devoted to their particular trade or occupation. Moreover the age at which persons are eligible for membership varies in different unions. The census results are classified in quinquennial age groups, and age 20 years is taken as approximating to the age of admission to membership. A line has also been added showing the estimated numbers of "junior" workers under 20 years of age. The figures for years prior to 1938 previously published in the Official Year Book have been revised:—

TRADE UNIONS : NUMBER OF MALE AND FEMALE MEMBERS AND PERCENTAGE TO TOTAL EMPLOYEES, AUSTRALIA.

Particulars.	1935.	1936.	1937.	1938.	1939.
MALES.					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	1,432,905	1,453,006	1,473,323	1,493,647	1,512,854
No. of Members of Unions ..	662,447	685,795	720,587	748,749	778,336
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	46.2	47.2	48.9	50.1	51.4
Junior Wage and Salary Earners (under 20)	223,613	221,197	227,776	231,536	235,945
FEMALES.					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	388,167	396,893	406,708	415,789	425,377
No. of Members of Unions ..	128,383	129,014	135,696	136,409	137,134
Percentage of Members on Estimated Number of Wage and Salary Earners ..	33.1	32.5	33.4	32.8	32.2
Junior Wage and Salary Earners (under 20)	141,345	142,138	143,840	145,674	148,248
TOTAL.					
Estimated No. of Adult Wage and Salary Earners (20 years of age and over) ..	1,821,072	1,850,349	1,880,031	1,909,436	1,938,231
No. of Members of Unions ..	790,830	814,809	856,283	885,158	915,470
Percentage of Members on Estimated Number of Adult Wage and Salary Earners ..	43.4	44.0	45.5	46.4	47.2
Junior Wage and Salary Earners (under 20)	364,958	367,335	371,616	377,210	384,193

(v) *Interstate or Federated Unions.* The following table gives particulars as to the number and membership of interstate or federated unions in 1939:—

INTERSTATE OR FEDERATED UNIONS : AUSTRALIA, 1939.

Particulars.	Unions Operating in—					Total.
	2 States.	3 States.	4 States.	5 States.	6 States. (a)	
Number of Unions ..	19	11	20	24	42	116
Number of Members ..	30,888	33,319	120,664	209,369	361,884	756,124

(a) Certain unions in this group have, in addition to branches in each of the six States, branches in the Northern Territory and the Australian Capital Territory.

It appears, therefore, that 116 out of the 380 separate associations and groups of associations in Australia are organized on an interstate basis. The membership of these 116 unions was 756,124 or 83 per cent. of the membership of all unions.

3. **Central Labour Organizations.**—In each of the capital cities and in a number of industrial centres elsewhere, delegate organizations consisting of representatives from a group of trade unions have been established. 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, or the Labour Federation. 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, to 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, as a matter of fact, independent bodies.

A new Central Labour Organization, called the Australasian 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 Australasian Council is based on the Metropolitan Trades and Labour Councils in each State, such bodies having the right to appoint two representatives to act on the Executive of the Council. The Metropolitan Trades and Labour Councils are the branches of the Australasian Council. In addition to the representatives from the Metropolitan Councils, the Executive consists of four officers—the President, two Vice-Presidents, and a Secretary, who are elected by and from the All-Australian Trade Union Congress.

The objective of the Council is the socialization of industry, i.e., production and exchange. The methods to be adopted are:—(a) The closer organization of the workers by the transformation of the Australasian Trade Union Movement from the Craft to an Industrial basis by the establishment of one Union in each industry; (b) the consolidation of the Australasian Labour Movement with the object of unified control, administration and action; (c) the centralized control of industrial disputes; and (d) educational propaganda among unions. The Australasian Council of Trade Unions is 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.

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 thereto, in each State at the end of 1939:—

CENTRAL LABOUR ORGANIZATIONS : NUMBER, AND UNIONS AFFILIATED, 1939.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	A.C.T.	Total.
Number of Councils	3	5	6	2	8	2	1	27
Number of Unions and Branch Unions affiliated	103	179	79	50	210	59	9	689

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 to the local trades councils in the several towns in which they are represented.

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 the interests of the members of which are closely connected by reason of the occupation of their members. 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.

4. **Laws relating to Conditions of Labour.**—In Official Year Book No. 16, pp. 538 to 566, a conspectus is given of Labour Laws in force in Australia at the end of 1922, and of Acts and Regulations relating to Factories and Shops.

Information was contained in the same issue regarding employment under Mining Acts, followed by a brief reference to Employers' Liability and Workmen's Compensation Acts and miscellaneous legislation relating to conditions of labour enacted by the States. A conspectus of the Tribunals for the Regulation of Wages and Conditions of Labour is also included.

§ 2. Employers' Associations.

1. **General.**—Recent investigations show that the spirit of association is no less manifest in the case of employers than in the case of workers. Associations for trade purposes merely are not included in the present chapter, which deals with those associations only whose members are united for their own protection, and for representation in cases before Arbitration Courts, Wages Boards and other wage-fixing tribunals. Associations of employers and employees are recognized under the Commonwealth Conciliation and Arbitration Act as well as under several State Acts, and organizations of these bodies may be registered.

The year 1922 was the first for which information was collected, and detailed particulars for that and subsequent years appear in previous issues of the Official Year Book and in the *Labour Reports*.

2. **Employers' Associations in each State.**—The following table gives particulars of the number of employers' associations in each State at the end of the years 1935 to 1939:—

EMPLOYERS' ASSOCIATIONS.

Year.	N.S.W.	Victoria.	Q'land.	S.A.	W.A.	Tas.	Total.
NUMBER OF ASSOCIATIONS.							
1935	(a) 131	156	72	60	56	25	(a) 500
1936	(a) 134	150	73	61	58	30	(a) 506
1937	(a) 134	149	78	61	59	30	(a) 511
1938	(b) 134	147	76	62	58	29	(b) 506
1939	(b) 136	152	75	61	60	30	(b) 514

NUMBER OF BRANCHES.

1935	786	559	135	13	302	8	1,803
1936	806	608	393	32	296	6	2,141
1937	681	548	394	33	184	10	1,850
1938	658	561	391	32	85	6	1,733
1939	670	559	405	27	85	5	1,751

MEMBERSHIP.

1935	a 59,444	37,765	18,556	7,536	10,791	2,087	a 136,179
1936	a 60,135	50,262	35,764	8,813	11,193	2,257	a 168,424
1937	a 63,747	50,566	33,150	9,081	10,978	2,152	a 169,674
1938	b 66,573	53,745	32,407	9,671	11,312	1,982	b 175,690
1939	b 66,861	54,451	31,915	10,257	11,600	2,006	b 177,090

(a) Includes one association in the Australian Capital Territory.

(b) Includes two associations in the Australian Capital Territory.

There has been a large increase in the number of branches since 1926, due to the inclusion of associations representing agricultural interests, while the increase in total membership is partly attributable to a more complete collection of statistics relating to these organizations.

3. **Employers' Associations in Industrial Groups.**—The figures in the following table refer to Australia at the end of the years 1938 and 1939 :—

EMPLOYERS' ASSOCIATIONS : INDUSTRIAL GROUPS, AUSTRALIA.

Class.	Number of Associations.		Number of Branches.		Membership.	
	1938.	1939.	1938.	1939.	1938.	1939.
Manufacturing :—						
I. Wood, Furniture, etc. . .	20	20	16	16	1,239	1,517
II. Engineering, etc. . .	18	20	1	2	2,632	2,540
III. Food, Drink, etc. . .	106	110	140	160	24,169	24,749
IV. Clothing, Hats, etc. . .	15	15	9	9	1,541	1,739
V. Books, Printing, etc. . .	39	40	..	..	2,625	2,596
VI. Other Manufacturing . .	39	42	2	3	3,624	3,988
VII. Building	26	26	10	12	2,176	2,169
VIII. Mining, Quarrying, etc. . .	11	9	..	2	288	244
X. Other Land Transport . .	18	18	10	11	3,271	3,190
XI. Shipping, etc.	18	20	3	9	265	277
XII. Pastoral, Agricultural, etc.	51	48	1,512	1,491	110,435	108,582
XIII. Domestic, Hotels, etc. . .	20	19	..	1	2,192	2,267
XIV. Miscellaneous	125	127	30	35	21,233	23,232
Total	506	514	1,733	1,751	175,690	177,090

The female membership of these associations was 6,200 for 1938 and 6,407 for 1939.

The organization of employers is relatively strongest in the pastoral and agricultural industries and in the manufacture and distribution of articles of food and drink. In the former case there has been considerable growth in organization among small farmers, and in the latter, the number of small shops purveying foodstuffs of which the proprietors are members of grocers', butchers' and other similar associations accounts for the large membership.

4. **Federations of Employers' Associations.**—In addition to the associations in various industries, there are central associations in each State to which many of these separate organizations are affiliated. Examples of this kind of association are provided in the Chamber of Manufactures, Chamber of Commerce and Employers' Federation in each State. Further, these State associations are, in some cases, organized on a federal basis, e.g., there is an Associated Chamber of Manufactures, and Associated Chamber of Commerce, or a Central Council of Employers, to which State branches are affiliated.

The affiliation of these associations is, however, of a very loose nature when compared with that of the Federated Trade Unions. Whereas in the latter case the central body has complete control of its State branches, in the case of the Employers' Associations each State body enjoys complete independence, the central body acting in a more or less advisory capacity only.

The following table gives particulars so far as can be ascertained, of interstate or federated associations having branches in two or more States from 1935 to 1939 :—
INTERSTATE OR FEDERATED EMPLOYERS' ASSOCIATIONS.

Year.	Associations Operating in—					Total.
	2 States.	3 States.	4 States.	5 States.	6 States.	
NUMBER OF ASSOCIATIONS.						
1935	4	2	10	6	20	42
1936	5	2	8	6	17	38
1937	3	3	10	10	17	43
1938	5	1	7	14	17	44
1939	4	..	11	11	19	45
NUMBER OF MEMBERS.						
1935	10,529	57	3,311	63,155	37,723	114,775
1936	11,315	904	1,013	22,324	104,806	140,452
1937	9,351	2,019	1,118	92,049	38,908	143,445
1938	9,368	144	3,800	93,454	41,198	147,964
1939	8,299	..	5,219	89,287	43,723	146,458

The above table shows that associations having 83 per cent. of the total membership of employers' organizations are grouped together on an interstate basis.

F.—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 (a) of each Section : Weighted Average of Six Capitals 1911 = 1,000.)

Period.	Retail Price Index-numbers.				Nominal Wages, Adult Males.	Real Wages. (b)	Percentage of Unemployment among Trade Unionists.
	Food and Groceries.	Housing (4 and 5 Rooms).	Food and Housing (4 and 5 Rooms) "B" Series.	All Items of Household Expenditure "C" Series.			
Year—							%
1911	1,000	1,000	1,000	(c) 1,000	1,000	(c) 1,000	4.7
1914	1,144	1,082	1,121	1,140	1,081	948	8.3
1921	1,902	1,410	1,717	1,680	1,826	1,087	11.2
1928	1,761	1,743	1,755	1,675	1,963	1,172	10.8
1929	1,866	1,754	1,824	1,713	1,972	1,151	11.1
1930	1,682	1,711	1,693	1,618	1,939	1,198	19.3
1931	1,477	1,473	1,475	1,448	1,752	1,210	27.4
1932	1,425	1,336	1,391	1,377	1,639	1,190	29.0
1933	1,342	1,314	1,332	1,335	1,584	1,187	25.1
1934	1,400	1,324	1,371	1,355	1,590	1,173	20.5
1935	1,442	1,372	1,416	1,380	1,612	1,169	16.5
1936	1,475	1,437	1,461	1,409	1,638	1,162	12.2
1937	1,521	1,488	1,510	1,448	1,707	1,178	9.3
1938	1,584	1,540	1,568	1,488	1,799	1,209	8.7
1939	1,657	1,577	1,626	1,526	1,846	1,211	9.7
1940	1,679	1,590	1,644	1,588	1,889	1,190	8.0

(a) The index-numbers given in the separate columns of the table cannot be compared with each other in order to show the relative cost of housing, and food and groceries, since the cost in 1911 in each group or combination is made equal to 1,000. (b) Index of nominal weekly wage rates divided by "C" Series Index of retail prices. (c) Taken back from true base (November, 1914) by means of the Food and Rent of All Houses ("A" Series) Index.

COMPARATIVE INDEX-NUMBERS FOR THE SIX CAPITAL CITIES
COMBINED—continued.

(Base (a) of each Section : Weighted Average of Six Capitals 1911 = 1000.)

Period.	Retail Price Index-numbers.				Nominal Wages Adult Males.	Real Wages. (b)	Percentage of Unemploy- ment among Trade Unionists.
	Food and Grocer- ies.	Housing (4 and 5 Rooms).	Food and Housing (4 and 5 Rooms) "B" Series.	All Items of House- hold Ex- pendi- ture "C" Series.			
Quarter—							
1930.							
March	1,751	1,782	1,763	1,670	1,973	1,181	%
June	1,734	1,744	1,738	1,653	1,950	1,183	14.6
September .. .	1,673	1,692	1,680	1,607	1,939	1,207	18.5
December .. .	1,568	1,625	1,590	1,542	1,887	1,224	20.5
1931.							
March	1,538	1,560	1,546	1,500	1,814	1,209	23.4
June	1,496	1,501	1,498	1,464	1,704	1,205	25.8
September .. .	1,435	1,447	1,439	1,423	1,735	1,219	27.6
December .. .	1,439	1,382	1,418	1,406	1,694	1,205	28.3
1932.							
March	1,465	1,358	1,425	1,403	1,680	1,197	28.0
June	1,448	1,345	1,409	1,389	1,672	1,204	28.3
September .. .	1,416	1,327	1,382	1,370	1,608	1,174	30.0
December .. .	1,369	1,314	1,348	1,346	1,597	1,186	29.6
1933.							
March	1,317	1,318	1,318	1,327	1,585	1,194	28.1
June	1,337	1,314	1,329	1,334	1,595	1,196	26.5
September .. .	1,359	1,311	1,341	1,340	1,587	1,184	25.7
December .. .	1,355	1,311	1,339	1,337	1,570	1,174	25.1
1934.							
March	1,371	1,315	1,350	1,344	1,572	1,170	23.0
June	1,404	1,319	1,372	1,358	1,592	1,172	21.9
September .. .	1,401	1,331	1,375	1,357	1,596	1,176	20.9
December .. .	1,422	1,332	1,388	1,391	1,599	1,175	20.4
1935.							
March	1,420	1,356	1,396	1,368	1,607	1,175	18.8
June	1,425	1,363	1,402	1,371	1,609	1,174	18.6
September .. .	1,461	1,379	1,430	1,389	1,613	1,161	17.8
December .. .	1,460	1,390	1,434	1,391	1,620	1,165	15.9
1936.							
March	1,445	1,413	1,433	1,391	1,623	1,167	13.7
June	1,455	1,425	1,444	1,397	1,629	1,166	13.4
September .. .	1,489	1,449	1,474	1,420	1,641	1,156	12.8
December .. .	1,510	1,461	1,491	1,430	1,659	1,160	12.0
1937.							
March	1,510	1,470	1,495	1,433	1,662	1,160	10.7
June	1,507	1,483	1,498	1,441	1,680	1,166	9.9
September .. .	1,526	1,499	1,516	1,454	1,721	1,184	9.7
December .. .	1,540	1,510	1,529	1,465	1,763	1,203	9.3
1938.							
March	1,540	1,521	1,534	1,467	1,778	1,212	8.2
June	1,572	1,534	1,558	1,482	1,787	1,206	8.0
September .. .	1,616	1,547	1,589	1,500	1,806	1,204	8.6
December .. .	1,608	1,559	1,589	1,501	1,823	1,213	9.2
1939.							
March	1,673	1,568	1,631	1,524	1,826	1,198	8.9
June	1,654	1,575	1,623	1,522	1,847	1,214	9.6
September .. .	1,645	1,582	1,620	1,520	1,854	1,220	9.5
December .. .	1,657	1,584	1,628	1,536	1,858	1,210	10.2
1940.							
March	1,640	1,587	1,620	1,542	1,864	1,209	7.4
June	1,688	1,589	1,649	1,583	1,875	1,184	10.5
September .. .	1,676	1,591	1,642	1,590	1,903	1,197	7.4
December .. .	1,710	1,593	1,663	1,635	1,912	1,166	6.2

(a) The index-numbers given in the separate columns of the table cannot be compared with each other in order to show the relative cost of housing, and food and groceries, since the cost in 1911 in each group or combination is made equal to 1,000. (b) Index of nominal weekly wage rates divided by "C" Series index of retail prices. (c) Taken back from true base (November, 1914) by means of the Food and Rent of All Houses ("A" Series) Index.

CHAPTER XXIV.

TRADE.

§ 1. Introductory.

Constitutional Powers of the Commonwealth in regard to Commerce.—The powers vested in the Commonwealth Parliament by the Commonwealth Constitution Act with respect to oversea trade and commerce will be found in Sub-section 51 (i) and Sections 86 to 95 of the Act (see pp. 14 and 20 above).

§ 2. Commonwealth Legislation affecting Oversea Trade.

1. **General.**—In previous issues of the Official Year Book brief particulars of the various Commonwealth Acts and amendments thereof affecting oversea trade are given in chronological order. The Customs Acts represent the administrative or machinery Acts under which the Customs Department operates, while the Customs Tariff provides the statutory authority for imposing the actual rates of duties operative from time to time.

The Acts at present in force are: The Customs Act 1901-1936; Customs Tariff, 1933-1939; Customs Tariff (Canadian Preference) 1934-1939; Customs Tariff (Exchange Adjustment) Act, 1933-1939; Customs Tariff (Industries Preservation) Act, 1921-1936; Customs Tariff (Newfoundland Preference) 1930; Customs Tariff (New Zealand Preference) Adjustment Act, 1933; Customs Tariff (New Zealand Preference) 1933-1934; Customs Tariff (Papua and New Guinea Preference) 1936; Customs Tariff (Primage Duties). 1934. A complete statement of the Acts passed in 1939 appears in par. 15 below.

2. **Customs Tariffs.**—The Customs Tariff 1921-1930 provided a British Preferential Tariff, an Intermediate Tariff and a General Tariff. The Customs Tariff 1933 made no provision for an Intermediate Tariff but this feature was restored by the Customs Tariff 1936.

“British Preferential Tariff” rates of duty apply to goods the produce or manufacture of the United Kingdom provided such goods comply with the laws and statutory regulations for the time being in force affecting the grant of British 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. The benefits of the British Preferential Tariff may be extended wholly or in part to any British non-self-governing colony, British protectorate or to certain territories governed under British mandate. The benefits of the British Preferential Tariff have been extended by separate Trade Agreements to certain goods the produce of the Dominions of Canada and New Zealand and to certain goods the produce of British non-self-governing colonies.

In submitting tariff schedules to Parliament on 20th March, 1936, the Minister for Trade and Customs said: “Another new feature of the schedules is the Intermediate Tariff. It has been re-introduced to provide a convenient avenue for expressing the level of duties which the Government propose should form the basis for trade treaties. The rates proposed under the protective items of the Intermediate Tariff express, in every case, a protective level for Australian industry as well as preserving the margins required under the Ottawa Agreement.” The Customs Tariff 1933-1939 provides that the Governor-General may from time to time by proclamation declare that the Intermediate Tariff shall apply from a date and time specified to goods specified in the proclamation

which are the produce or manufacture of the British or foreign country specified in the proclamation. The Intermediate Tariff was brought into operation on 1st January, 1937, by Customs Proclamations Nos. 338, 342, 343 and 369, which granted intermediate rates of duty to specified goods the produce of "Proclaimed Countries." The countries proclaimed include the United Kingdom, the Dominions and Colonies in respect of goods which do not comply with the conditions prescribed for the application of a lower tariff and most foreign countries under the terms entitling them to most favoured nation treatment. The United States of America is an important exception, while Japan is entitled to intermediate rates for eleven items only, comprising artificial silk and cotton piece goods.

The "General Tariff" applies to all importations excepting:—

- (a) Goods the produce or manufacture of the United Kingdom, shipped in the United Kingdom;
- (b) Goods the produce or manufacture of the following countries when admissible under the British Preferential Tariff or at a special rate of duty: Canada, New Zealand, Norfolk Island, Papua and New Guinea, and British non-self-governing Colonies, British Protectorates and certain Territories governed under British mandate.
- (c) Goods admitted under the provisions of the Intermediate Tariff.

The Customs Tariff 1933–1939 provides for duties on certain goods to be deferred. Where a deferred duty on any goods is provided in the Schedule, the Minister shall refer to the Tariff Board for inquiry and report the question whether the deferred duty should or should not operate on and after the date to which it has been deferred. The Board shall report whether the goods in respect of which the deferred duty is provided are being made or produced in Australia or will be so made or produced on, or immediately after, the date to which the duty has been deferred—(a) in reasonable quantities; (b) of satisfactory quality; and (c) at a reasonable price having regard, among other things, to the probable economic effect of the imposition of the deferred duty upon other industries concerned, and upon the community in general. Upon receipt of a report from the Tariff Board, the Minister may defer the duty further by notice published in the *Gazette*.

During the period 3rd April, 1930, to 23rd July, 1931, a special customs duty equal to 50 per cent. of the rate already in force was imposed on a number of items which were mostly of a luxury nature. The list of items affected was gradually reduced between 24th May, 1932, and 28th February, 1935, from which date the special customs duty ceased to operate.

By proclamation of 4th April, 1930, the importation of 78 classes of goods into the Commonwealth was prohibited, but these prohibitions were all removed during the period from 24th February to 31st August, 1932.

In pursuance of the trade diversion policy of the Commonwealth Government (see par. 9 of this section), an amendment of the Customs (Prohibited Imports) Regulations of 22nd May, 1936—Item 21—prohibited the import into Australia, except under special licence, of 84 classified groups of goods produced or manufactured in foreign countries. A list of the principal items affected is published in Official Year Book No. 30. Important modifications of the licensing system as applied to the 84 groups of goods referred to were announced on 7th December, 1937, by the Minister for Trade and Customs, who stated that in respect of goods not competitive with Australian industry, licences for importation would be granted irrespective of the country of origin. In respect of goods competitive with Australian industry the licensing system then in force would operate until duties adequate to the protection of the industries concerned had been determined. Tariff Schedules amending duties to give adequate protection to Australian industries established or extended during the currency of the licensing system were embodied in Customs and Excise Resolutions submitted to Parliament on 4th May, 1938, and the licensing restrictions ceased to have force from that date. The Acting Minister for Trade and Customs explained that the Schedules should be regarded as of a temporary nature until the industries could be inquired into and reported on by the Tariff Board.

Under Item 22 the import, except under special licence, is prohibited of motor vehicle chassis produced or manufactured in any country except the United Kingdom. Imports of chassis from the principal suppliers other than the United Kingdom are restricted to the same level of imports as for the twelve months ended 30th April, 1936.

From the same date, 22nd May, 1936, customs duties were increased on imports of certain items of cotton, artificial silk and silk piece goods and on motor chassis. The duties imposed on cotton and artificial silk piece goods were reduced as from 1st January, 1937.

3. **Primage Duty.**—From 10th July, 1930, a primage duty of 2½ per cent. ad valorem was imposed on all goods whether dutiable or not dutiable, in addition to the duties collected in accordance with the Customs Tariff 1921–1930, excepting bullion, specie, radium and certain special governmental and other imports. The rate of primage duty was subsequently increased to 4 per cent. as from 6th November, 1930.

A proclamation of 14th May, 1931, exempted certain aids to primary production, and on 11th July, 1931, a further amendment, in addition to extending the list of these goods and also exempting some minor imports from primage duty, provided for a rate of 4 per cent. ad valorem on a few other items, mainly aids to production, and increased the ad valorem rate of primage duty to 10 per cent. on all other articles imported. Amendments promulgated since 11th July, 1931, have greatly increased the list of goods exempt from primage duty.

The Customs Tariff (Primage Duties) Act 1934 imposed primage duty at rates of 4, 5, and 10 per cent. and provided for preferential treatment of certain goods admitted under the British Preferential Tariff. A proclamation of 12th December, 1934, exempted from primage duty goods the produce or manufacture of Fiji and a proclamation of 25th September, 1935, exempted from primage duty goods the produce or manufacture of the Territories of New Guinea and Papua. Under the Customs Tariff (New Zealand Preference) Act goods the produce or manufacture of New Zealand are exempt from primage duty. Similarly under the Norfolk Island Act 1913 goods the produce or manufacture of Norfolk Island are exempt from primage duty.

Customs proclamations, which came into force on 1st January, 1937, and later dates, provide in respect of specified tariff items exemptions from, and reduced rates of 4 and 5 per cent. primage duty on imports the produce or manufacture of "proclaimed countries". All countries whose goods are admissible to Australia under the intermediate customs tariff rank as proclaimed countries and include the United Kingdom, the Dominions and Colonies and most foreign countries. An important exception is the United States of America while Japan is a proclaimed country for eleven items only.

In 1938–39 the value of goods from the United Kingdom admitted under British Preferential Tariff rates was, in Australian currency, £A43,682,327 and the primage duty paid, £A1,134,460. This amount is £A1,178,381 less than the amount which would have been paid if certain goods had not been subject to preferential rates of primage duty.

4. **Special War Duty.**—This duty was imposed from 3rd May, 1940, as a war taxation measure. It comprises a tax of 10 per cent. on the Amount of Duties of Customs (which include Primage) on all goods (other than goods covered by Item 229 (c) in the Schedule to the Customs Tariff 1933–1939) entered for home consumption on and after the date mentioned. The tax is not regarded as having any relationship to the Duties of Customs in the ordinary acceptance of the term, but the amounts collected appear under the heading "Customs Collections" in Chapter XXVI, "Public Finance."

5. **Preferential Tariff.**—(i) *British Preference.* The Commonwealth Tariff 1908 provided Preferential Tariff rates in favour of specified goods produced or manufactured in the United Kingdom. Subsequent amendments of the Tariff have extended the list of articles to which the preferential rates apply. The favourable treatment of the United Kingdom was again extended by Customs Tariff 1921 and when this Act was incorporated in Customs Tariff 1921–1930 further concessions were granted.

On the introduction of the preferential treatment of British goods by the Commonwealth Tariff, it was required that British material or labour should represent not less than one-fourth the value of such goods. From 1st September, 1911, it was required in regard to goods only partially manufactured in the United Kingdom, that the final process or processes of manufacture should have been performed in the United Kingdom and that the expenditure on material of British production and/or British labour should have been not less than one-fourth of the factory or works cost of the goods in their finished state.

These conditions were superseded by Customs Act 1934 as amended by Customs Act 1936 which repealed section 151A of the Principal Act and inserted in its stead :—

151A. (1.) For the purposes of any Customs Tariff (whether passed before or after the commencement of this section) which specifies in respect of any goods rates of duties of Customs lower than the Intermediate Tariff in respect of those goods, the following goods shall, subject to this section, be deemed to be the produce or manufacture of the United Kingdom :—

(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 seventy-five 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 twenty-five 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.

(2.) Where in relation to any class or kind of goods to which paragraph (c) of the last preceding sub-section applies the Minister is satisfied that it is desirable that 50 per cent. should be substituted for the percentage specified, the Minister may so determine and thereupon that paragraph shall apply to that class or kind of goods as if 50 per cent. were so substituted accordingly.

(3.) No goods shall be deemed to be the produce or manufacture of the United Kingdom unless the final process of their production or manufacture was performed in the United Kingdom.

(4.) The provisions of this section shall apply *mutatis mutandis* in relation to goods which are imported from any country in respect of which a Customs Tariff within the meaning of sub-section (1.) of this section applies, in like manner as they apply in relation to goods imported from the United Kingdom.

Sub-sections 5, 6 and 8 to 10 of section 151A relate to certain powers of the Minister and the meaning of "Intermediate Tariff" and sub-section 7 to the meaning of "unmanufactured raw materials."

Section 151B of Customs Act 1936 prescribes the conditions relating to the application of the Intermediate Tariff.

The Customs Tariff 1933-1939 provides that the British Preferential Tariff rates of duty apply to goods or manufactures of the United Kingdom provided such goods comply with the laws and statutory regulations for the time being in force affecting the grant of British preference (see Section 151A of Customs Act 1901-1936). Customs Tariff 1933-1939 also provides that the benefits of the British Preferential Tariff may

be extended wholly or in part to any British non-self-governing colony, British Protectorate, or to certain territories governed under British mandate. The benefits of the British Preferential Tariff have also been extended by separate Trade Agreements to certain goods the produce of the Dominions of Canada and New Zealand.

At the Imperial Economic Conference held at Ottawa, Canada, during July and August, 1932, a trade agreement providing increased preference was made between the Government of the United Kingdom and the Government of the Commonwealth of Australia. The Tariff proposals embodying the terms of the trade agreement came into operation on 14th October, 1932. An Act entitled the United Kingdom and Australia Trade Agreement Act 1932 approved the provisions of the trade agreement arising out of the Conference at Ottawa. Briefly stated the Commonwealth Government agrees (a) to invite Parliament to pass legislation making the tariff changes necessary to give effect to the preference formula set forth in the agreement; (b) that protection by tariffs shall be afforded only to those industries which are reasonably assured of sound opportunities for success; (c) that during the currency of the agreement the tariff shall be based on the principle that protective duties shall not exceed such a level as will give United Kingdom producers full opportunity of reasonable competition on the basis of the relative cost of economical and efficient production, provided that in the application of such principle special consideration may be given to the case of industries not fully established; (d) that the Australian Tariff Board review existing protective duties in accordance with the above principles, and after the receipt of the report of the Board the Parliament shall be invited to vary, wherever necessary, the tariff on goods of United Kingdom origin in such manner as to give effect to such principles; (e) that no new protective duty shall be imposed and no existing duty shall be increased on United Kingdom goods to an amount in excess of the recommendation of the Tariff tribunal; (f) that United Kingdom producers shall be entitled to full rights of audience before the Tariff Board when it has under consideration above-mentioned matters; (g) that, in so far as concerns goods the produce or manufacture of the United Kingdom, the Commonwealth Government undertake to (i) repeal the proclamation prohibiting the importation of certain goods; (ii) remove as soon as practicable the surcharges imposed by resolution introduced into the Parliament of Australia on 24th May, 1932; and (iii) to reduce or remove primage duty as soon as the finances of Australia will allow. The agreement shall remain in force for a period of five years and come into effect on 20th August, 1932 (subject to the necessary legislative or other action being taken).

The prohibitions and surcharges referred to in this agreement have been abolished and primage duty on a large number of items removed or reduced. The concessions granted by the Government of the United Kingdom under the terms of the Ottawa trade agreement on goods of Australian origin are set out briefly in par. 7 of this section. Further reference to this trade agreement appears in the Appendix to Official Year Book, No. 26, 1933.

This agreement was reviewed by a Conference of United Kingdom and Australian Ministers in London in 1938, and on 20th July, 1938, a White Paper was presented to the British House of Commons embodying the results of the negotiations.

The full text of this White Paper is as follows :

WHITE PAPER ON UNITED KINGDOM—AUSTRALIA TRADE NEGOTIATIONS.

“ United Kingdom and Australian Ministers have been engaged for some time in a review of various matters arising out of the Ottawa Agreement of 1932. Not only have the existing preferential arrangements between the two countries been examined, but Empire problems have, in a spirit of mutual sympathy and goodwill, been considered in their widest aspects, with a view to ensuring the maximum co-operation between the United Kingdom and Australia in their solution. The Ministers have reviewed broadly the principles which should in their opinion be regarded as a charter of the United Kingdom—Australia trade relations.

“ The United Kingdom and Australia have a vital interest in each other. Australia in the United Kingdom—

- (a) as a great force for the bringing about and maintenance of international, political and economic peace,
- (b) as an essential element in the defence of Australia's territory and trade,
- (c) as the greatest market for Australian exports of primary products ;

the United Kingdom in Australia—

- (a) as a sister nation closely linked to the United Kingdom in matters of Empire defence,
- (b) as a country which given adequate population and full development of resources will become a great power in continued partnership with the United Kingdom,
- (c) as one of the greatest customers in the world for United Kingdom goods,
- (d) as the domicile of the largest amount of United Kingdom capital invested in any single overseas country and as a field for future United Kingdom investment.

“ Both the United Kingdom and Australia have certain problems and requirements existing which each not only admits but is prepared to treat as the bases for trade relationships between the two countries. Australian Ministers recognize—

- (a) the necessity for the United Kingdom to safeguard and develop her own agriculture,
- (b) the position of the United Kingdom as a great international trade investor and shipowner,
- (c) the consequent necessity that the United Kingdom should maintain the position as a great oversea trader and in particular as an exporter of manufactured goods to the Empire and to foreign countries,
- (d) that these facts impose an upward limit upon the extent to which increased opportunities can be afforded to the Dominion producers in the United Kingdom market,
- (e) that any diminution of the total exports from the United Kingdom will tend to affect the capacity of the United Kingdom to purchase foodstuffs and raw materials from overseas suppliers and Australia.

United Kingdom Ministers recognize—

- (a) that in the interests of both countries and of the British Empire as a whole it is desirable for Australia to endeavour to bring about as soon as possible a substantial increase in her population,
- (b) that it is impossible to achieve this objective solely or principally by an expansion of Australian primary industries,
- (c) that there is therefore a necessity to combine with such expansion the sound and progressive development of Australian secondary industries.

“ Both United Kingdom and Australian Ministers are strongly attached to the principle of preferential trade within the British Empire. At the same time they realize that several of the important facts above stated render it not only inevitable but desirable that both the United Kingdom and Australia should from time to time enter into trade agreements with foreign countries. In this way the two countries can assure their own full development and at the same time make an effective contribution to the expansion of international trade. To this end the United Kingdom and Australian Ministers have undertaken to co-operate in every practicable way with a view to acceptance of each other's co-operation in arriving at trade agreements with foreign countries.

“ Certain immediate difficulties arise when an attempt is made to reconcile the desirability for Australia to expand her secondary industries to the maximum extent economically possible with that of the United Kingdom to maintain her exports and to secure for her exports a stable position in the Australian market. Some machinery for the adjustment of the immediate interests of the two countries was and is obviously desirable.

“ In the Ottawa Agreement an attempt was made to meet these difficulties by the provisions of Articles 9 to 13 which have in practice worked fairly satisfactorily though they have been criticized from quite opposite points of view in the United Kingdom and Australia. Two possible methods of dealing with these Articles presented themselves to the Ministers. One was to endeavour to revise them so as to satisfy the requirements of both countries. This has so far proved impracticable. The other was to abolish the Articles altogether and to substitute for them a schedule of maximum rates of duty which should operate during the currency of the agreement. The principle of making trade treaties on the basis of fixing rates of duty is one which has been common to most modern international arrangements, but there may be special difficulties in applying it in the case of a young and developing country like Australia which also has a system of wage-fixing tribunals and consequently fluctuations of industrial costs. Australian Ministers have, however, stated that the Australian Government will proceed forthwith to investigate the possibility of adopting such a system. They realize that it cannot be adopted without determining (subject of course to an exception in favour of the manufacture of defence materials, as to which no ruling could be laid down in advance) upon what lines the development of secondary industries will be followed by Australia during the next few years, but they believe if inquiries are put in hand for the purpose of determining the lines of a general plan of industrial development in Australia much good would result. Exports would to that extent be protected and the necessity for Articles which at present invoke criticism would disappear.

“ In making such an inquiry the Commonwealth Government propose to have regard to *inter alia* such important factors as—

- (a) the necessity for increased Australian population,
- (b) the economics and future growth of primary production in Australia,
- (c) the necessity on national and economic grounds for a continued development of Australian secondary industries,
- (d) the defence needs of Australia,
- (e) the maintenance of United Kingdom—Australian trade by effective preference to United Kingdom in Australia and to Australia in the United Kingdom,
- (f) the need for new markets for Australian exports and for foreign trade arrangements.

“ In the meantime and pending the decision of the Australian Government on this matter the present agreement will continue in force, though in order to avoid some difficulties which have presented themselves in the past the United Kingdom Ministers are prepared not to press their objection to interpretations now placed by the Australian Tariff Board upon Article 10, while the Australian Ministers have undertaken to make every effort to ensure that the Tariff Board's recommendations under Article 11 are made effective.

“ During the course of conversations between Ministers much discussion took place with regard to the marketing of primary produce in the United Kingdom. Australian Ministers recognize the rights of United Kingdom agriculture in accordance with the principle that the home producer is entitled to first consideration in the home market. They also recognize that the circumstances above indicated impose an upward limit upon the extent to which increased opportunities can be afforded to Dominion producers in the United Kingdom market. The United Kingdom Ministers in their turn recognize the principle that Empire producers are entitled to second consideration in the United Kingdom market and that, subject to the vital interests of the United Kingdom in its agriculture and oversea trade, the necessity of maintaining remunerative prices while safeguarding the interests of the consumer and the absorptive capacity of the United Kingdom market, an extended market should, as far as practicable, be afforded in the United Kingdom for their products. It was felt by both United Kingdom and Australian Ministers that, in the present state of trade, the interests of all parties could best be

served by means of orderly marketing secured by collective action on the part of Empire producers' organizations in co-operation with corresponding bodies in other countries in respect of particular commodities. A similar method has already been adopted in regard to beef by the creation of the Empire Beef Council and the International Beef Conference, and in the opinion of the Ministers great benefit to both home and Dominion producers can be secured by co-operation of this character in relation to other commodities."

On the basis of the imports during 1913 the preferential provisions of the Tariff of 1908-1911 covered 65 per cent. of the imports of merchandise of United Kingdom origin, the margin of preference being equal to 5 per cent. of the value of the goods. On the basis of the imports during 1938-39 the Customs Tariff 1933-1939 extended the application of the Preferential Tariff rates to 85.0 per cent. of the imports from the United Kingdom, and at the same time increased the margin of preference to 19.0 per cent. ad valorem. These percentages relate to all imports on which preference was granted, whether dutiable or free under the preferential provisions. With regard to imports on which preference was granted and which were dutiable under both the Preferential and General Tariffs, the average equivalent ad valorem rate of duty paid in 1938-39 under the Customs Tariff 1933-1939 on goods of United Kingdom origin was about 15.9 per cent., whereas the same goods under the General Tariff rates would have been called upon to pay an average rate of about 40.5 per cent.

An application of the Customs Tariff 1933-1939 to the total imports of £A50,643,072 (including outside packages) from the United Kingdom entered for home consumption during 1938-39 shows that the value of the goods of United Kingdom origin which participated in the preferential provisions of the Tariff was £A43,682,327, upon which duty to the amount of £A3,916,726 was collected. Under the General Tariff the same goods would have paid £A12,487,351 duty or £A8,570,625 more than was paid at preferential rates, representing an additional duty of 19.6 per cent. on the value of the goods. The principal classes which benefited under the Preferential Tariff and the additional duty that would have been collected under the General Tariff during 1938-39 were textiles, £3,661,950; metals and metal manufactures, £2,789,967; machines and machinery, £1,697,984; spirituous and alcoholic liquors, £1,050,273; drugs, chemicals, etc., £561,157; earthenware, glass, etc., £433,876; apparel, £397,064; paper, £311,421; manufactured fibres, £175,446; stationery and paper manufactures, £171,151; jewellery and fancy goods, £129,924; and optical, surgical and scientific instruments, £116,686.

If a preferential tariff had not been in operation in 1938-39 £A8,570,625 additional customs duty would have been collected under the general tariff on United Kingdom goods imported at preferential rates. It would be improper, however, to speak of this sum as the "value" of preference to the United Kingdom as some of the preferential goods would have come from the United Kingdom without preference.

The margin of preference granted by the preferential tariff has been increased to some extent by the operation of the Customs Tariff (Exchange Adjustment) Act 1933-1939. This Act provides for deductions of duty consequent on the depreciation in the value of Australian currency in relation to the currencies of other countries but is limited in its application to protected goods admitted under the British preferential tariff. On goods of United Kingdom origin subject to exchange adjustment in 1934-35 the deductions amounted to £A460,729 and reduced the duty from £A3,804,325 to £A3,343,596. The total amount deducted in later years cannot be stated owing to the fact that since the end of 1934 "net" rates of duty (after making allowance for exchange adjustment) recommended by the Tariff Board have been applicable.

The value of goods from countries other than the United Kingdom which were adversely affected by the preferential provisions of the Tariff amounted to £A22,835,959, and the duty collected thereon was £A6,403,740, or £A4,316,742 more than would have been paid under the British Preferential Tariff Rates.

The following table shows the effect of the Preferential provisions of the Customs Tariff on imports of goods affected favourably or adversely by the British Preferential Tariff during the years 1936-37 to 1938-39 :-

EFFECT OF THE PREFERENTIAL PROVISIONS OF THE CUSTOMS TARIFF.

IMPORTS OF GOODS AFFECTED FAVOURABLY OR ADVERSELY BY THE BRITISH PREFERENTIAL TARIFF.

Particulars.	United Kingdom.			Other Countries.(a)		
	1936-37.	1937-38.	1938-39.	1936-37.	1937-38.	1938-39.

GOODS OF A KIND WHICH WERE "FREE", IF FROM UNITED KINGDOM.

Value of goods cleared for consumption	£	20,317,326	25,040,517	19,095,649	9,676,676	12,983,535	10,530,878
Amount of Duty collected thereon .. ..	£	..	..	..	1,251,871	1,600,664	1,415,247
Average ad valorem rate of Duty collected ..	%	..	..	..	12.9	12.3	13.4
Duty which would have been collected under General Tariff rates ..	£	2,592,120	3,213,203	2,474,807	..	..	..
Average ad valorem rate of Duty which would have been collected under General Tariff rates ..	%	12.8	12.8	13.0	..	..	..

GOODS OF A KIND WHICH WERE "DUTIABLE", IF FROM UNITED KINGDOM.

Value of goods cleared for consumption	£	24,419,570	28,058,500	24,586,678	14,247,041	14,253,772	12,305,081
Amount of Duty collected thereon	£	4,010,882b	4,312,158b	3,916,726b	6,097,474	5,753,250	4,988,493
Average ad valorem rate of Duty collected ..	%	16.4	15.4	15.9	42.8	40.4	40.5
Duty which would have been collected on United Kingdom goods under General Tariff rates ..	£	9,306,743	11,195,361	10,012,544	..	..	..
Average ad valorem rate of Duty which would have been collected under General Tariff rates ..	%	38.1	39.9	40.7	..	..	..
Duty which would have been collected on goods of Other Countries under British Preferential Tariff ..	£	..	..	..	2,427,105b	2,358,432b	2,086,998b
Average ad valorem rate of Duty which would have been collected under British Preferential Tariff ..	%	..	..	..	17.0	16.6	17.0
Amount of Rebate on United Kingdom goods as against General Tariff rates ..	£	5,295,861b	6,883,203b	6,095,818b	..	..	..
Average ad valorem rate of Rebate on United Kingdom goods ..	%	21.7	24.5	24.8	..	..	..
Amount of Surcharge on goods from Other Countries as against British Preferential Tariff rates ..	£	..	..	..	3,670,369b	3,394,818b	2,901,495b
Average ad valorem rate of Surcharge on goods of Other Countries ..	%	..	..	..	25.8	23.8	23.6

(a) Goods cleared under "General Tariff." (b) In computing this amount, account has been taken of the effect of the Exchange Adjustment Act on the margin of British Preference.

NOTE.—For the purpose of the above analysis the value of imports is stated in Australian currency.

EFFECT OF THE PREFERENTIAL PROVISIONS OF THE CUSTOMS
TARIFF—*continued.*

Particulars.	United Kingdom.			Other Countries.(a)		
	1936-37.	1937-38.	1938-39.	1936-37.	1937-38.	1938-39.
TOTAL GOODS—"FREE" AND "DUTIABLE", AFFECTED BY THE BRITISH PREFERENTIAL TARIFF.						
Value of goods cleared for consumption ..	£ 44,736,896	53,099,017	43,682,327	23,923,717	27,237,307	22,835,959
Amount of Duty collected thereon ..	£ 4,010,882b	4,312,158b	3,916,726b	7,349,345	7,353,914	6,403,740
Average ad valorem rate of Duty collected ..	% 9.0	8.1	9.0	30.7	27.0	28.0
Duty which would have been collected on United Kingdom goods under General Tariff rates ..	£ 11,898,863	14,408,564	12,487,351	..	..	..
Average ad valorem rate of Duty which would have been collected under General Tariff rates ..	% 26.6	27.1	28.6	..	..	..
Duty which would have been collected on goods of Other Countries under British Preferential Tariff ..	£ ..	..	..	2,427,105b	2,358,432b	2,086,008b
Average ad valorem rate of Duty which would have been collected under British Preferential Tariff ..	% ..	..	..	10.1	8.7	9.1
Amount of Rebate on United Kingdom goods as against General Tariff rates ..	£ 7,887,981b	10,096,406b	8,570,625b	..	..	..
Average ad valorem rate of Rebate on United Kingdom goods ..	% 17.6	19.0	19.6	..	..	..
Amount of Surcharge on goods from other Countries as against British Preferential rates ..	£ ..	..	..	4,922,240b	4,995,482b	4,316,742b
Average ad valorem rate of Surcharge on goods of Other Countries ..	% ..	..	..	20.6	18.3	18.9

(a) Goods cleared under "General Tariff." (b) In computing this amount, account has been taken of the effect of the Exchange Adjustment Act on the margin of British Preference.

NOTE.—For the purpose of the above analysis the value of imports is stated in Australian currency

(ii) *Intermediate Tariff Preference.* The Intermediate Tariff came into operation on 1st January, 1937, and during the year ended 30th June, 1939, was applicable wholly or in part to about 140 tariff items. In the period mentioned goods from "Proclaimed Countries" (i.e. foreign countries entitled to most favoured nation treatment) cleared at intermediate rates of duty were valued at £A6,672,563 on which £A2,052,372 duty was collected. Under the General Tariff the same goods would have paid £A3,536,308 duty or £A1,483,936 more than was paid at intermediate rates, representing an additional duty of 22.2 per cent. on the value of the goods. At British preferential rates of duty the same goods would have paid £A810,378, or £A1,241,994 less than was paid at intermediate rates, a reduction equivalent to an ad valorem duty of 18.6 per cent.

(iii) *Exchange Adjustment.* The Customs Tariff (Exchange Adjustment) Act 1933-1939 provides for adjustments in Duties of Customs, consequent upon depreciation in the value of Australian currency in relation to the currencies of countries, on goods to which the British Preferential Tariff applies. This Act came into operation on 5th October, 1933, but subsequent amendments have extended the list of items affected. The application of Section 5 of the Act is explained hereunder:—

The deduction to be made from duty in respect of protected goods (covered by items) specified in the schedule to the Act and admissible under the British Preferential Tariff

on account of the depreciation of Australian currency in relation to the currency of the British country exporting the protected goods to Australia will depend on—

- (a) Whether the extent of depreciation is not less than 16 $\frac{2}{3}$ per cent. ; or
- (b) Whether the extent of depreciation is not less than 11 1-9 per cent., and less than 16 $\frac{2}{3}$ per cent.

If (a) applies, the deduction from the amount of duty will be—(i) one-fourth of the amount of duty ; or (ii) 12 $\frac{1}{2}$ per cent. ($\frac{1}{8}$) of the value for duty, whichever is the less :

If (b) applies, the deduction will be (i) one-eighth of the amount of duty ; or (ii) 6 $\frac{1}{2}$ per cent. of the value for duty, whichever is the less. The telegraphic transfer (buying) rate shall determine the extent of depreciation of Australian currency.

Prior to 1933-34 the Tariff Board had recommended rates of duty as though exchange was at par, but early in the year mentioned the Board decided to change the basis of its recommendations and has since shown its findings under the following headings :—

- (a) The rates which would prove reasonable and adequate under existing conditions of exchange.
- (b) An estimate as closely as can be made of the rates which would be reasonable and adequate if exchange suddenly reverted to par.
- (c) The scale of adjustment necessary to meet conditions of exchange between parity and the present adverse rate of 25 per cent.

In tariff proposals introduced on 6th December, 1934, and later, the new basis has been adopted in fixing rates of duty on certain items in accordance with the Board's recommendations as set out in (a) with provision for the adjustment of rates of duty as set out in (c). With respect to such items the deductions under the provisions of the Exchange Adjustment Act will cease to apply.

(iv) *Papua and New Guinea Preference.* The Customs Tariff (Papua and New Guinea Preference) Act 1936 which repealed the Act of 1934 provides for Customs Preference on goods the produce of Papua and on goods the produce of the Territory of New Guinea. Imports into Australia direct from the Territory of Papua or the Territory of New Guinea, of such of the goods specified in the schedule to the Act as were produced in the Territory from which they were imported, shall, notwithstanding anything contained in the Customs Tariff 1933-1939 be free of duty. The goods specified in the schedule to the Customs Tariff (Papua and New Guinea Preference) 1936 are coffee, dried lychee fruit, various native fresh fruits, edible fungi, green and dry ginger, coconuts, Rangoon beans, kapok and sesame seeds, areca nuts, cocoa beans, massoi oil, nuts (edible), sago, tapioca, spices, vanilla beans and gums. Total imports from Papua during 1938-39 amounted to £A365,579, including gold, £A104,580, imports of goods entitled to preference to £A68,195, and duties remitted to £A46,599. Total imports from the Territory of New Guinea during 1938-39 amounted to £A2,194,765, including gold £A1,987,472, imports of goods entitled to preference to £A92,151, and the duties remitted to £A65,734.

6. *Reciprocal Tariffs.*—(i) *General.* The Customs Tariff of 1921 introduced a new feature into Australian Tariffs in the form of an intermediate tariff. No provision was made in the Customs Tariffs 1933 for an intermediate tariff but in the Customs Tariff 1936 this feature was restored. The purpose of the intermediate tariff is referred to in par. 2 above.

The trade agreement signed at the Imperial Economic Conference, 1932, held at Ottawa, Canada, on behalf of the Government of the United Kingdom and of the Government of the Commonwealth of Australia materially altered the existing conditions of preference. The agreement provides special preferential trade conditions between the Commonwealth of Australia and the United Kingdom and certain of its dependencies. Customs Tariff 1933 embodied the main provisions of the Ottawa Agreement, and imposed duties of customs under two headings—British Preferential Tariff and General Tariff. No provision was made for an Intermediate Tariff in the abovementioned Act. The terms of the agreement conceded by the Commonwealth Government are briefly stated in par. 5 above and the concessions granted by the Government of the United Kingdom on goods of Australian origin are set out in par. 7 below of this chapter. A review of the trade agreement appears in the Appendix to Official Year Book No. 26.

(ii) *Union of South Africa.* The Commonwealth Customs Tariff (South African Preference) Act 1906 and subsequent amending Acts which provided preferential rates of duty upon goods produced within the South African Customs Union were repealed from 1st July, 1926, by the Customs Tariff 1926.

A new trade agreement took effect from 1st July, 1935. This agreement provides that the products of the Union of South Africa or the mandated territory of South-West Africa entering Australia and the products of Australia entering the Union of South Africa or the mandated territory of South-West Africa shall be subject to customs duties not higher than those imposed by the importing country on like products from the most favoured foreign nation. A reciprocal tariff arrangement under which products of Mozambique are admitted duty free to the Union of South Africa is exempt from the agreement.

(iii) *Dominion of New Zealand.* The Customs Tariff (New Zealand Preference) Act 1933, which came into force on 1st December, 1933, repealed earlier Acts and provides that duties on all goods specified in the schedule to the Act shall be at the rates indicated therein, and that all goods other than those provided for in the schedule shall be subject to the rates in force under the British Preferential Tariff. An amendment to this Act in 1934 provides that, where the rate of duty upon any class of goods under the New Zealand British Preferential Tariff is less than that operating in Australia under the British Preferential rate, upon request by the New Zealand Government such goods may, after proclamation, be admitted at the lower rate. The rates of duty on goods re-exported from New Zealand (not being goods the produce or manufacture of New Zealand) and which are imported into Australia, and upon which if they had been imported into Australia direct from the country of origin would have been subject to the rates of duty under the British Preferential Tariff, shall be the rates of duty in force under that tariff.

The Act provides also that films produced in New Zealand by or for the Government of New Zealand for publicity purposes shall be admitted free of duty, also that cocoa beans the produce of Western Samoa shall not be subject to any higher duties than those paid on cocoa beans the produce of any British non-self-governing Colony or Protectorate or any Territory under British mandate. Nothing in the Act shall apply to goods being the produce of Cook Islands.

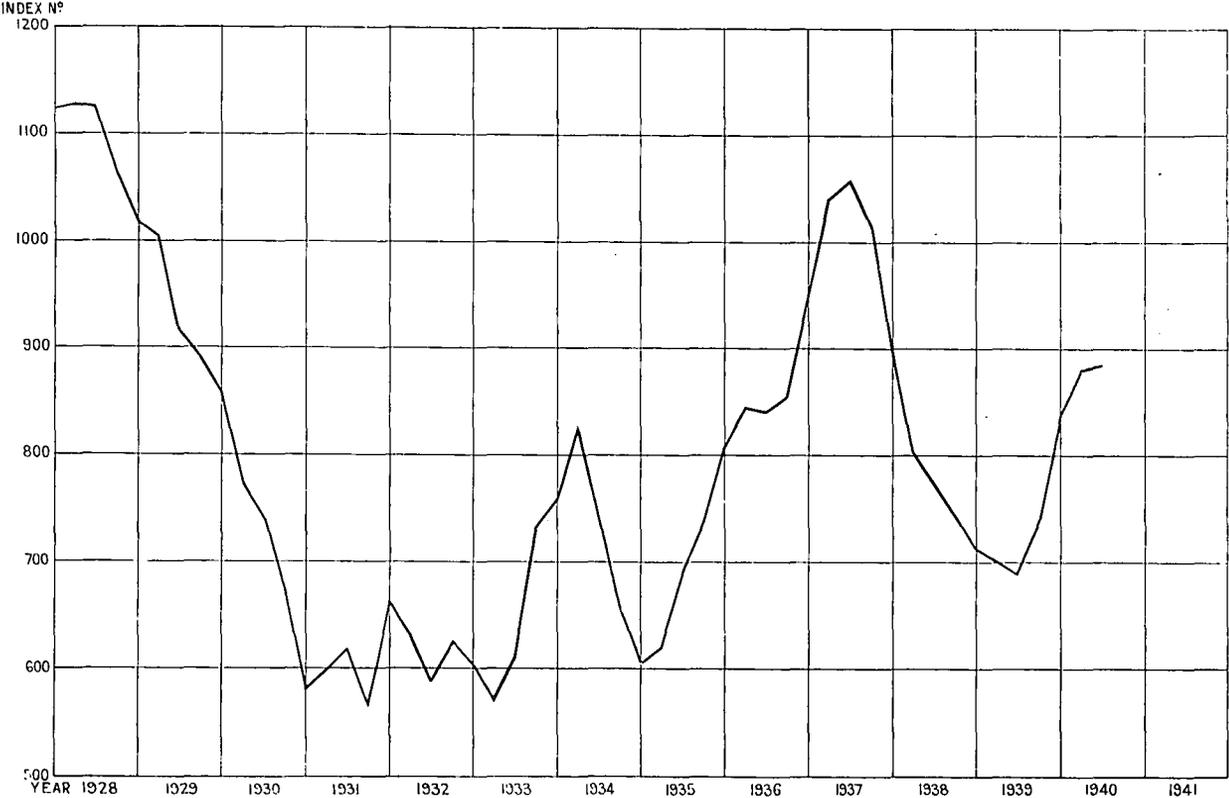
Goods the produce or manufacture of the Dominion of New Zealand are exempt from primage duty.

The conditions of preference in the Act provide that goods shall be deemed to be the produce or manufacture of New Zealand if they conform to the laws and regulations in force in Australia which apply to such goods when imported under the British Preferential Tariff (*vide* section 151A of Customs Act 1901-1936) except that goods not wholly produced or manufactured in New Zealand need not contain more than 50 per cent. of New Zealand labour and/or material in their factory or works cost, instead of 75 per cent. under the conditions of the United Kingdom preference.

Of the total imports of £A2,147,785 from New Zealand during 1938-39 it is estimated that goods otherwise dutiable amounting in value to £A435,288 were admitted free under the provisions of the Preferential Tariff and the duty thus remitted was £A155,092. In addition, goods valued at £A139,235 were admitted under the preferential rates of duty, the duty remitted on such goods being £A47,965. The total of the duties remitted on the import of New Zealand goods was thus £A203,057, representing a margin of preference of 35.3 per cent. on the value of the goods entitled to preference. The principal items which benefited under the preferential provisions were fish, valued at £A155,861, and undressed timber, £A140,656, the amounts of duty remitted being £A33,698 and £A140,656 respectively.

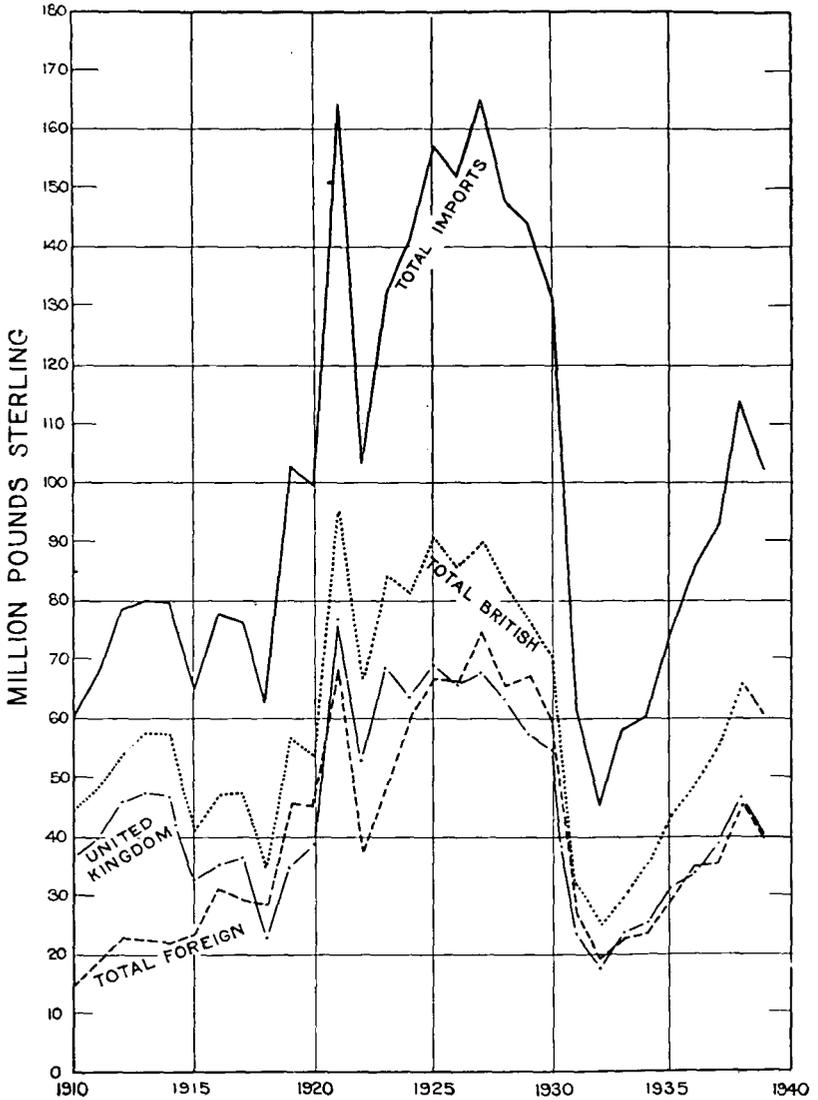
In December, 1938, the New Zealand Government announced a policy of import control. The immediate necessity for the prohibitions was due to the seriously low level to which New Zealand credits had fallen in London, but the policy was largely dictated by the determination to develop primary and secondary industries in the Dominion, increase exports, and control imports. The increase of exports would necessarily result in increased imports, but their nature would be controlled in the interests of local production

EXPORT PRICES INDEX-NUMBERS—AUSTRALIA, 1928 TO 1940.

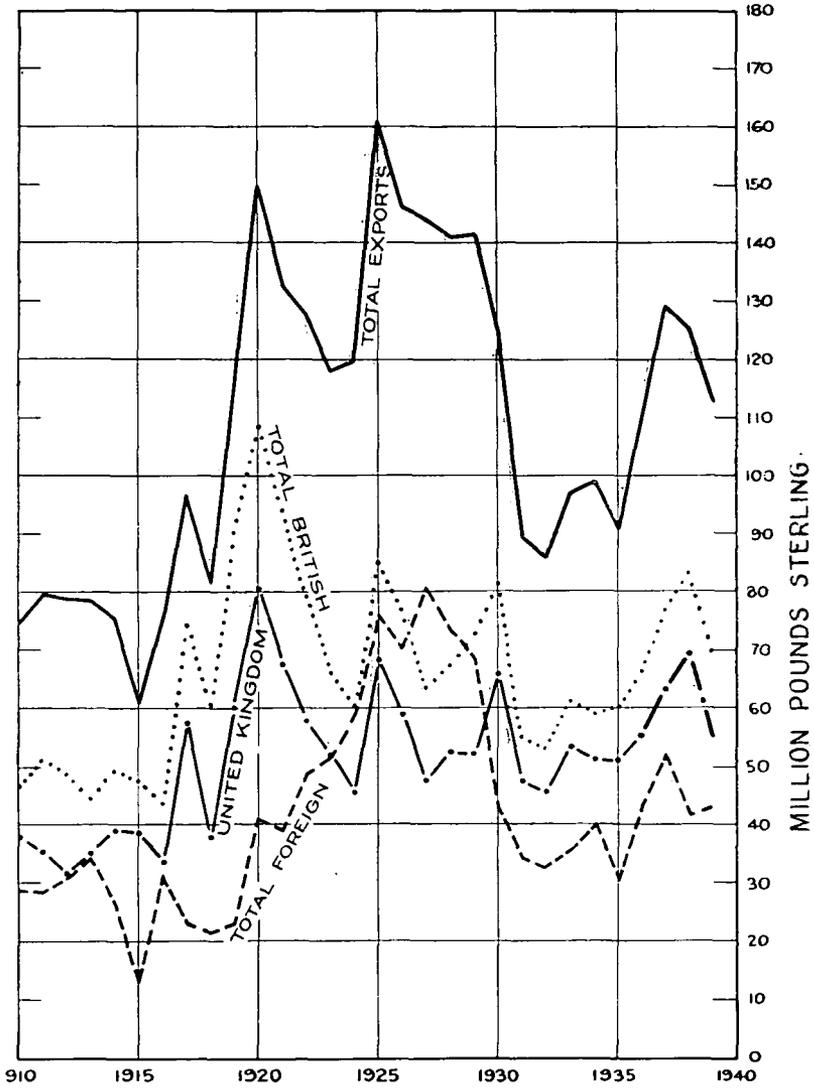


EXPLANATION.—This graph represents the Fixed Base series of Export Price Index-Numbers computed quarterly with the average for year 1928-29 as base (= 1,000).

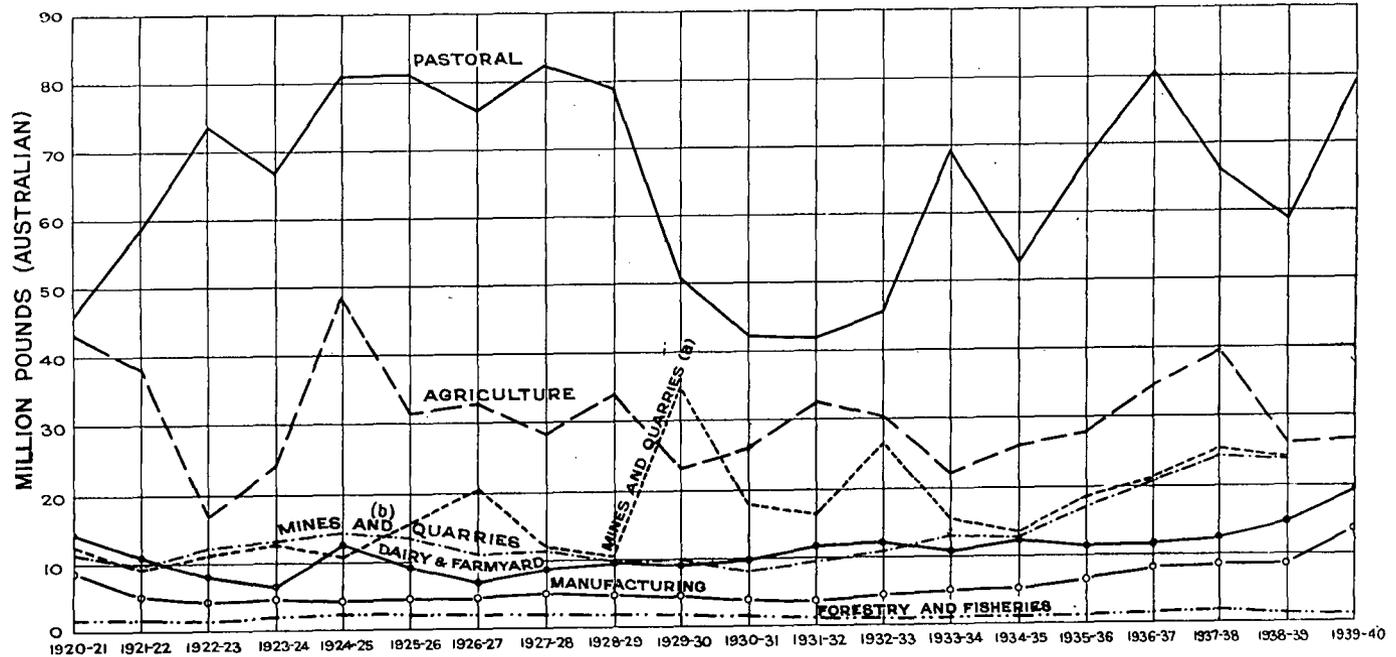
IMPORTS INTO AUSTRALIA, 1910 TO 1930.



EXPORTS FROM AUSTRALIA, 1910 TO 1939.



EXPORTS OF AUSTRALIAN PRODUCTS ACCORDING TO INDUSTRIES, 1920-21 TO 1939-40.



EXPLANATION.—Mines and Quarries (a) represents the total exports of the produce of this industry, including bullion and specie.
 Mines and Quarries (b) represents the export of products other than gold, to which is added the value of gold produced in the respective years.

by prohibiting luxury lines, and facilitating the importation of capital equipment and essential raw material for the production of goods which the policy of "import selection" would automatically prevent from coming into the Dominion.

During April, 1939, the Minister for Customs in New Zealand announced that imports into New Zealand of fruit, vegetables and certain other goods would be controlled by the State. The Minister stated that the object of the control was to enable imports to be co-ordinated more effectively with production in New Zealand.

The Minister further indicated that after 30th June, 1939, the imports of 220 items out of the 449 comprising the Customs Tariff would be completely prohibited regardless of country of origin. A further 40 items would have percentage reductions. The items affected include the following:—

Confectionery, spices, preserves, matches, cigars, cigarettes, manufactured tobacco, alcoholic liquors, made-up apparel (except children's hosiery), made-up hats, millinery, footwear (except gum boots, children's shoes, tennis shoes, and goloshes), floor coverings, cement, bricks, roofing tiles, musical instruments, gramophones, assembled radios, hand lawn mowers, most bottles, tinware, household electrical goods, vacuum cleaners, irons, cooking appliances (except ranges), paints, varnishes, lacquers, dressed timber, joinery, turnery, furniture, cabinetware, brooms, mops, brushes.

Assembled motor vehicles, totally prohibited; unassembled, 40 per cent. reduction.

Motor cycles and bicycles: 25 per cent. reduction, British; 55 per cent. Dominion made; 100 per cent. foreign.

(iv) *Dominion of Canada.* A reciprocal trade agreement between Canada and Australia which came into force on 1st October, 1925, was superseded by the Customs Tariff (Canadian Preference) Act of 1931, which reaffirmed the principle of granting preferences for the mutual advantage of the two countries and extended preferential conditions. Other tariff legislation in force is the Customs Tariff (Canadian Preference) Act No. 5 of 1934 as amended by Nos. 16 and 70 of 1936; No. 5 of 1938; and Nos. 58 and 61 of 1939. The commodities on which Canada grants preferential rates of duty to Australia are: Butter, brandy, champagne, cheese, currants, eggs, eucalyptus oil, fresh apricots, pears, quinces, nectarines, grapes, oranges and passion fruit, dried prunes, apricots, nectarines, pears and peaches, fruit pulp, fruits in cans, gelatine, hops, rice (uncleaned), meat (fresh and canned), peanuts, raisins, sugar, tallow, veneers and wine. Australia's preferential duties apply to the following Canadian imports:—Carbide of calcium, cash registers, corsets, fish, gloves, goloshes and rubber sand boots, etc., iron and steel tubes or pipes, printing machinery, barbed wire, paper (printing, typewriting and writing), timber, typewriters, vacuum cleaners and vehicles—motor chassis (unassembled and assembled)—and vehicle parts but not including bodies, gears, rubber tyres and tubes, storage batteries, shock absorbers, bumper bars, sparking plugs and springs.

During 1938–39 the imports from Canada amounted in Australian currency to £A9,674,647 and imports of Canadian origin entitled to preference were valued at £A8,759,973, the principal items being motor chassis and parts, £A2,395,895; printing paper, £A2,082,436; timber, £A1,250,015; fish, £A535,613; and piece goods, £A382,255. The duty on the total imports of Canadian origin entitled to preference would have been £A3,326,267 under the General Tariff, but by the preferential provisions this was reduced by £A1,942,947, or by 22.2 per cent. on the value of the imports concerned.

Australian exports to Canada subject to preference amounted to approximately £A1,250,000, the principle items being fruits, dried, £A561,172; sugar, £A470,026; fruits, preserved, £A76,863; and tallow, £A50,282.

7. *Preferential Tariff of the United Kingdom.*—(i) *General.* The post-war Tariff of the United Kingdom provides Preferential Customs rates on certain goods where it is shown to the satisfaction of the Commissioners of Customs and Excise that such goods

have been consigned from and grown, produced, or manufactured in the British Empire. Manufactured articles generally are not entitled to the preferential rates unless a specified percentage of their value is the result of labour within the British Empire. In the Budget submitted to the House of Commons during June, 1925, clauses dealing with increased Imperial preference on Empire-grown tobacco, preserved and dried fruits, jams and jellies, spirits, wine, sugar and hops were proposed and adopted. The new rates of duty took effect on 1st July, 1925, excepting that relating to hops, which came into operation on 16th August, 1925.

(ii) *Australian Preference.* The principal items of interest to Australia which are accorded preferential treatment under the Preferential Tariff of the United Kingdom are—Fruits, dried and preserved; jam; fruit pulp; preserved milk; wine and brandy. Conditions of preference to goods of Australian origin imported into the United Kingdom were revised in the trade agreement signed at the Ottawa Imperial Economic Conference. Increased preference was granted and the list of commodities entitled to preference was extended. This agreement provides that for eggs, poultry, butter, cheese and other milk products free entry for produce of Australia will be continued for three years certain. Article 2 of the agreement provides that the British Government will invite Parliament to pass the legislation necessary to impose on foreign goods specified in Schedule B, the duties of customs specified therein in place of the duties (if any) now leviable. The goods and duties in Schedule B are as follows:—Wheat in grain, 2s. per quarter; (this duty was abolished as a result of the United Kingdom—United States of America trade agreement of 17th November, 1938. See sub-par. (iv) below); butter, 15s. per cwt.; cheese, 15 per cent. ad valorem; apples, raw, 4s. 6d. per cwt.; pears, raw, 4s. 6d. per cwt.; apples, canned, 3s. 6d. per cwt., in addition to duty in respect of sugar content; other canned fruits, 15 per cent. ad valorem, in addition to duty in respect of sugar content; dried fruits, now dutiable at 7s., 10s. 6d. per cwt.; eggs in shell, (a) not exceeding 14 lb. per great 100, 1s. per great 100; (b) over 14 lb. but not exceeding 17 lb., 1s. 6d. per great 100; (c) over 17 lb., 1s. 9d. per great 100; condensed milk, whole, sweetened, 5s. per cwt., in addition to duty in respect of sugar content; condensed milk, whole, not sweetened, 6s. per cwt.; milk powder and other preserved milk, not sweetened, 6s. per cwt.; honey, 7s. per cwt.; copper, unwrought, whether refined or not, in ingots, bars, etc., 2d. per lb.; oranges, raw, 3s. 6d. per cwt. from 1st April to 30th November; grape fruit, raw, 5s. per cwt., from 1st April to 30th November, and grapes (other than hothouse) 1½d. per lb. from 1st February to 30th June. Schedule C provides that the margin of preference on wine not exceeding 27 degrees of proof spirit shall be 2s. per gallon.

The British Government undertake that the general ad valorem duty of 10 per cent. imposed by Section 1 of the Import Duties Act 1932 on the following foreign goods shall not be reduced except with the consent of the Commonwealth Government;—Leather, tallow, canned meat, zinc, lead, barley, wheaten flour, macaroni, dried peas, dressed poultry, casein, eucalyptus oil, meat extracts and essences, copra, sugar of milk, sausage casings, wattle bark, asbestos and dried fruits other than currants.

The duties provided on foreign wheat in grain, copper, lead and zinc are conditional on Empire producers continuing to offer these commodities on first sale in the United Kingdom at prices not exceeding the world price.

During the calendar year 1938 merchandise of Australian origin imported into United Kingdom amounted to £71,842,000. Of this total approximately £44,725,000 represented goods which received preferential tariff treatment over similar goods from foreign countries. If these goods had been subject to the duties imposed on foreign goods it is estimated that they would have paid approximately £6,945,000 more in duty. This represents a rebate of approximately 15.5 per cent. on the value of imports receiving preferential treatment. The main items receiving preference and the amount of the rebates were:—Wheat, £11,933,000 (rebate, £723,000); butter, £9,630,000 (rebate, £1,348,000); lead, unwrought, £2,952,000 (rebate, £70,000); beef, chilled and frozen, £4,366,000 (rebate, £821,000); sugar, £3,518,000 (rebate, £1,459,000); flour, £1,420,000 (rebate, £142,000); apples, fresh, £1,713,000 (rebate, £338,000); fruits, preserved, £1,050,000 (rebate, £196,000); raisins, £1,571,000 (rebate, £450,000); eggs in shell.

£600,000 (rebate, £76,000); and wine, £590,000 (rebate, £604,000). The above figures for imports have been obtained from the *Annual Statement of the Trade of the United Kingdom* 1938, and the rebate granted has been estimated from rates of duty shown in the Import Duties Act 1932, Ottawa Agreements Act 1932 and the other enactments mentioned above.

The declaration by the British Government (Schedule H of the agreement) provides for the regulation of foreign meat into the United Kingdom and undertakes that no restriction will be placed upon the importation of any meat from Australia during the period (January 1933 to June 1934) named in the "agreed programme" which is set out in Schedule H.

The views of the Government of the United Kingdom on the imports of meat into the United Kingdom were the subject of a paper presented to the House of Representatives in April, 1935. In a memorandum on "The Live Stock Situation" issued as a White Paper in July, 1934, the United Kingdom Government called attention to the very serious decline which had taken place in 1932, 1933 and the first half of 1934, in the prices of fat and store cattle in the United Kingdom market. The decline was attributed in the main to the disproportionate fall of agricultural prices as the result of the world depression and the effect on the meat industry of the expansion of oversea production which in some cases was stimulated by the payment of subsidies. The United Kingdom Government added that it was clearly impossible for that Government to acquiesce in a situation which threatened ruin to the United Kingdom live stock industry and explained that the choice lay between—

- (a) a drastic reduction of imports to the point necessary to sustain prices of United Kingdom live stock at a remunerative figure; or
- (b) the introduction in agreement with oversea countries of a levy upon imports the proceeds of which would be available for the assistance of the home industry.

In the latter case, it was explained, the quantity of imports might either be left entirely free or subjected to such moderate regulation as might be thought necessary to prevent the market from breaking altogether. It was further pointed out that, without the consent of the countries concerned, no duty could be imposed on Dominion meat before August, 1937, or on Argentine meat before November, 1936. Failing agreement on the payment of a levy on meat imports the United Kingdom Government would have no alternative but to take steps to regulate, during the currency of existing agreements, the quantity of imports to whatever extent was necessary to restore live stock prices to a remunerative level. In summing up the position the United Kingdom Government stated that it was the firm intention of His Majesty's Government in the United Kingdom to safeguard the position of the United Kingdom live stock industry.

The arrangements with the United Kingdom provide for importations of Australian meat regulated in accordance with the absorptive capacity of the United Kingdom market. Australian meat importations into the United Kingdom during 1934 to 1938 as compared with the Ottawa agreement year (1931-32) have been as follows:—

Year.	Chilled Beef.	Frozen Beef and Veal.	Frozen Mutton and Lamb.	Pork.
	Cwt.	Cwt.	Cwt.	Cwt.
1931-32	Nil	1,124,000	1,488,000	Nil
1934	55,000	1,599,000	1,627,000	82,000
1935	228,000	1,468,000	1,784,000	147,000
1936	296,000	1,512,000	1,499,000	233,000
1937	458,000	1,830,000	1,883,000	234,000
1938	547,000	1,850,000	1,899,000	284,000

Imports of mutton and lamb into the United Kingdom for the twelve-monthly period from 1st October, 1938, to 30th September, 1939, were reduced by 3 per cent. below the level of the preceding twelve months, this action having been taken by the United

Kingdom Government in order to safeguard the stability of the market. This reduction applied to exports from New Zealand, while foreign supplies were reduced by 10 per cent. compared with the preceding year.

Exports of mutton and lamb from Australia for arrival in the United Kingdom during the six months ended June, 1939, totalled 1,318,177 cwt., and total exports for the twelve months from October, 1938, to September, 1939, were estimated at 1,713,000 cwt. As this figure is within the limits imposed, the reduction of imports did not involve any actual restriction on exports of mutton and lamb from Australia.

From 1st October, 1939, the United Kingdom Government agreed to purchase from Australia beef, mutton, lamb, veal, pork, and offals. Particulars of the contracts appear in Chapter XXVIII. "Miscellaneous" (see § 14).

(iii) *United Kingdom-Argentina Trade Agreement.* In connexion with the supply of meat to the Mother Country it will be of interest to compare the terms of the United Kingdom-Argentina Trade Agreement which took effect from 20th November, 1936. This Agreement provides for "minimum annual quantities" of Argentina meat to be imported into the United Kingdom as follows:—Chilled beef for year 1937 not less than the quantity imported in 1935 reduced by 138,700 cwt. For each of the years 1938 and 1939 not less than the quantity permitted in the preceding year reduced by 138,700 cwt. provided that the 1939 quantity shall be not less than 6,590,000 cwt. Frozen beef 124,600 cwt., pork 186,800 cwt., and canned beef 605,600 cwt. annually. Mutton and lamb for year 1937, 886,000 cwt. and for 1938, 797,400 cwt. In addition, customs duty has been imposed as follows:—Chilled beef 3d. per lb.; frozen beef 3d. per lb.; canned beef (excluding tongues) 20 per cent., and tongues 30 per cent. ad valorem; pork, mutton and lamb, free. If in any period Argentina is unable to supply the minimum quantities specified the United Kingdom Government may re-allocate the shortage among other countries. The agreement was to remain in force until 31st December, 1939, and thereafter until terminated by six months' notice.

(iv) *United Kingdom-United States of America Trade Agreement.* The trade agreement between the United Kingdom and the United States of America, signed on 17th November, 1938, was of much interest to Australia as a country dependent on reasonable access to oversea markets for the disposal of its large surplus of agricultural products. In particular, the Commonwealth derived an interest in the United Kingdom-United States Agreement from the fact that the concurrence of the Dominions and India was sought in the modification of certain preferences, accorded by the United Kingdom under the Ottawa Agreements of 1932, in order to facilitate the satisfactory conclusion of the negotiations. The extent of the alterations in preferences to which the Commonwealth agreed was limited to:—

- (a) the abolition of the duty on foreign wheat imported into the United Kingdom,
- (b) a reduction in the duty on fresh apples during the period 15th August to 15th April and on fresh pears during the period August to January; the full duty to be maintained during the remaining months when the Australian supplies are principally marketed, and
- (c) reductions in the duties on honey and on the following fruits preserved in syrup, namely, apples, grape fruit, fruit salad, pineapples and loganberries.

In co-operating with the United Kingdom to the extent indicated the Commonwealth Government was actuated by the belief that the promotion of greater freedom in world trade as a result of the agreement between the United States and the United Kingdom would have an indirect but beneficial effect on the marketing of Australian export commodities.

8. *Trade Agreements.*—(i) *Belgium.* An agreement executed on 19th November, 1934, between the Governments of Belgium and the Commonwealth of Australia permitted Belgium to supply a specified proportion of Australian requirements of plain, clear sheet glass in return for which the Belgian Government waived all restrictions upon the importation of Australian meat and agreed not to enforce an embargo on

Australian cereals. This agreement continued in force until 1st January, 1937, when a new agreement came into operation. The quota arrangement with respect to Belgian glass is a feature of the new agreement which also provides for—

- (1) Reciprocal most-favoured-nation treatment.
- (2) The grant of intermediate tariff to Belgium in respect of 53 sub-items; an undertaking not to increase the duty on seven non-protective items; primage concessions on a number of items; remission of the revenue duty on outside packages operating on goods covered by nine items; an undertaking to refer a limited number of items to the Tariff Board for inquiry and report; and reclassification of certain sheet glass not manufactured in Australia.
- (3) Consolidation of the present duty-free entry into Belgium of Australian wool, sheepskins, hides and tallow, and consolidation of the duties on fresh apples and pears.
- (4) An undertaking by Belgium that Australian barley, wheat and frozen beef will not be prohibited.

The agreement is of indefinite duration and will remain in force until terminated by six months' notice from either Government.

(ii) *Brazil*. A trade agreement concluded between the Governments of Brazil and the Commonwealth of Australia came into operation on 1st January, 1940. Briefly, the agreement provided:—

- (1) Imports from Brazil would receive treatment not less favorable than that accorded to articles the produce or manufacture of any other foreign country.
- (2) Imports from Australia—the same as in (1).

Exceptions were made in regard to preferences or privileges granted for special reasons to particular countries.

(iii) *Czechoslovakia*. A trade agreement concluded between the Governments of Czechoslovakia and the Commonwealth of Australia came into force on 1st January, 1937. The actual commitments of the Commonwealth Government may be summarized as follows:—

- (1) The grant to Czechoslovakia of most-favoured-nation treatment covering import duties and charges on the importation into Australia of articles from Czechoslovakia.
- (2) The grant of an intermediate tariff rate on 44 items.
- (3) The continuance of by-law admission of certain steel which is of a type not manufactured in Australia.
- (4) Remission of primage duty on a limited number of items.
- (5) An undertaking that prohibitions and restrictions shall not be discriminatory.
- (6) An undertaking to accord equitable treatment to Czechoslovakian goods should quantitative regulation of imports be maintained or adopted.

The undertakings given in paragraphs 1, 5 and 6 are reciprocal in their application. Czechoslovakia on its part undertakes to grant duty-free admission to wool, sheepskins, rabbit skins and pearl-shell; to consolidate the existing low duties on lead; and to grant a reduction of duty on apples.

The agreement is for one year but will continue thereafter until terminated by three months' notice of denunciation.

On 13th April, 1938, amendments to the agreement were adopted providing that the scope of Article 6 should be extended to include prohibitions and restrictions applying to arms, ammunition and implements of war and in exceptional circumstances to all other war supplies.

(iv) *France.* A trade agreement between the Governments of France and the Commonwealth of Australia came into force on 1st January, 1937. Briefly stated the concessions granted to France by the Commonwealth Government are as follows:—

- (1) A general pledge to accord France most-favoured-nation treatment with respect to customs duties by according to French products tariff treatment at least as favourable as that accorded to the products of the most favoured foreign country.
- (2) The grant of intermediate tariff rates on 96 tariff items or sub-items.
- (3) A reduction of primage duties on 72 tariff items or sub-items.
- (4) An undertaking to refer 16 items to the Tariff Board for inquiry and report.
- (5) A consolidation for the minimum period of the agreement—one year—of the duties on high-power insulators for use in the manufacture of electric switch-gear and transformers.

In return for the concessions granted by Australia, the French Government has agreed to accord the following benefits to Australian exports:—

- (1) The grant of the French minimum tariff duties on 20 items. Wool, hides and skins, wheat, barley, apples, meat, and metals are included in the list.
- (2) The abolition of the special retaliatory duties of 200 per cent. of the French maximum tariff on butter and wheat.
- (3) The abolition of exchange surtax of 15 per cent. ad valorem on all Australian goods.
- (4) The reduction of the import tax on Australian products to a flat rate of 2 per cent. This tax which is similar to primage formerly ranged from 2 per cent. to 6 per cent.

The agreement has been made for one year but will continue thereafter until terminated by two months' notice from either Government.

While French quota restrictions remain, the grant of French minimum tariff duties on 20 items does not necessarily mean that the way is open for large imports of those commodities to France. For some items the French Government has been unable to grant quotas but has undertaken to examine with goodwill any request from the Commonwealth Government for a percentage of the global quota. Australian barley and apples are exceptions, the annual quota for barley having been fixed at 20,000 quintals, and for apples at 64,500 bushel cases.

(v) *Japan.* A trade arrangement entered into between the Governments of Japan and the Commonwealth of Australia operated from 1st January, 1937 to 30th June, 1938. Under this arrangement the Commonwealth Government granted intermediate tariff rates of duty to imports of Japanese artificial silk and cotton piece goods comprising eleven tariff items from which primage duty was also removed. The maximum quantity to be imported was fixed at 102,500,000 square yards per annum, divided equally between artificial silk and cotton. In return, the Government of Japan undertook to issue permits for the import during the currency of the arrangement of 800,000 bales of Australian wool, or at the rate of 533,000 bales per annum. In accordance with the terms of the arrangement all prohibitions and super duties which had been imposed by the two Governments in 1936 were removed as from 1st January, 1937.

A new arrangement effected by an exchange of letters between representatives of the two Governments came into force on 1st July, 1938, and has a currency of one year. Under this arrangement Japan will permit the import of such quantity of Australian wool as will correspond to two-thirds of the total quantity up to 500,000 bales imported from all countries, and such additional quantity as will correspond to three-fourths of the total imports in excess of 500,000 bales. It is further provided that the difference between the quantity imported into Japan during the period from 1st January, 1937 to 30th June, 1938, and 600,000 bales shall be imported into Japan during the period of one year from 1st July, 1938. This additional quantity shall not be taken into consideration in determining Australia's wool allotment on the basis of a proportion of total imports for the year (shipments of Australian wool to Japan in the period from 1st January, 1937, to 30th June, 1938, amounted to 521,929 bales).

The only alteration made in the import quotas for Japanese textiles is the inclusion of staple fibre piece goods in the artificial silk goods quota. The quantity to be imported is fixed as before at 102,500,000 square yards per annum in equal quantities of artificial silk and cotton piece goods. As in the previous agreement calico for use in the manufacture of bags is admitted without restriction.

Provision is made in the arrangement for a review by the Commonwealth Government of the textile piece goods quotas if it should appear at any time that the quantity of Australian wool to be imported into Japan during the year commencing 1st July, 1938, will be less than 266,667 bales in addition to approximately 100,000 bales representing the difference between 600,000 bales and the quantity of Australian wool imported into Japan between 1st January, 1937, and 30th June, 1938.

The Japanese Government declined to renew the agreement after 30th June, 1939, and guaranteed to maintain the reciprocal trade transactions on the same basis as obtained under the agreement.

(vi) *Newfoundland*. A trade agreement concluded between the Governments of Newfoundland and the Commonwealth of Australia came into operation on 14th December, 1939. The agreement provided for preferential treatment in respect of butter and canned fruits imported into Newfoundland from Australia, and in respect of certain news-printing paper imported into Australia from Newfoundland.

(vii) *Switzerland*. A trade agreement, concluded between the Governments of Switzerland and the Commonwealth of Australia, came into force on 30th December, 1938. The agreement is of indefinite duration, and remains in force until six months after denunciation by either party. Briefly it provides for the following:—

- (1) Reciprocal most-favoured treatment.
- (2) The grant of an intermediate tariff rate and primage duty reductions in respect of a limited number of Swiss commodities.

These concessions are granted in respect of Swiss cheese, certain classes of textiles (mainly Swiss specialties), watches and chronometers, and trade catalogues, price lists and other printed advertising matter addressed to hospitals, medical practitioners or dentists in single copies.

- (3) The reduction and consolidation of Swiss duties on certain Australian products.

The reductions are on wool (50 centimes to 15 centimes per metric quintal) and on sandalwood oil (80 francs to 10 francs per metric quintal), and the consolidations are on apples and pears, raisins and currants, canned fruits, lead, eucalyptus oil and starch.

- (4) Minimum annual quotas of certain Australian products (apples and pears, timber and barley).

The quota on apples and pears is 15,000 metric quintals, an increase of more than 12,000 metric quintals over the quota for 1938, while the quota on timber is increased from 560 metric quintals to 10,000 metric quintals. The quota on barley is the same as that for 1938 (38,000 metric quintals).

- (5) Mutual undertaking that quantitative restrictions on imports shall not be discriminatory.
- (6) Mutual right to withdraw concessions if other countries obtain the major benefits.
- (7) Liberty on the part of either party to take any action it thinks proper to re-establish the equilibrium of the agreement, should either party adopt any measures considered to nullify or impair the advantages of the agreement.

9. *Australian Trade Diversion*.—On 22nd May, 1936, the Minister directing negotiations for Trade Treaties announced in the House of Representatives the decision of the Government to divert portion of Australia's import trade, with the object of increasing exports of primary produce, expanding secondary industry, and bringing about an increase of rural and industrial employment.

Briefly summarized the Minister's statement indicated that certain imports would be restricted with a view to their manufacture in Australia, including motor chassis, which, it was hoped, would be made in Australia on a large scale within a few years. In the case of certain other imports it was intended to divert them from their present sources of supply to other countries which were great customers of Australia and which it was expected would become greater customers if Australia increased her purchases from them. The Government would proceed in two ways, firstly, by the adoption of a special licensing system over a limited range of imports and, secondly, by the imposition of higher duties where this course appeared more desirable. With the exception of motor chassis all goods of British origin would be exempt from the licensing system. In the case of motor chassis imports of United Kingdom origin only would be exempt from restriction. Upon application licences would be freely granted to countries with which Australia had a favourable balance of trade and to all other countries in regard to which, although the balance might be adverse to the Commonwealth, the Government was satisfied with the position.

The special licensing system was introduced on 23rd May, 1936, in the form of an amendment to the Customs (Prohibited Imports) Regulations which prohibited the import, except under special licence, of 84 classified groups of goods from foreign countries. On 7th December, 1937, the Minister for Trade and Customs announced important modifications of the licensing system and the intention of the Government to substitute adequate duties to protect Australian industries established or extended under the licensing system. These duties were imposed by Customs and Excise Resolutions of 4th May, 1938, and all licensing restrictions on the 84 groups of goods were removed from that date. From December, 1939, imports from non-sterling countries including Canada, Newfoundland and Hong Kong were controlled by the Customs (Import Licensing) Regulations, the main aim being to conserve resources in non-sterling exchange and to prevent the use of those resources in the purchase of unessential imports to the detriment of the more vital national needs. Other references to this subject and to restrictions imposed on the import of motor chassis will be found in par. 2 above.

10. **United States of America—Australian Trade Relations.**—The trade diversion policy of the Commonwealth Government as expressed by the prohibition, except under special licence, of specified imports as from 23rd May, 1936, adversely affected a wide range of goods from the United States of America, which for a number of years had enjoyed an extremely favourable trade balance with Australia. In reply to this action the United States Government withdrew as from 1st August, 1936, the most-favoured-nation treatment hitherto accorded to Australian goods including certain trade benefits extended to Australia equally with a number of countries with which the United States had concluded trade agreements. A further step bearing on the trade relations between the two countries was the extension by the Commonwealth Government to "proclaimed countries" as from 1st January, 1937, of intermediate customs tariff rates and certain primage duty concessions. The list of "proclaimed countries" includes the United Kingdom, the Dominions and Colonies, and the principal foreign countries but does not include the United States.

The alteration in the system of import licensing restrictions, which had been in operation since 23rd May, 1936, and the substitution of increased rates of duty where such were considered necessary to provide adequate protection for Australian industries, resulted in the restoration, from 1st February, 1938, by the United States Government, of the accord to Australian goods of most favoured nation treatment.

11. **Restriction of Imports into Japan.**—An Imperial Ordinance, No. 124 of 1936, affecting the trade of Australia with Japan was promulgated on 25th June, 1936, by the Government of Japan providing for the restriction of imports from proclaimed countries under certain conditions.

The restrictions imposed by this Ordinance were abolished, however, as from 1st January, 1937, so far as Australia was concerned, under the terms of the trade agreement concluded between the Governments of Japan and the Commonwealth of Australia.

12. **Tariff Board.**—The Tariff Board Act 1921–1934 provides for the appointment of a Tariff Board consisting of four members, one of whom shall be an administrative officer of the Department of Trade and Customs. This member may be appointed Chairman of the Board. Members of the Board are appointed for a term of not less than one year nor more than three years, and two members may be appointed as a Committee for making special inquiries. The purpose of the Tariff Board is to assist the Minister in the administration of matters relating to trade and customs. The more important matters which the Minister shall refer to the Board for inquiry and report include disputes arising out of the interpretation of any Customs or Excise Tariff; the necessity for new, increased or reduced duties; the necessity for granting bonuses; any proposal for the application of the British Preferential Tariff to any part of the British Dominions or any foreign country; 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. The Minister may refer to the Board for inquiry and report the following matters:—the classification of goods under items of the Tariff that provide for admission under By-laws; the determination of the value of goods for duty; the general effect of the working of the Customs Tariff and the Excise Tariff; the fiscal and industrial effects of the Customs laws of the Commonwealth; the incidence between the rates of duty on raw materials and on finished or partly finished products; and any other matter affecting the encouragement of primary and secondary industries in relation to the Tariff.

Inquiries conducted by the Board relating to any revision of the Tariff, any proposal for a bounty, or any complaints 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 1921–1936 shall be taken in public on oath.

The latest "Annual Report of the Tariff Board," issued in accordance with Section 18 (1) of the Tariff Board Act 1921–1934 reviews the work of the Board during the year ended 30th June, 1940. During the year the Board furnished 50 reports to the Minister for Trade and Customs, and of these reports 45 related to matters on which public inquiries had been held. The subjects dealt with comprised:—Tariff revision, 37; requests for removal of goods from by-law, 3; and establishments of new industries, 2. Four reports on the question of bringing deferred duties into operation and one dealing with a question of classification were not the subject of public inquiries. At 30th June, 1940, the Board had on hand nine subjects on which reports had not been furnished to the Minister and six subjects which had been referred to it by the Director of Economic Co-ordination.

The Minister for Trade and Customs on 14th December, 1932, referred to the Tariff Board for public inquiry and report the question as to the practicability of evolving some method of varying duties imposed under protective items of the Customs Tariff to meet the operation of exchange and primage. The recommendation of the Board regarding exchange adjustment was embodied in Customs Tariff (Exchange Adjustment) Act 1933. In regard to primage duty, the Board reaffirmed its recommendation to the Minister, dated 5th August, 1932, that primage duty should be removed from protective items in the Tariff Schedule, and suggested the adoption of such recommendation so soon as the Government considered that revenue considerations permitted.

13. **Industries Preservation.**—The Customs Tariff (Industries Preservation) Act 1921–1936 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 price 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 a fair market 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—on goods carried free—the amount payable as freight at the normal rate; 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 are also imposed in the case of goods imported from countries whose currency is depreciated. Provision is also made for the protection of the trade of the United Kingdom in the Australian market from depreciated foreign currency.

The Act provides that the Minister for Trade and Customs, after inquiry and report by the Tariff Board, may publish a notice in the *Commonwealth Government Gazette* specifying the goods upon which special rates of duty under this Act shall be charged and collected. Several amendments of the Act were recommended by the Tariff Board and put into effect by the Customs Tariff (Industries Preservation) Act 1922. The Customs Tariff (Industries Preservation) Act 1933 repeals section 8 of Act 1921-1922 and provides new clauses relating to Exchange Special Duty.

14. Trade Descriptions.—The Commerce (Trade Descriptions) Act 1905 as amended by the Acts of 1926, 1930 and 1933 gives power to compel the placing of a proper description on certain prescribed goods, or on packages containing the same, being imports or exports of the Commonwealth. The goods to which a trade description must be applied are:— (a) Articles used for food or drink by man, or used in the manufacture or preparation of articles used for food or drink by man; (b) medicines or medicinal preparations for internal or external use; (c) manures; (d) apparel (including boots and shoes), and the materials from which apparel is manufactured; (e) jewellery; (f) seeds and plants; and (g) brushware.

15. Acts passed in 1939.—The following Acts relating to Australian production and trade were assented to during the year 1939:—

Customs Tariff, No. 2 of 1939. An Act relating to duties of Customs.

Customs Tariff (Exchange Adjustment) Act, No. 3 of 1939. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-38.

Trading with the Enemy Act, No. 14 of 1939. An Act relating to trading with the Enemy.

Flour Tax (Wheat Industry Assistance). Assessment Act, No. 27 of 1939. An Act to insert provisions in the Flour Tax (Wheat Industry Assistance) Assessment Act 1938 relating to certain declarations made by the Minister.

Customs Tariff (No. 2), No. 28 of 1939. An Act relating to duties of Customs.

Excise Tariff, No. 29 of 1939. An Act relating to duties of Excise.

Tractor Bounty Act, No. 35 of 1939. An Act to provide for the payment of a bounty on the production of tractors.

Sulphur Bounty Act, No. 36 of 1939. An Act to provide for the payment of a bounty on the production of sulphur.

Wire Netting Bounty Act, No. 37 of 1939. An Act to provide for the payment of a bounty on the production of wire netting.

Wine Export Bounty Act, No. 44 of 1939. An Act to provide for the payment of a bounty on the export of fortified wine, and for other purposes.

Ship Bounty Act, No. 45 of 1939. An Act to provide for the payment of a bounty on the construction of ships and parts of ships.

Trade Agreement (Newfoundland) Act, No. 49 of 1939. An Act to approve an agreement between the Government of the Commonwealth of Australia and the Government of Newfoundland in relation to duties of Customs.

Customs Tariff (Newfoundland Preference), No. 50 of 1939. An Act relating to duties of Customs.

Gold Tax Collection Act, No. 51 of 1939. An Act relating to the imposition and collection of a tax upon gold.

Gold Tax Act, No. 52 of 1939. An Act to impose a tax upon gold.

Customs Tariff (No. 3), No. 53 of 1939. An Act relating to duties of Customs.

- Excise Tariff (No. 2). No. 54 of 1939. An Act relating to duties of Excise.
- Customs Tariff (No. 4), No. 56 of 1939. An Act relating to duties of Customs.
- Customs Tariff (Exchange Adjustment) (No. 2) Act, No. 57 of 1939. An Act to amend the Customs Tariff (Exchange Adjustment) Act, 1933-1938, as amended by the Customs Tariff (Exchange Adjustment) Act 1939.
- Customs Tariff (Canadian Preference), No. 58 of 1939. An Act to amend the Customs Tariff (Canadian Preference) 1934-1938.
- Customs Tariff (No. 5), No. 59 of 1939. An Act relating to duties of Customs.
- Customs Tariff (Exchange Adjustment) (No. 3) Act, No. 60 of 1939. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-1938, as amended by the Customs Tariff (Exchange Adjustment) Act 1939.
- Customs Tariff (Canadian Preference) (No. 2), No. 61 of 1939. An Act to amend the Customs Tariff (Canadian Preference) 1934-1938, as amended by the Customs Tariff (Canadian Preference) 1939.
- Customs Tariff (No. 6), No. 62 of 1939. An Act relating to duties of Customs.
- Customs Tariff (Exchange Adjustment) (No. 4) Act, No. 63 of 1939. An Act to amend the Customs Tariff (Exchange Adjustment) Act 1933-1938, as amended by the Customs Tariff (Exchange Adjustment) Act 1939.
- Customs Tariff (No. 7). No. 64 of 1939. An Act relating to duties of Customs.
- Excise Tariff (No. 3). No. 65 of 1939. An Act relating to duties of Excise.
- Raw Cotton Bounty Act, No. 68 of 1939. An Act to amend the Raw Cotton Bounty Act 1934-1938.
- Motor Vehicle Engine Bounty Act, No. 69 of 1939. An Act to provide for the payment of a bounty on the production of motor vehicle engines.
- Canvas and Duck Bounty Act, No. 73 of 1939. An Act to provide for the payment of a bounty on the production of canvas and duck.
- Tyre Cord Bounty Act, No. 75 of 1939. An Act to provide for the payment of a bounty on the production of tyre cord and tyre cord fabric.
- Customs Tariff Validation Act, No. 76 of 1939. An Act to provide for the validation of collections of duties of Customs under Customs Tariff Proposals.
- Customs Tariff (Exchange Adjustment) Validation Act, No. 77 of 1939. An Act to provide for the validation of adjustments in duties of Customs under Customs Tariff (Exchange Adjustment) Proposals.
- Customs Tariff (Canadian Preference) Validation Act, No. 78 of 1939. An Act to provide for the validation of duties of Customs under Customs Tariff (Canadian Preference) Proposals.
- Sulphur Bounty (No. 2) Act, No. 79 of 1939. An Act to amend the Sulphur Bounty Act 1939.
- Tractor Bounty (No. 2) Act, No. 80 of 1939. An Act to amend the Tractor Bounty Act 1939.
- Wire Netting Bounty (No. 2) Act, No. 81 of 1939. An Act to amend the Wire Netting Bounty Act 1939.
- Newsprinting Paper Bounty Act, No. 82 of 1939. An Act to amend the Newsprinting Paper Bounty Act 1938.
- Trade Agreement (Brazil) Act, No. 83 of 1939. An Act to approve an agreement between the Government of the Commonwealth of Australia and the Government of the Republic of Brazil.
- Wheat Industry (War-time Control) Act, No. 84 of 1939. An Act relating to the financial arrangements necessary for carrying out a scheme for the regulation and control of the Wheat Industry during the present War.

§ 3. Trade Representatives.

1. *Oversea*.—The Commonwealth of Australia is represented in the United Kingdom by the Right Hon. S. M. Bruce, C.H., M.C., High Commissioner, with headquarters at Australia House, London. Matters affecting the oversea trade of Australia come within the scope of the duties of the office.

The first appointment of a representative for Australia in the United States of America was made in 1918. The office of Commissioner-General for Australia in the United States was changed to that of Australian Government Trade Commissioner as from 1st July, 1938. In 1940 the position of Australian Government Trade Commissioner for North America was created with head quarters in New York. The Commissioner exercises supervision and general control over the trade offices in the United States of America and Canada.

In April, 1929, a Commercial Representative for Australia was appointed in the Dominion of Canada, with head-quarters at Toronto. The position has now been abolished and is administered from New York with an Assistant Trade Commissioner at Toronto.

The Trade Commissioners Act 1933 provides for the appointment of one or more Trade Commissioners and Assistant Trade Commissioners of the Commonwealth in such places as the Governor-General determines. In April, 1934, the first appointment under the Act was made, Mr. R. H. Nesbitt being appointed Australian Trade Commissioner in New Zealand, with head-quarters at Wellington. Mr. Nesbitt resigned in April, 1937, and was succeeded in July, 1937, by Mr. C. E. Critchley, M.B.E., formerly Australian Trade Commissioner in Netherlands East Indies. In May, 1935, Trade Commissioners and Assistant Trade Commissioners were appointed to Japan, China and Netherlands East Indies, and in January, 1937 a Trade Commissioner was appointed to Egypt. The Trade Commissioners are—China, Mr. V. G. Bowden, C.B.E., Shanghai; Egypt, Mr. J. Payne (Acting), Cairo; India, Mr. H. Roy Gollan, D.S.O., M.C., Calcutta; Japan—This office has now become part of the Legation established at Tokyo in 1940. Mr. A. G. Hard the former Assistant Trade Commissioner has been appointed Commercial Secretary of the Legation; Netherlands East Indies, Mr. H. A. Peterson, Batavia; New Zealand, Mr. C. E. Critchley, M.B.E., Wellington; and North America, Mr. L. R. MacGregor, C.B.E., New York, with Mr. J. U. Garside, New York, as Assistant Trade Commissioner in the United States of America, and Mr. R. R. Ellen, Toronto, as Assistant Commissioner in Canada.

2. In Australia.—Trade Commissioners representing the undermentioned countries are located in Australia, namely:—The United Kingdom, Canada, India, New Zealand and France. His Majesty's Senior Trade Commissioner for the United Kingdom has his head-quarters in Sydney and Trade Commissioners are located also at Melbourne and Brisbane. The New Zealand Government Representative and Trade Commissioner, the Senior Canadian Government Trade Commissioner and the Trade Commissioners for India and France are located in Sydney. Trade matters affecting other oversea countries are generally attended to by their Consular representatives.

§ 4. Method of Recording Imports and Exports.

1. Value of 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. The value of goods is taken to be 10 per cent. in advance of their fair market value in the principal markets of the country whence the goods were exported. Acting upon a recommendation of the Tariff Board the section of the Customs Act relating to the valuation of imports was amended, and section 154 (1) of the Customs Act 1901-1936 now 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;
- (b) all charges payable or ordinarily payable for placing the goods free on board at the port of export; and
- (c) ten per centum of the amounts specified under paragraphs (a) and (b) of this sub-section.

“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.”

Imports are recorded in British currency values, and Section 157 of the Customs Act provides that when the invoice value of imported goods is shown in any currency other than British currency, the equivalent value in British currency shall be ascertained according to a fair rate of exchange to be declared in case of doubt by the Minister. Under this section it was the practice of the Department of Trade and Customs, until 8th December, 1920, to convert on the basis of the mint par of exchange. Since the date mentioned, in consequence of a ruling of the High Court, all conversions have been based on the commercial rates of exchange.

The term “British currency values” is not exactly synonymous with “English sterling”, since imports already expressed in terms of £ s. d. are regarded for duty purposes as being expressed in British currency values. This exception to the general rule is chiefly important in the case of imports from Fiji, New Zealand, and the Union of South Africa when their currencies are not at par with English currency. In all the tables in this volume no correction has been made on this account, even when for the sake of brevity the term “sterling” has been used as a contraction for “British currency values.”

2. Value of Exports.—Prior to 1st July, 1929, the recorded value of all goods exported was taken as representing the value in the principal markets of the Commonwealth in the ordinary commercial acceptance of the term. Owing to the inflated values arbitrarily allotted in recent years to commodities which are subject to governmental control or subsidy, some change in the practice of valuation of exports of such commodities became desirable. Accordingly a new basis was adopted as from 1st July, 1929, for the statistical valuation of exports of sugar, butter and goods on which bounty or rebate was paid which would show for (a) *Sugar*—the value f.o.b. at which sold to oversea buyers, or a f.o.b. value equal to the London market price if shipped on consignment; (b) *Goods on which bounty or rebate was paid on export*—the value in the principal markets of the Commonwealth in the ordinary commercial acceptance of the term, less the value of any bounty or rebate. Until 31st March, 1934, the basis adopted for the value of exports of butter was the current market value, less the amount paid as export bonus. From 31st March, 1934, to 30th June, 1937, the basis was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the butter was sold and (b) shipped on consignment—the f.o.b. equivalent of the ruling price overseas.

From 1st July, 1930, to 30th June, 1937, the basis adopted for the value of *wool* exported was (a) sold in Australia for export—the actual price paid plus the cost of services incurred in placing the wool on board ship, and (b) shipped on consignment—the f.o.b. equivalent of ruling Australian prices.

From 1st July, 1932, to 30th June, 1937, the basis adopted for the value of *wheat* exported was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the wheat was sold, and (b) shipped on consignment—the f.o.b. equivalent of the current selling price overseas.

From 1st July, 1934, to 30th June, 1937, the basis adopted for the value of *flour* exported was (a) sold in Australia for export—the f.o.b. equivalent of the price at which the flour was sold, and (b) shipped on consignment—the f.o.b. equivalent of ruling Australian prices.

Since 1st July, 1937, the following revised definitions of f.o.b. values have been adopted for exports generally :—

- (1) Goods sold to oversea buyers before export—the f.o.b. equivalent of the price at which the goods were sold (e.g., as regards wool, the actual price paid by the oversea buyer plus the cost of all services incurred by him in placing the wool on board ship).

- (2) Goods shipped on consignment—the Australian f.o.b. 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. equivalent of current price ruling in Australia will normally provide a sufficient approximation to the f.o.b. equivalent of the price ultimately received).

All values to be shown in terms of Australian currency, and to include cost of containers.

3. **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, comprising the States of New South Wales (including Australian Capital Territory), Victoria, Queensland, South Australia, Western Australia and Tasmania, and the Northern Territory. Non-contiguous territories and mandated areas 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.

4. **Statistical Classification of Imports and Exports.**—*Oversea Trade Bulletin No. 36* for the year 1938-39, from which the summary figures in this issue of the Official Year Book have been extracted, was compiled according to a classification which came into operation on 1st July, 1922. In order to meet the demand for more detailed information relating to imports and exports the number of items has been materially increased. The revised classification was divided into 21 classes, and at 30th June, 1940, comprised approximately 2,000 separate import items and 600 export items.

5. **The Trade Year.**—From 1st July, 1914, the statistics relating to Oversea Trade have been shown according to the fiscal year (July to June). Prior to that date the figures related to the calendar year. A table is given in § 15 showing the total value of imports and exports in the calendar years 1936 to 1938 inclusive. For the year 1939, the value of merchandise only is shown.

6. **Records of Past Years.**—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. The figures in the following table for years prior to Federation have been carefully compiled and may be taken as representative of the oversea trade of Australia as a whole. On the introduction of the Customs Act 1901, the methods of recording values were made uniform throughout the States, but it was not until September, 1903, that a fundamental defect in the system of recording transhipped goods was remedied. Prior to 1905 the value of ships imported or exported was not included in the returns of trade.

7. **Ships' 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' stores have been specially recorded as such, and omitted from the return of exports. A table showing the value of these stores shipped each year since 1906 is given in §9 below.

§ 5. Oversea Trade.

1. **Total Oversea Trade.**—(i) *Including Gold.* The following table shows the total trade (including gold) of the Commonwealth with oversea countries from the earliest date for which records are available. To save space, the period 1826 to 1925-26 has been divided into quinquennia, and the figures shown represent the annual averages for the quinquennia specified. The figures for individual years were published in earlier issues of the Official Year Book. (See note to following table.)

TOTAL OVERSEA TRADE : AUSTRALIA.
(INCLUDING GOLD.)

Period.(a)	Recorded Value.(b)			Value per Inhabitant.			Percentage of Exports on Imports.
	Imports.	Exports.	Total.	Imports.	Exports.	Total.	
	£1,000.	£1,000.	£1,000.	£ s. d.	£ s. d.	£ s. d.	%
1826 to 30	638	153	791	10 12 5	2 10 11	13 3 4	23.9
1831 „ 35	1,144	613	1,757	11 19 10	6 8 6	18 8 4	53.6
1836 „ 40	2,283	1,112	3,395	14 15 9	7 4 1	21 19 10	48.7
1841 „ 45	1,906	1,378	3,284	9 0 5	6 10 5	15 10 10	72.3
1846 „ 50	2,379	2,264	4,643	6 18 10	6 12 2	13 11 0	95.2
1851 „ 55	11,931	11,414	23,345	19 12 5	18 15 4	38 7 9	95.7
1856 „ 60	18,816	16,019	34,835	18 6 1	15 11 8	33 17 9	85.1
1861 „ 65	20,132	18,699	38,831	15 17 1	14 14 9	30 11 10	93.0
1866 „ 70	18,691	19,417	38,108	12 7 4	12 16 11	25 4 3	103.9
1871 „ 75	21,982	24,247	46,229	12 7 2	13 13 6	26 0 8	110.3
1876 „ 80	24,622	23,772	48,394	11 19 7	11 10 9	23 10 4	96.6
1881 „ 85	34,895	28,055	62,950	14 4 3	11 9 5	25 13 8	80.4
1886 „ 90	34,675	26,579	61,254	11 16 11	9 1 0	20 17 11	76.6
1891 „ 95	27,335	33,683	61,018	8 5 2	10 2 5	18 7 7	123.2
1896 „ 1900	33,763	41,094	74,857	9 5 4	11 5 6	20 10 10	121.7
1901 „ 05	39,258	51,237	90,495	10 1 10	13 2 9	23 4 7	130.5
1906 „ 10	51,508	(c)69,336	120,844	12 4 8	16 9 11	28 14 7	134.6
1911 „ 15-16	73,411	74,504	147,915	15 7 4	15 12 10	31 0 2	101.5
1916-17 to 1920-21	100,735	115,066	215,801	19 7 9	22 2 10	41 10 7	114.2
1921-22 to 1925-26	136,844	134,545	271,389	23 15 6	23 7 7	47 3 1	98.3
1926-27 ..	164,717	144,084	308,801	26 18 1	23 10 9	50 8 10	87.5
1927-28 ..	147,945	141,206	289,151	23 13 8	22 12 0	46 5 8	95.4
1928-29 ..	143,648	141,615	285,263	22 12 3	22 5 10	44 18 1	98.6
1929-30 ..	131,081	125,000	256,081	20 7 7	19 8 7	39 16 2	95.4
1930-31(d)	60,960	105,003	..	9 7 7	16 3 2	..	..
(e)	60,960	89,456	150,416	9 7 7	13 15 4	23 2 11	146.8
1931-32(d)	44,713	109,034	..	6 16 6	16 12 9	..	..
(e)	44,713	85,843	130,556	6 16 6	13 1 11	19 18 5	192.0
1932-33(d)	58,014	121,264	..	8 15 8	18 7 3	..	..
(e)	58,014	96,853	154,867	8 15 8	14 13 3	23 8 11	167.0
1933-34(d)	60,713	124,003	..	9 2 6	18 12 8	..	..
(e)	60,713	99,021	159,734	9 2 6	14 17 6	24 0 0	163.1
1934-35(d)	74,119	113,523	..	11 1 2	16 18 9	..	..
(e)	74,119	90,654	164,773	11 1 2	13 10 6	24 11 8	122.3
1935-36(d)	85,253	136,964	..	12 12 7	20 5 10	..	..
(e)	85,253	109,372	194,625	12 12 7	16 4 1	28 16 8	128.3
1936-37(d)	92,641	162,377	..	13 12 4	23 17 3	..	..
(e)	92,641	129,664	222,305	13 12 4	19 1 1	32 13 5	140.0
1937-38(d)	113,975	157,580	..	16 12 1	22 19 2	..	..
(e)	113,975	125,838	239,813	16 12 1	18 6 8	34 18 9	110.4
1938-39(d)	102,156	140,496	..	14 15 0	20 5 8	..	..
(e)	102,156	112,202	214,358	14 15 0	16 3 11	30 18 11	109.8
1939-40(d)(f)	115,676	148,750	..	16 10 8	21 5 3	..	..
(e)(f)	115,676	118,762	234,438	16 10 8	16 19 6	33 10 2	102.7

(a) The figures given for the years 1826 to 1925-26 represent the annual averages for the quinquennial periods. The trade of the individual years will be found in Official Year Book No. 29 and earlier issues. From 1914-15 onwards the particulars relate to fiscal years. (b) For actual values for recent years, showing merchandise and bullion and specie separately. see § 8, para. 5 and 6. (c) Prior to 1906, ships' stores were included in the general exports. For value of these goods shipped each year since 1906 see later table, § 9. (d) Recorded values. Imports, British currency; Exports, Australian currency. (e) British currency values. (f) Merchandise only.

In previous issues of the Official Year Book fluctuations in the value of the oversea trade of Australia have been treated in some detail for earlier years. 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 War of 1914-19 and these factors should be taken into consideration in making comparisons with earlier years.

In 1924-25 the total value of oversea trade was £318,454,000 represented by imports £157,143,000, and exports £161,311,000. So far as total trade and exports are concerned these figures are the highest recorded, but the figure for imports was exceeded in 1920-21, and again in 1926-27. Imports in 1924-25, however, included an exceptionally large quantity of bullion and specie valued at £10,543,000. In the three years ended 1928-29 imports fell but exports were well maintained and in 1929-30 both imports and exports declined substantially. The full effects of the economic depression and of certain restrictions imposed by the Commonwealth Government are reflected in the greatly diminished trade figures for 1930-31 onwards. The lowest level was recorded in 1931-32 when the total trade amounted to £130,556,000. Most of the Government restrictions were removed in 1932. Following a gradual improvement in 1933-34 and 1934-35 recovery was more rapid in the three years ended 1937-38 owing generally to higher prices for exports of primary products and the rising flow of imports. In 1937-38, however, export prices fell sharply and declining still further in 1938-39 the value of exports in the latter year dropped by nearly £14,000,000 and total trade by more than £25,000,000. In 1939-40 the value of merchandise trade rose by £38,092,000, exports increasing by £21,730,000 and imports by £16,362,000.

(ii) *Excluding Gold.* In recent years there have been large gold movements of an exceptional nature, which have been included in the previous table. The fluctuations 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.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

British Currency Values.

Year.	Imports excluding Gold.	Exports excluding Gold.	Total Trade excluding Gold.	Value per Inhabitant.			Percentage of Exports on Imports.
				Imports.	Exports.	Total Trade.	
	£1,000. Stg.	£1,000. Stg.	£1,000. Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.	%
1934-35	72,440	82,801	155,241	10 16 2	12 7 1	23 3 3	114.3
1935-36	83,617	99,350	182,967	12 7 9	14 14 4	27 2 1	118.8
1936-37	90,642	118,555	209,197	13 6 5	17 8 6	30 14 11	130.8
1937-38	111,782	113,108	224,890	16 5 8	16 9 7	32 15 3	101.2
1938-39	99,384	97,839	197,223	14 6 11	14 2 6	28 9 5	98.4
1939-40a	115,676	118,762	234,438	16 10 8	16 19 6	33 10 2	102.7

(a) Merchandise only.

2. *Balance of Trade.*—The table on page 769 shows the percentage of exports on imports (including gold) for quinquennial periods from 1826 to 1925-26 and for each financial year from 1926-27 to 1938-39 (owing to censorship provisions the figures for 1939-40 exclude bullion and specie), while the table above shows the percentage of exports on imports (excluding gold) for each financial year 1934-35 to 1939-40. Reference to the first-mentioned table shows that prior to the quinquennial period 1891-95 the balances of trade, with two exceptions, due to temporary dislocations, had been on the side of imports, while from that period to 1920-21 the position was reversed. During the subsequent quinquennial period ended 1925-26, there was an excess of imports, as was the case in each of the years 1926-27 to 1929-30. From 1930-31 to 1938-39 exports greatly exceeded imports.

In recent years imports and exports of gold for monetary purposes have made the interpretation of the foregoing tables more difficult. In the following table, the balance of commodity trade, including the value of gold currently produced in Australia, has been separated from the monetary movement of gold:—

COMMODITY BALANCE OF TRADE AND MONETARY MOVEMENT OF GOLD.

British Currency Values.

Year.	A.	B.	C.	D.	E.	F.	G.
	Total Imports other than Gold. (Specie, Bullion and in Matte.)	Total Exports, other than Gold. (Specie, Bullion and in Matte.)	Gold produced in Australia.	Total of Merchandise exports and Gold Production. B+C	Commodity Balance of Trade. D-A	Net Exports of Gold (Specie, Bullion and in Matte) in excess of Production. F	Total Balance. E+F
	£1,000,000	£1,000,000	£1,000,000	£1,000,000	£1,000,000	£1,000,000	£1,000,000
1910 ..	59.0	69.8	11.6	81.4	22.4	- 7.9	14.5
1911 ..	65.4	67.5	10.5	78.0	12.6	- 0.1	12.5
1912 ..	76.8	66.8	9.9	76.7	- 0.1	1.1	1.0
1913 ..	78.4	75.1	9.4	84.5	6.1	- 7.3	- 1.2
1914 (a) ..	39.0	36.5	4.4	40.9	1.9	- 3.7	- 1.8
1914-15 ..	61.0	58.0	8.5	66.5	2.5	- 6.3	- 3.8
1915-16 ..	77.2	64.2	7.7	71.9	- 5.3	2.3	- 3.0
1916-17 ..	76.0	86.3	6.6	92.9	16.9	4.8	21.7
1917-18 ..	60.8	75.0	5.8	80.8	20.0	- 0.9	19.1
1918-19 ..	95.0	106.8	5.4	112.2	17.2	- 5.6	11.6
1919-20 ..	98.9	144.3	5.4	149.7	50.8	0.1	50.9
1920-21 ..	163.8	126.8	4.7	131.5	- 32.3	0.6	- 31.7
1921-22 ..	103.0	124.3	3.8	128.1	- 25.1	- 0.3	- 24.8
1922-23 ..	131.7	115.6	3.3	118.9	- 12.8	- 1.1	- 13.9
1923-24 ..	140.6	116.7	3.2	119.9	- 20.7	- 0.4	- 21.1
1924-25 ..	146.7	160.4	2.8	163.2	16.5	- 12.3	4.2
1925-26 ..	151.3	141.9	2.3	144.2	- 7.1	1.7	- 5.4
1926-27 ..	164.1	132.7	2.2	134.9	- 29.2	8.6	- 20.6
1927-28 ..	146.9	138.4	2.1	140.5	- 6.4	- 0.3	- 6.7
1928-29 ..	143.3	138.6	1.9	140.5	- 2.8	0.8	- 2.0
1929-30 ..	130.8	98.1	1.9	100.0	- 30.8	24.7	- 6.1
1930-31 ..	60.6	77.2	2.2	79.4	18.8	9.7	28.5
1931-32 ..	44.1	76.3	3.6	79.9	35.8	5.3	41.1
1932-33 ..	56.9	78.8	4.6	83.4	26.5	12.3	38.8
1933-34 ..	59.5	91.1	5.7	96.8	37.3	1.0	38.3
1934-35 ..	72.5	82.6	5.9	88.5	16.0	0.5	16.5
1935-36 ..	83.6	99.1	7.4	106.5	22.9	1.3	24.2
1936-37 ..	90.6	118.3	9.0	127.3	36.7	0.3	37.0
1937-38 ..	111.8	112.7	10.2	122.9	11.1	0.7	11.8
1938-39 ..	99.4	97.5	11.7	109.2	9.8	0.3	10.1
1939-40 ..	115.7	119.2	14.1	133.3	17.6	(b)	(b)

(a) First six months only.

(b) Not available for publication.

3. **Balance of Payments.**—The balance of visible trade, including the net movement of precious metals, does not present a complete picture of Australia's international transactions during each year. Allowance must also be made for unrecorded imports and exports, for services rendered and received, and for international capital and interest transactions. The values of some of these items are known, and some of those remaining can be estimated with a sufficient measure of accuracy, but for many items it is difficult to make even a rough guess. A continuous investigation is being made into the values of these "invisible" items in the balance of payments.

§ 6. Direction of Oversea Trade.

1. **Imports according to Country of Origin.**—The following table shows the value (in British currency) of the imports into Australia during the years 1934-35 to 1938-39 of commodities stated to be the produce or manufacture of the undermentioned countries.

The figures, however, do not indicate with any degree of precision the competitive forces of different countries in the Australian import trade. To measure the success or otherwise of these forces requires some analysis which will show the relative amounts of different classes of goods supplied by different countries. The results of such an analysis, confined to the major classes of manufactured goods imported, are shown in § 14 of this Chapter.

Particulars for the year 1939-40 are not available for publication.

AUSTRALIAN IMPORTS: COUNTRIES OF ORIGIN.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

British Currency Values.

Country of Origin.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
United Kingdom	30,788,269	33,838,843	38,560,293	46,226,985	40,420,289
British Possessions—					
Canada	4,091,796	5,375,851	6,071,813	8,045,130	7,724,269
Ceylon	795,307	960,724	1,010,374	890,286	839,717
India	2,541,377	2,732,145	2,975,892	3,077,616	2,870,297
Malaya (British)	561,845	488,254	852,282	1,022,899	902,419
New Zealand	1,294,181	1,552,413	1,322,875	1,708,649	1,770,324
Pacific Islands—					
Nauru	292,431	361,986	383,641	551,920	650,113
Papua	116,716	128,078	191,742	165,245	208,377
Territory of New Guinea	87,523	117,419	195,035	186,884	165,503
Other Islands	346,240	438,941	598,537	438,989	371,756
Union of South Africa	177,063	284,846	250,539	290,843	244,308
Other British Possessions	512,224	720,930	712,069	1,066,616	1,665,309
Total, British Possessions	10,816,703	13,158,587	14,565,699	17,445,077	17,412,392
Total, British Countries ..	41,604,972	46,997,430	53,125,992	63,672,062	57,832,681
Foreign Countries—					
Belgium	477,864	568,083	783,393	1,140,974	982,107
China	354,127	657,178	683,742	601,870	461,559
France	862,147	790,108	865,919	964,554	1,028,133
Germany	2,145,315	2,963,049	3,596,584	4,170,624	4,131,212
Italy	557,438	444,141	410,002	844,983	685,453
Japan	4,624,740	4,960,571	4,604,465	5,349,087	4,093,191
Netherlands	504,573	564,236	679,102	656,161	700,709
Netherlands East Indies	4,390,327	4,928,025	6,176,385	7,530,509	7,119,785
Norway	382,671	415,252	440,817	495,560	378,806
Pacific Islands	18,446	33,023	69,937	44,029	46,024
Philippine Islands	79,885	92,619	110,231	123,466	120,774
Sweden	828,283	972,096	1,048,655	1,551,333	946,718
Switzerland	462,023	602,145	600,025	873,629	939,463
United States of America	11,041,365	13,901,705	12,959,149	17,758,684	14,647,305
Other Foreign Countries	2,238,227	2,656,012	2,982,232	3,450,412	2,960,101
Total, Foreign Countries ..	28,977,431	34,557,243	35,410,728	45,555,875	39,241,342
Total	70,582,403	81,554,673	88,536,720	109,227,937	97,074,023
	(a)	(a)	(a)	(a)	(a)

(a) Excluding Outside Packages, 1934-35, £1,857,507; 1935-36, £2,062,275; 1936-37, £2,105,361; 1937-38, £2,554,084; 1938-39, £2,310,204.

2. Percentage of Imports from Various Countries.—In view of the fluctuations in the total values of imports, it is somewhat difficult to ascertain from the preceding table the relative importance of the various countries in the import trade of Australia in successive years. A better idea of the proportions of imports supplied by the various countries may be obtained from the following table of percentages.

Particulars for the year 1939-40 are not available for publication.

AUSTRALIAN IMPORTS: PERCENTAGES FROM COUNTRIES OF ORIGIN.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Country of Origin	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Per cent.				
United Kingdom	43.62	41.50	43.55	42.32	41.64
British Possessions—					
Canada	5.80	6.60	6.85	7.37	7.96
Ceylon	1.13	1.18	1.14	0.81	0.87
India	3.60	3.35	3.36	2.82	2.96
Malaya (British)	0.80	0.60	0.96	0.94	0.93
New Zealand—					
Pacific Islands—					
Nauru	0.41	0.44	0.43	0.50	0.66
Papua	0.17	0.16	0.22	0.15	0.22
Territory of New Guinea	0.12	0.14	0.22	0.17	0.17
Other Islands	0.49	0.53	0.68	0.40	0.38
Union of South Africa	0.25	0.35	0.28	0.27	0.25
Other British Possessions	0.72	0.88	0.81	0.98	1.72
Total, British Possessions ..	15.32	16.13	16.45	15.97	17.94
Total, British Countries ..	58.94	57.63	60.00	58.29	59.58
Foreign Countries—					
Belgium	0.68	0.70	0.89	1.05	1.01
China	0.52	0.81	0.77	0.55	0.48
France	1.22	0.97	0.98	0.88	1.06
Germany	3.04	3.63	4.06	3.82	4.25
Italy	0.79	0.54	0.46	0.77	0.71
Japan	6.55	6.09	4.52	4.90	4.22
Netherlands	0.72	0.69	0.77	0.60	0.72
Netherlands East Indies	6.22	6.04	6.98	6.90	7.33
Norway	0.54	0.51	0.50	0.45	0.39
Pacific Islands	0.03	0.04	0.08	0.04	0.05
Philippine Islands	0.11	0.12	0.12	0.11	0.12
Sweden	1.17	1.19	1.18	1.42	0.97
Switzerland	0.66	0.74	0.68	0.80	0.97
United States of America	15.64	17.05	14.64	16.26	15.09
Other Foreign Countries	3.17	3.25	3.37	3.16	3.05
Total, Foreign Countries ..	41.06	42.37	40.00	41.71	40.42
Total	100	100	100	100	100

The relative positions of the various countries supplying goods to Australia have not varied much during the period covered by the table. The proportion from the United Kingdom has declined as has that from India, while Canada has consistently increased its percentage. Of the foreign countries Netherlands East Indies, Germany and Belgium increased their proportions, while that from Japan declined each year except 1937-38. The percentage of imports from the United States of America fluctuated without showing any particular trend.

3. Direction of Exports.—The following table shows the value in Australian currency of commodity exports to the principal countries during the five years 1934-35 to 1938-39 inclusive.

Particulars for the year 1939-40 are not available for publication.

EXPORTS FROM AUSTRALIA TO VARIOUS COUNTRIES.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Australian Currency Values.

Country of Destination.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ A.	£ A.	£ A.	£ A.	£ A.
United Kingdom	54,163,538	61,644,049	73,492,399	78,659,611	66,724,807
British Possessions—					
Canada	1,378,259	1,348,104	2,385,620	2,250,023	1,993,522
Ceylon	648,187	970,961	928,151	871,221	1,326,568
Fiji	361,132	483,998	592,325	713,192	622,916
Hong Kong	715,994	624,663	803,010	1,048,833	475,263
India	785,815	973,171	1,086,754	1,104,692	1,965,220
Malaya (British)	1,315,822	1,263,526	1,727,956	2,063,740	1,911,207
Mauritius	98,790	96,000	113,976	138,013	108,763
New Zealand	3,617,339	4,396,840	5,686,229	7,110,430	6,681,975
Papua	151,865	165,613	232,027	319,228	299,376
Union of South Africa	316,381	449,056	406,091	713,326	813,326
Other British Possessions	1,592,071	2,562,225	3,310,793	2,311,422	2,191,450
Total, British Possessions	11,181,655	13,334,157	17,274,932	18,644,120	18,389,595
Total, British Countries	65,345,193	74,978,206	90,767,331	97,303,731	85,114,402
Foreign Countries—					
Belgium	6,080,381	7,260,967	9,423,821	5,685,579	5,546,514
Chile and Peru	2,029	2,931	3,438	60,988	2,542
China	2,472,262	1,212,821	842,963	616,520	3,022,571
Manchuria including Kwantung Peninsula	1,613,775	839,815	142,427	190,747	63,450
Egypt	639,654	524,066	562,135	640,727	601,019
France	4,731,952	6,131,143	7,907,054	10,322,346	9,378,782
Germany	1,738,481	2,368,453	4,239,026	4,410,098	2,652,420
Italy	995,827	689,225	5,331,528	2,044,058	1,211,326
Japan	12,095,514	17,661,232	9,705,738	5,900,098	4,865,469
Netherlands	927,723	1,200,638	1,983,223	779,515	1,038,627
Netherlands East Indies	1,182,329	1,274,195	1,395,183	1,459,922	1,373,197
Norway	7,439	10,052	62,735	56,573	25,263
Pacific Islands (Foreign)	346,377	374,878	442,348	461,181	385,800
Philippine Islands	324,053	353,311	666,733	619,504	498,893
Spain	559,912	182,951	175,801	133,448	954
Sweden	240,751	264,918	344,687	472,657	637,038
United States of America	2,754,228	5,615,372	10,935,103	3,386,567	3,614,038
U.S.S.R. (Russia)	84,180	10,700	20,721	1,121,262	278,460
Other Foreign Countries	1,564,676	3,280,145	3,537,599	5,402,256	2,232,255
Total, Foreign Countries	38,361,543	49,457,814	57,722,263	44,364,046	37,428,618
Total	103,706,736	124,436,020	148,489,594	141,667,777	122,543,020

The comparison of the value of exports as shown in the table above is affected by two factors operating in opposite directions. The values have been depressed by prices, but have been increased by the fact that they are stated in Australian currency. In 1930-31 the recorded value of exports was increased by 17.4 per cent. by the depreciation of the currency and in subsequent years the increase from this cause amounted to 25½ per cent. Stated in sterling the value of exports of merchandise for 1938-39 was £97,838,738 against £122,543,020 in Australian currency. Up to the end of the year 1929-30 the two currencies had practically the same value.

4. **Percentage of Exports to Various Countries.**—In consequence of the fluctuations in the total values of exports, the relative importance of various countries as markets for Australian produce is shown more clearly by the following table of percentages.

Particulars for the year 1939-40 are not available for publication.

EXPORTS FROM AUSTRALIA : PERCENTAGES TO VARIOUS COUNTRIES.

(EXCLUDING GOLD BULLION, SPECIE AND IN MATTE.)

Country of Destination.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	Per cent.				
United Kingdom	52.23	49.54	49.50	55.52	54.45
British Possessions—					
Canada	1.52	1.08	1.61	1.59	1.63
Ceylon	0.63	0.78	0.62	0.61	1.08
Fiji	0.35	0.39	0.40	0.50	0.51
Hong Kong	0.69	0.50	0.54	0.74	0.39
India	0.76	0.78	0.73	0.78	1.60
Malaya (British)	1.27	1.02	1.16	1.46	1.56
Mauritius	0.10	0.07	0.08	0.10	0.09
New Zealand	3.49	3.53	3.83	5.02	5.45
Papua	0.14	0.14	0.16	0.23	0.25
Union of South Africa	0.30	0.36	0.27	0.50	0.66
Other British Possessions	1.53	2.06	2.23	1.63	1.79
Total, British Possessions	10.78	10.71	11.63	13.16	15.01
Total, British Countries	63.01	60.25	61.13	68.68	69.46
Foreign Countries—					
Belgium	5.86	5.84	6.35	4.01	4.53
Chile and Peru	0.00	0.00	0.00	0.04	0.00
China	2.38	0.98	0.57	0.44	2.46
Manchuria, including Kwantung Peninsula	1.56	0.67	0.10	0.14	0.05
Egypt	0.62	0.42	0.38	0.45	0.49
France	4.56	4.93	5.32	7.29	7.65
Germany	1.68	1.90	2.85	3.11	2.17
Italy	0.96	0.56	3.59	1.87	0.99
Japan	11.66	14.19	6.54	4.16	3.97
Netherlands	0.90	0.96	1.34	0.55	0.85
Netherlands East Indies	1.14	1.02	0.94	1.03	1.12
Norway	0.01	0.01	0.04	0.04	0.02
Pacific Islands (Foreign)	0.33	0.30	0.30	0.33	0.31
Philippine Islands	0.31	0.45	0.45	0.44	0.41
Spain	0.54	0.15	0.12	0.09	0.00
Sweden	0.23	0.21	0.23	0.33	0.52
United States of America	2.66	4.51	7.36	2.39	2.95
U.S.S.R. (Russia)	0.08	0.01	0.01	0.79	0.23
Other Foreign Countries	1.51	2.64	2.38	3.82	1.82
Total, Foreign Countries	36.99	39.75	38.87	31.32	30.54
Total	100	100	100	100	100

5. **Balance of Trade with Principal Countries.**—In the following table a comparison is made in British currency values of the total Australian trade in merchandise (excluding bullion and specie) with principal countries during the years 1937-38 and 1938-39.

Particulars for the year 1939-40 are not available for publication.

BALANCE OF AUSTRALIAN TRADE WITH PRINCIPAL COUNTRIES.

(EXCLUDING BULLION AND SPECIE.)

British Currency Values.

Country.	Imports from— (a)		Exports to—		Excess of Exports.	
	1937-38.	1938-39.	1937-38.	1938-39.	1937-38.	1938-39.
	£Stg. 1,000.	£Stg. 1,000.	£Stg. 1,000.	£Stg. 1,000.	£Stg. 1,000.	£Stg. 1,000.
United Kingdom	46,226	40,420	58,309	53,252	12,083	12,832
Canada	8,045	7,724	1,796	1,592	6,249	6,132
India	3,078	2,870	745	1,550	2,333	1,320
New Zealand	1,707	1,769	5,671	5,330	3,964	3,561
Other British Countries	4,567	4,979	6,215	5,440	1,648	461
Total, British Countries	63,623	57,760	72,736	67,164	9,113	9,402
Belgium	1,141	982	4,560	4,428	3,419	3,446
China	602	462	492	2,413	110	1,951
France	965	1,028	7,725	7,488	6,760	6,460
Germany	4,171	4,131	3,500	2,112	671	2,019
Italy	845	685	1,502	967	647	282
Japan	5,349	4,093	4,711	3,885	638	208
Netherlands East Indies	7,531	7,120	1,169	1,096	6,362	6,024
United States of America	17,759	14,647	2,695	2,877	15,064	11,770
Other Foreign Countries	7,193	6,093	13,192	4,603	5,999	1,490
Total, Foreign Countries	45,556	39,241	39,546	29,869	6,010	9,372

(a) Excluding outside packages.

The balance of trade with single countries is of little significance, since in the first place, there is still a fair proportion of Australian produce distributed through the United Kingdom either immediately, by transshipment or re-sale, or ultimately, by incorporation in manufactures. Further, in very many cases international balances are equated directly by services or indirectly by exchange of goods between several countries.

6. **Principal Imports and Exports.—Countries.**—The total value of imports from and exports to each of the more important British and foreign countries during 1938-39, together with brief particulars of the principal commodities interchanged with such countries, is given hereunder. The values of imports are shown in British currency, while the exports are shown in Australian currency. Should further details be required, reference may be made to the annual publication, *Oversea Trade Bulletin*, No. 36, issued by this Bureau, which gives details of the trade with Australia of 37 of the principal countries of the world during the past five years. That publication furnishes information regarding the country of origin of each statistical item of import for the years 1937-38, and 1938-39, showing the value and (where available) the quantity imported from each country, and the value of each item imported into each of the States. The publication referred to also gives the country to which each item of exports was shipped during these years.

United Kingdom.—*Total Imports of United Kingdom Origin including Bullion and Specie in 1938-39, £stg. 40,433,500.* The two outstanding classes of goods imported were—Machines, machinery and manufactures of metal, £18,246,658; and apparel, textiles, yarns, etc., £10,033,422. Imports of the following goods also contributed

largely to the total:—Paper and stationery, £2,945,640; drugs and chemicals, £2,288,387; earthenware, crockery, glass, etc., £946,220; spirituous liquors, £613,874; optical, surgical and scientific instruments, £523,381; paints and varnishes, £383,043; foodstuffs of animal origin, £300,283; stones and minerals, £278,568; jewellery and fancy goods, £275,301; rubber and leather manufactures, £247,671; and vegetable substances and fibres, £211,174.

Total Exports to United Kingdom, £A68,716,031. Of this total, £68,393,916 represented Australian produce. The principal items of export were—Wool, £18,513,175; butter, £12,127,260; mutton and lamb, frozen, £4,682,819; wheat, £4,443,613; lead, pig, £4,198,486; beef, frozen and chilled, £3,901,691; sugar, £3,685,761; fruits, dried, £2,045,646; gold, £1,991,224; frozen meats, other, £1,430,228; fruits, fresh, £1,400,618; fruits in liquid, £1,041,385; cheese, £1,019,681; wine, £896,699; hides and skins, £815,318; flour, £705,518; zinc concentrates, £662,205; and eggs, £654,980.

Canada.—Total Imports of Canadian Origin, £stg.7,724,269. The principal imports were—Motor chassis and parts, £1,938,793; paper, £1,789,225; timber, £1,071,997; machines and machinery, £729,245; fish, preserved in tins, £412,870; apparel and textiles, £400,333; drugs and chemicals, £175,491; vehicles (excluding motor), £151,803; tools of trade, £144,834; sensitized films, £102,307; asbestos, £95,941; hides and skins, £73,836; and clocks and watches, £59,931.

Total Exports to Canada, £A1,993,522. Of this total, £1,976,590 was Australian produce. The principal items were—Fruits, dried, £561,172; wool, £482,010; sugar, £470,026; fruits, preserved or pulped, £76,863; tallow, £50,282; spirituous liquors, £49,371; hides and skins, £47,639; and gelatine and glue, £33,237.

Ceylon.—Total Imports of Ceylon Origin, £stg.839,717. The principal items were—Tea, £703,610; rubber, £102,428, and coir, £7,926.

Total Exports to Ceylon, £A1,326,568. Of this total, £1,323,469 was Australian produce. The principal items were—Silver, £903,829; flour, £112,444; timber, £59,102; milk and cream, £57,166; butter, £46,899; fruits, £43,133; and meats, £36,653.

Fiji.—Total Imports of Fijian Origin, £stg.770,002. The principal items were—Gold, £698,186; copra, £34,716; molasses, £22,819; and hides, £3,558.

Total Exports to Fiji, £A622,916. Of this total, £532,887 was Australian produce. The principal items were—Machinery and metal manufactures, £173,194; bran and pollard, £45,520; tobacco, £36,703; drugs and chemicals, £35,429; spirituous liquors, £30,070; flour, £29,264; coal, £25,814; earthenware, glass, etc., £20,135; timber, £19,392; paints and varnishes, £14,211; and apparel and textiles, £10,492.

Hong Kong. Total Imports of Hong Kong Origin, £stg.35,567. The principal items were—Lamps and lampware, £10,447; fireworks, £5,441; ginger, £4,283; and bamboo and cane, £3,149.

Total Exports to Hong Kong, £A475,263. Of this total, £467,789 was Australian produce. The principal exports were—Flour, £148,305; leather, £53,330; butter, £49,870; meats, £46,650; sandalwood, £18,709; iron and steel, plate and sheet, plain or corrugated, not galvanized, £17,306; hêche-de-mer, £16,807; wool, £16,228; milk and cream, £13,524; fruits, fresh, £12,287; cheese, £9,846; and oatmeal, wheatmeal, etc., £8,774.

India. Total Imports of Indian Origin, £stg.2,870,297. The principal items were—Bags and sacks, £1,502,808; hessian, £373,514; linseed, £243,451; hides and skins, £161,192; tea, £98,937; cotton, raw, £98,024; jute, £52,511; nuts, edible, £32,828; mats and matting, £26,399; and gums and resins, £18,477.

Total Exports to India, £A1,965,229. Of this total, £1,954,773 was Australian produce. The principal exports were—Wheat, £957,926; zinc, bars, blocks, etc., £355,479; wool, £164,760; tallow, £92,350; horses, £55,149; milk and cream, £32,908; silver, £23,533; jams and jellies, £20,883; butter, £17,167; and fruits, fresh, £11,159.

Malaya (British). *Total Imports of Malayan (British) Origin*, *Estg.* 902,419. The principal items were—Rubber (crude), £778,438; latex, £33,244; sago and tapioca, £27,648; spices (unground), £23,248; and tin ingots, £6,866.

Total Exports to Malaya (British), £A1,911,207. Of this total, £1,849,227 was Australian produce. The principal items were—Metals and machinery, £469,227; flour, £438,072; milk and cream, £385,404; meats, £161,424; butter, £106,195; spirituous liquors, £65,239; fruits, £64,108; sheep, £36,044; drugs and chemicals, £23,444; leather, £15,915; lard and refined animal fats, £9,486; and coal, £8,023.

New Zealand. *Total Imports of New Zealand Origin*, *Estg.* 2,147,785. The principal imports were—Wool, £657,454; gold, £377,461; hides and skins, £218,561; fish, £166,113; timber, £138,568; seeds, £89,794; metals and machinery, £71,041; horses, £60,024; beans and peas, £54,286; sheep, £31,385; and flax and hemp, £30,457.

Total Exports to New Zealand, £A6,681,975, of which £6,132,012 was Australian produce. The principal items were—Machinery and metal manufactures, £2,013,325; timber, £444,988; wheat, £417,696; apparel and textiles, £416,024; drugs and chemicals, £379,354; paper and stationery, £323,320; optical, surgical and scientific instruments, £229,701; fruits, dried, £223,803; fruits, fresh, £185,788; tobacco, £172,268; earthenware, china, glass, etc., £164,982; fruits in liquid, £146,889; rubber and leather, £135,994; paints and varnishes, £134,789; arms, ammunition, etc., £134,330; coal, £107,689; confectionery, £75,773; spirituous liquors, £57,786; and barley, £40,979.

Papua. *Total Imports of Papuan Origin*, *Estg.* 291,875. The principal items were—Rubber, £93,814; gold bar, dust, etc., £83,498; coco-nuts, prepared, £45,453; copper in matte, £30,341; copra, £17,160; and coffee, raw, £6,849.

Total Exports to Papua, £A299,376, of which £190,876 was Australian produce. The principal exports were—Tobacco, £35,086; films for cinematographs, £27,206; machines and machinery, £26,181; manufactures of metal, £25,717; meats, £17,885; grain and pulse, £13,077; oils in bulk, £12,137; apparel and textiles, £8,538; and timber, £8,354.

Territory of New Guinea. *Total Imports of Territory of New Guinea Origin*, *Estg.* 1,752,307. The principal items were—Gold bar, dust, etc., £1,586,804; coco-nuts (prepared), £73,847; copra, £43,795; and silver bar, ingot, etc., £13,887.

Total Exports to Territory of New Guinea, £A739,857, of which £516,355 was Australian produce. The principal exports were—Manufactures of metal, £94,574; machines and machinery, £75,695; meats, £66,169; tobacco, £51,524; cinematographs and films, £51,363; oils in bulk, £38,591; silver specie, £30,569; drugs and chemicals, £18,518; apparel and textiles, £15,054; paper and stationery, £13,447; spirituous liquors, £12,235; wood and wicker, £8,191; and biscuits, £5,952.

Union of South Africa. *Total Imports of Union of South African Origin*, *Estg.* 254,352. The principal items were—Diamonds, £110,712; fish, £50,009; asbestos (crude), £23,550; and tanning substances, £8,340.

Total Exports to Union of South Africa, £A813,326, of which £796,223 was Australian produce. The principal exports were—Wheat, £331,787; timber, £135,440; machinery and metal manufactures, £96,800; apparel and textiles, £62,910; gelatine and glue, £30,337; leather, £14,655; drugs and chemicals, £13,696; sporting materials, £13,497; fruits, £10,543; meats, £9,168; and soap, £8,351.

Belgium. *Total Imports of Belgian Origin*, *Estg.* 982,107. The principal items were—Piece goods, £248,186; glass and glassware, £208,895; carpets and carpeting, £96,626; gloves, £64,926; precious stones, £64,492; iron and steel manufactures, £60,753; machines and machinery, £47,334; paper and stationery, £22,663; zinc, sheet, £14,128; and arms, ammunition, etc., £13,291.

Total Exports to Belgium, £A5,546,514. Of this total, £5,528,024 was Australian produce. The principal exports were—Wool, £4,630,537; silver and silver lead concentrates, £335,166; zinc concentrates, £111,238; sheepskins, £74,985; wheat, £61,298; copper, £34,408; fruits, fresh, £28,036; barley, £22,777; timber (undressed), £19,347; rabbit and hare skins, £18,847; and wolfram ore, £13,217.

China. Total Imports of Chinese Origin, £stg.461,559. The principal items were—Apparel and textiles, £144,809; tung, etc., oil, £61,675; bristles, etc., £52,155; tea, £34,230; nuts (edible), £30,627; ginger, £11,157; cotton, raw, £11,086; rice, £10,685; and drugs and chemicals, £10,196.

Total Exports to China, £A3,022,571, of which £3,020,559 was Australian produce. The principal items were—Wheat, £1,357,010; flour, £1,307,430; wool, £173,732; tallow, £35,223; butter, £22,466; sandalwood, £18,511; leather, £13,256; and milk and cream, £11,839.

Czechoslovakia. Total Imports of Czechoslovakian Origin, £stg.501,598. The principal items were—Glass and glassware, £101,708; apparel, £83,838; textiles, £59,999; paper, £42,624; machines and machinery, £37,237; jewellery, £32,318; iron and steel manufactures, £30,349; fancy goods, £21,128; and bags, baskets, etc., £13,635.

Total Exports to Czechoslovakia, £A378,020, of which £377,959 was Australian produce. The principal exports were—Wool, £349,764; and lead, pig, £10,188.

Egypt. Total Imports of Egyptian Origin, £stg.203,499. The principal items were—Asphalt, bitumen, etc., £165,336; and cigarette tubes and papers, £5,728.

Total Exports to Egypt, £A601,019, of which £580,450 was Australian produce. The principal exports were—Frozen beef, £171,626; flour, £106,646; butter, £82,717; wheat, £54,286; timber, £49,172; and other meats, £31,073.

France. Total Imports of French Origin, £stg.1,028,133. The principal items were—Apparel, £158,981; argol, £117,851; piece goods, silk, £98,935; spirituous liquors, £58,642; lace for attire, £57,571; piece goods, velvet, £56,983; machinery and metal manufactures, £53,404; olive oil, £50,740; cigarette tubes and papers, £44,862; gums and resins, £22,021; pipes, cigar holders, etc., £18,213; earthenware, glass, etc., £16,980; perfumery and toilet preparations, £15,848; and fertilizers, £12,332.

Total Exports to France, £A9,386,109. Of this total, £9,370,843 was Australian produce. The principal exports were—Wool, £7,566,458; sheepskins, £1,709,768; and concentrates, £25,459.

Germany. Total Imports of German Origin, £stg.4,131,212. The principal items were—Machinery, £912,310; manufactures of metal, £537,095; drugs and chemicals, £476,737; paper and stationery, £316,741; optical and scientific instruments, £241,848; earthenware, china, glassware, etc., £204,527; piece goods, silk, £151,841; gloves, £129,859; timepieces, £82,916; trimmings and ornaments, £59,904; piece goods, other than silk, £58,160; oils, in bulk, £55,913; bags, baskets, etc., £51,008; and textiles, excluding piece goods, £45,331.

Total Exports to Germany, £A2,652,420, of which £2,624,525 was Australian produce. The principal exports were—Wool, £1,994,320; hides and skins, £234,364; apples, fresh, £114,529; wheat, £71,797; wolfram, £68,253; tallow, £26,998; metals and metal manufactures, £19,769, and eucalyptus oil, £14,061.

Italy. Total Imports of Italian Origin, £stg.685,453. The principal imports were—Argol, £83,233; piece goods, silk, £77,723; yarns, artificial silk, £74,154; textiles, other than piece goods, £58,768; gloves, £47,461; oils, essential, £44,701; hides and skins, £36,731; machinery and metal manufactures, £36,034; olive oil, £29,679; hemp, £29,042; and nuts (edible), £16,040.

Total Exports to Italy, £A1,211,326, of which £1,195,615 was Australian produce. The principal exports were—Wool, £1,175,304; tallow, £8,064; and hides and skins, £5,093.

Japan. *Total Imports of Japanese Origin*, £stg.4,093,191. The principal imports were—Piece goods, silk or containing silk, £1,160,761; piece goods, cotton and linen, £726,050; silk, raw, £390,900; piece goods, other, £210,906; apparel, £188,547; textiles, other than piece goods, £183,644; machinery and metal manufactures, £167,570; fish, £153,270; fancy goods, toys, etc., £136,500; crockery and household ware, £126,085; paper and stationery, £88,448; yarns, £56,244; and glass and glassware, £36,648.

Total Exports to Japan, £A4,865,469. Of this total, £4,730,801 was Australian produce. The principal exports were—Wool, £3,804,120; iron and steel scrap, £283,302; zinc, bars, blocks, etc., £228,995; cattle hides and skins, £143,882; pig iron, £95,388; wheat, £61,944; iron ore, £51,477; trochus-shell, £41,678; and milk and cream, £36,593.

Netherlands. *Total Imports of Netherlands Origin*, £stg.700,709. The principal items were—Yarns, artificial silk, £195,376; electrical machinery and appliances, £83,604; caramel, cocoa, butter, etc., £43,774; piece goods, £40,633; precious stones, £38,724; lamps and lampware, £27,661; paper, £23,992; and wire, £15,978.

Total Exports to Netherlands, £A1,038,627. Of this total, £992,187 was Australian produce. The principal items were—Wool, £826,299; flour, £39,321; machinery and metal manufactures, £24,125; hides and skins, £24,007; and fruits, fresh, £14,550.

Netherlands East Indies. *Total Imports of Netherlands East Indies Origin*, £stg.7,119,785. The principal imports were—Petroleum spirit, £3,431,054; tea, £1,622,624; residual oil, £636,288; kerosene, £431,823; other oils, £293,220; kapok, £206,518; petroleum (crude), £198,453; rubber (crude), £137,475; hemp, £127,043; waxes, £47,491; and coffee, £23,479.

Total Exports to Netherlands East Indies, £A1,379,600. Of this total, £1,368,113 was Australian produce. The principal exports were—Flour, £647,746; butter, £276,025; machinery and metal manufactures, £131,822; bacon and hams, £44,357; fruits, fresh, £32,725; leather, £26,481; malt, £26,350; biscuits, £25,350; coal, £21,207; and tallow, £9,548.

Norway. *Total Imports of Norwegian Origin*, £stg.378,808. The principal items were—Fish, preserved in tins, £83,223; paper, writing and typewriting, £64,945; manufactures of metal, £53,313; timber, dressed, £38,040; paper, printing, £37,951; paper, wrapping, £20,907; paper, other, £15,636; and oils in bulk, £11,787; and wood pulp, £10,263.

Total Exports to Norway, £A25,263, of which £25,203 was Australian produce. The principal exports were—Wool, £19,895; apples, fresh, £1,669; and cattle hides, £1,390.

Pacific Islands (British and Foreign). *Total Imports of Pacific Islands Origin*, £stg.3,810,831. The principal imports were—Gold, £2,369,067; rock phosphates, £827,229; copra, £174,919; coco-nuts (prepared), £119,302; rubber (crude), £98,330; timber, £28,953; molasses, £22,819; silver, £17,491; shells, £14,953; hides and skins, £11,592; and vanilla beans, £9,508.

Total Exports to Pacific Islands, £A2,458,929, of which £1,883,742 was Australian produce. The principal exports were—Manufactures of metal, £289,467; machines and machinery, £203,622; tobacco, £172,158; meats, £123,070; flour, £116,736; coal, £113,535; spirituous liquors, £100,379; cinematographs and films, £91,804; oils in bulk, £88,146; drugs and chemicals, £86,724; apparel and textiles, £80,137; coke, £49,910; bran, pollard and sharps, £48,565; timber, £46,213; earthenware, china, cements, etc., £45,072; vegetables, £38,958; milk and cream, £34,419; silver, £31,869; paints and varnishes, £31,060; rubber and leather, £30,737; arms, ammunition and explosives, £30,418; paper and stationery, £34,002; biscuits, £29,540; tea, £29,217; and butter, £29,203.

Philippine Islands. *Total Imports of Philippine Islands Origin, Estg.120,774.* The principal items were—Timber, £58,391; hemp, £56,591; and hoods for hats, £3,048.

Total Exports to Philippine Islands, £A408,893, of which £497,456 was Australian produce. The principal exports were—Flour, £212,018; meats, £64,289; butter, £55,740; milk and cream, £34,873; carbide, calcium, £12,256; and cheese, £7,308.

Poland. *Total Imports of Polish Origin, Estg.31,333.* The principal items were—Timber, £6,738; cigarette tubes and papers, £5,354; machines and metal manufactures, £3,321; and pitch and tar, £1,689.

Total Exports to Poland, £A425,651. The principal items were—Wool, £402,606; and sheepskins, £20,395.

Spain. *Total Imports of Spanish Origin, Estg.70,715.* The principal items were—Corks, etc., £27,252; wine, £6,557; dry colours, £6,134; liquorice, £3,528; nuts (edible), £3,337; and fish in tins, £2,037.

Total Exports to Spain, £A954.

Sweden. *Total Imports of Swedish Origin, Estg.946,718.* The principal imports were—Machines and machinery, £250,127; paper, £188,025; pulp for paper-making, £163,549; manufactures of metal, £105,976; timber and wood manufactures, £90,933; and vacuum cleaners, £88,825.

Total Exports to Sweden, £A637,038. The principal exports were—Wool, £481,346; apples, fresh, £61,187; hides, cattle, £30,357; and wolfram, £29,800.

Switzerland. *Total Imports of Swiss Origin, Estg.940,332.* The principal imports were—Machinery and metal manufactures, £288,499; clocks and watches, £270,839; apparel and attire, £76,250; piece goods, silk, £68,877; drugs and chemicals, £54,056; piece goods, cotton and linen, £33,241; handkerchiefs, £32,047; and grass straw for hats, £28,757.

Total Exports to Switzerland, £A178,560. The principal exports were—Wool, £167,205; and timepieces and fancy goods, £4,911.

United States of America. *Total Imports of United States Origin, Estg.14,648,667.* The principal imports were—Motor cars and parts, £2,074,211; tobacco, unmanufactured, £1,716,435; machinery, other, £1,222,048; motive-power machinery, £1,059,163; petroleum spirit, £728,888; lubricating (mineral) oil, £713,585; electrical machinery, £548,317; drugs and chemicals, £516,977; sulphur, £486,702; paper and stationery, £372,572; iron and steel plate and sheet, £364,369; films, £347,681; wood and wicker, £297,069; metal working machinery, £291,978; apparel and textiles, £281,766; aeroplanes and parts, £259,168; sausage casings, £198,338; tools of trade, £190,508; mining machinery, £187,966; fibres, £132,738; paints and varnishes, £120,121; adding and computing machinery, £106,667; and gums and resins, £110,498.

Total Exports to the United States of America, £A19,562,376. Of this total, £16,411,324 was Australian produce. The principal exports were—Gold, £15,948,338; wool, £1,346,187; concentrates, £573,040; rabbit and hare skins, £392,435; sausage casings, £259,957; kangaroo skins, £169,011; hides, £142,378; and pearl-shell, £140,251.

U.S.S.R. (Russia). *Total Imports of U.S.S.R. Origin, Estg.129,344.* The principal items were—Fish, £43,044; hides and skins, £41,399; oils, in bulk, £20,594; and furs, dressed, £13,458.

Total Exports to U.S.S.R., £A278,460. The principal items were—Wheat, £277,359; and wool, £1,086.

§ 7. Trade with Eastern Countries.

1. **Principal Articles Exported.**—The following table shows the value of exports of Australian and other produce from Australia to Eastern countries during the years 1934-35 to 1938-39. The countries concerned in this trade are Borneo (British), Burma, Ceylon, China, French Indo China, Hong Kong, India, Japan, Korea, Kwantung Peninsula, Malaya (British), Manchuria, Netherlands East Indies, Philippine Islands, Siam, Timor (Portuguese), and French and Portuguese Possessions in India. After declining sharply in 1933-34 the export trade with Eastern countries rose substantially in the next two years with increased shipments of wool, wheat, flour and minerals; the exports in 1935-36 were valued at £25,532,518, which was the highest figure recorded since 1928-29. In 1936-37 the value of exports to Eastern countries decreased by more than £8 million largely as the result of the heavy reduction in the purchases of wool by Japan; wheat shipments to Japan and China also declined in value by nearly £2 million during the year. The value of exports decreased still further in 1937-38 and again a decline in the purchase of wool by Japan coupled with the recession in wool values was the principal contributing factor. Mainly owing to heavier shipments of wheat the exports increased by more than £1 million in 1938-39.

Particulars for the year 1939-40 are not available for publication

TOTAL EXPORTS FROM AUSTRALIA TO EASTERN COUNTRIES.

Australian Currency Values.

Article.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ A.	£ A.	£ A.	£ A.	£ A.
Biscuits	39,767	35,682	41,114	34,001	37,353
Butter	544,215	637,264	640,544	622,195	588,393
Cheese	22,012	25,538	39,647	39,014	43,555
Coal	74,978	81,907	94,821	149,964	125,740
Fruits—					
Fresh	122,628	124,550	155,093	170,947	166,076
Dried and preserved	42,081	40,073	45,116	46,421	42,981
Grain and pulse—					
Wheat	4,395,925	2,919,220	1,105,648	935,842	2,402,855
Flour	3,304,000	2,780,659	2,582,600	3,090,681	3,036,957
Other (prepared and unprepared)	60,306	71,798	129,050	101,585	70,288
Hay, chaff, and compressed fodder	16,014	16,187	25,111	13,553	16,156
Horses	102,586	105,995	126,518	97,525	85,895
Infants' and invalids' food	216,571	211,287	145,306	171,427	193,909
Iron ore	140,535	158,064	103,074	48,614	51,477
Iron and steel (scrap)	137,934	115,665	217,112	214,463	283,302
Jams and jellies	42,328	42,688	49,178	46,143	44,651
Lard and refined animal fats	28,432	35,046	40,738	34,432	26,248
Lead, pig	51,084	38,614	138,237	80,206	13,350
Leather	141,907	107,944	173,761	181,723	134,319
Meats—					
Bacon and hams	84,420	91,423	92,952	95,437	94,640
Other meats	214,182	244,439	253,450	322,298	274,015
Milk and cream	456,108	455,420	611,021	662,234	436,472
Pearl-shell and trochus-shell	46,737	53,066	59,666	37,878	42,425
Sandalwood	108,600	66,845	106,448	36,676	42,330
Skins, hoofs, horns, bones, and sinews	135,836	162,214	185,803	339,223	176,055
Tallow (unrefined)	296,937	237,484	174,981	218,591	156,105
Timber (undressed)	180,984	85,191	148,753	143,690	62,893
Wool	8,785,163	14,767,219	7,860,278	4,367,877	4,180,914
Zinc—					
Bars, blocks, ingots, etc.	303,282	528,032	937,474	390,939	597,366
Concentrates					14,895
Other merchandise	695,050	614,038	654,608	898,231	1,393,170
Total merchandise	20,790,602	24,882,561	16,939,032	13,591,810	14,834,785
Specie, and gold and silver bullion	475,864	649,957	546,473	610,518	933,965
Total Exports	21,266,466	25,532,518	17,485,505	14,202,328	15,768,750

(a) Estimated British currency value—1934-35, £ stg. 16,979,978; 1935-36, £ stg. 20,386,200; 1936-37, £ stg. 13,960,483; 1937-38, £ stg. 11,339,184; 1938-39, £ stg. 12,571,315.

2. Destination of Exports of Merchandise.—The next table shows the destination of merchandise exported to Eastern countries during the five years ended 1938-39 :—
Particulars for the year 1939-40 are not available for publication.

EXPORTS OF MERCHANDISE FROM AUSTRALIA TO EASTERN COUNTRIES.

Australian Currency Values.

Country of Destination.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ A.	£ A.	£ A.	£ A.	£ A.
China	2,472,262	1,212,821	842,963	616,520	3,022,571
Hong Kong	715,994	624,663	803,010	1,048,833	475,263
India, Burma and Ceylon	961,832	1,301,206	1,468,432	1,467,340	2,423,663
Japan	12,095,514	17,661,232	9,705,733	5,900,008	4,865,469
Malaya (British)	1,315,822	1,263,526	1,727,956	2,063,740	1,911,007
Manchuria including Kwantung					
Peninsula	1,613,775	839,815	142,427	190,747	63,450
Netherlands East Indies	1,182,329	1,274,195	1,395,183	1,464,379	1,373,197
Philippine Islands	324,053	553,311	666,733	619,504	498,893
Thailand (Siam)	58,660	100,959	118,291	117,382	119,494
Other Eastern Countries	50,361	50,833	68,299	103,267	81,778
Total	420,790,602	424,882,561	416,939,032	413,591,810	414,834,785

(a) Estimated British currency value, 1934-35, £stg. 16,639,285; 1935-36, £stg. 19,866,316; 1936-37, £stg. 13,524,177; 1937-38, £stg. 10,851,748; 1938-39, £stg. 11,844,143.

3. Imports of Merchandise from Eastern Countries.—The values of imports into Australia from Eastern countries during the years 1934-35 to 1938-39 are shown in the following table. The principal commodities imported in 1938-39, according to the countries of origin, were :—Ceylon—Tea, £703,610; India—Bags, Sacks and Hessians, £1,876,322; Japan—Silk Piece goods, £1,160,761; Cotton and Linen Piece goods, £726,050; Netherlands East Indies—Tea, £1,622,624; Petroleum Spirit, £3,431,054; Petroleum, crude, £198,453; Kerosene, £431,823; Residual Oil, £636,288.

Particulars for the year 1939-40 are not available for publication.

IMPORTS OF MERCHANDISE INTO AUSTRALIA FROM EASTERN COUNTRIES.

British Currency Values.

Country of Origin.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
China	364,127	657,178	683,742	601,870	461,559
Hong Kong	22,677	26,713	40,143	37,022	35,567
India, Burma and Ceylon	3,336,684	3,692,869	3,986,266	3,988,581	3,736,288
Japan	4,624,740	4,969,571	4,604,465	5,349,086	4,093,191
Malaya (British)	561,845	488,254	852,282	1,022,899	902,419
Manchuria including Kwantung Peninsula	3,906	8,156	20,853	16,106	14,887
Netherlands East Indies	4,390,327	4,928,025	6,176,385	7,530,509	7,119,785
Philippine Islands	79,885	92,619	110,231	123,466	120,774
Thailand (Siam)	1,879	6,403	2,609	6,870	3,010
Other Eastern Countries	74,423	83,993	42,039	143,047	190,109
Total	13,460,493	14,953,781	15,919,015	18,819,456	16,677,589

By comparison with footnote (a) of the previous table, the balance of trade with Eastern countries can be ascertained and shows an excess of exports from Australia during the first two years with the position reversed for the remaining years.

§ 8. Classified Summary of Australian Oversea Trade.

1. Imports.—The following table shows the value of imports into Australia during each of the last five years, arranged in accordance with the statistical classification which came into operation on 1st July, 1922 :—

IMPORTS TO AUSTRALIA : CLASSES.

British Currency Values.

Classes.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
I. Animal foodstuffs, etc.	1,412,896	1,509,813	1,565,765	1,599,827	1,572,288
II. Vegetable foodstuffs; non-alcoholic beverages, etc.	3,215,246	3,801,644	3,768,619	3,957,780	4,584,361
III. Alcoholic liquors, etc.	696,103	633,133	727,220	719,967	1,016,624
IV. Tobacco, etc.	1,614,226	1,717,677	2,011,004	1,863,887	1,926,516
V. Live animals	168,069	216,943	193,500	182,809	1,321,317
VI. Animal substances, etc.	1,488,143	1,465,533	2,260,898	1,942,284	1,787,711
VII. Vegetable substances, etc.	2,256,452	2,834,357	3,194,512	2,596,939	3,685,891
VIII. Apparel, textiles, etc.	17,292,354	18,059,604	21,016,945	17,750,098	24,586,791
IX. Oils, fats, and waxes	6,690,852	7,634,360	9,429,257	6,697,751	(a)
X. Paints and varnishes	490,591	576,360	590,454	580,745	728,169
XI. Stones and minerals, etc.	601,533	551,967	806,815	900,904	1,112,895
XII. Metals, metal manufactures, and machinery	25,205,625	27,277,464	37,280,008	31,274,421	33,026,388
XIII. Rubber and leather, etc.	1,185,812	1,821,914	1,915,442	1,689,568	2,332,311
XIV. Wood and wicker, etc.	1,934,955	1,787,427	2,759,081	2,079,981	1,993,019
XV. Earthenware, etc.	1,690,283	1,774,183	2,047,362	1,864,984	1,015,298
XVI. Paper and stationery	5,295,820	5,933,131	6,609,609	6,185,376	7,242,402
XVII. Jewellery, etc.	1,194,566	1,256,235	1,581,455	1,431,605	1,482,193
XVIII. Optical, surgical, and scientific instruments	1,218,299	1,284,653	1,558,483	1,600,583	1,743,706
XIX. Drugs, chemicals, etc.	4,370,127	4,515,446	5,304,092	5,598,553	6,005,343
XX. Miscellaneous	5,498,379	5,879,736	7,112,733	6,788,853	118,801,462
XXI. Gold and silver; and bronze specie	1,731,127	2,048,882	2,241,806	2,843,202	(b)
Total	85,252,458	92,640,462	113,975,060	102,156,352	115,675,505

(a) Total for Class IX. is included with Class XX.

(b) Not available for publication.

(c) Merchandise only.

2. Exports.—In the following table the exports from Australia are shown in classes according to the same classification as for imports, distinguishing (A) Australian produce; (B) Other produce (re-exports); and (C) Total exports.

EXPORTS FROM AUSTRALIA : CLASSES.

Australian Currency Values.

Classes.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£ A.	£ A.	£ A.	£ A.	£ A.
A. AUSTRALIAN PRODUCE.					
I. Animal foodstuffs, etc.	20,584,170	21,381,880	25,576,036	27,222,912	34,323,280
II. Vegetable foodstuffs; non-alcoholic beverages, etc.	27,528,837	34,757,712	39,098,847	25,532,970	25,967,007
III. Alcoholic liquors, etc.	1,079,964	1,220,456	1,152,619	1,158,424	1,214,638
IV. Tobacco, etc.	156,600	193,911	206,528	237,948	153,084
V. Live animals	179,015	227,233	217,373	197,081	186,118
VI. Animal substances, etc.	58,505,775	70,350,089	53,741,716	47,192,519	61,562,131
VII. Vegetable substances, etc.	260,143	407,607	328,675	297,864	388,311
VIII. Apparel, textiles, etc.	375,088	534,373	582,009	446,032	718,362
IX. Oils, fats, and waxes	772,791	970,379	784,601	611,633	1,192,522
X. Paints and varnishes	119,681	155,865	187,443	173,399	166,828
XI. Stones and minerals, etc.	1,807,966	2,486,329	3,305,551	2,667,077	2,406,965
XII. Metals, metal manufactures, and machinery	6,811,780	8,984,355	8,974,585	9,510,802	13,240,820
XIII. Rubber and leather, etc.	741,296	1,010,781	834,847	745,190	1,468,213
XIV. Wood and wicker, etc.	953,382	1,052,396	1,363,766	1,066,288	965,950
XV. Earthenware, etc.	175,300	160,010	191,816	209,637	163,805
XVI. Paper and stationery	249,911	247,136	300,998	364,928	320,677
XVII. Jewellery, etc.	91,669	120,327	133,625	105,803	112,310
XVIII. Optical, surgical, and scientific instruments	119,168	157,466	151,834	159,709	175,564
XIX. Drugs, chemicals, etc.	573,029	773,119	760,777	717,667	1,015,074
XX. Miscellaneous	727,202	732,288	800,749	915,711	1,152,657
XXI. Gold and silver; and bronze specie	11,700,284	12,495,809	14,930,762	15,951,167	(b)
Total	133,523,111	158,419,521	153,623,857	135,475,761	146,894,316
	(a)	(a)	(a)	(a)	(c)

(a) Estimated British currency value, 1935-36, £stg. 106,622,378; 1936-37, £stg. 126,501,534; 1937-38, £stg. 122,675,991; 1938-39, £stg. 108,188,166; 1939-40, £stg. 117,280,891. (b) Not available for publication. (c) Merchandise only.

EXPORTS FROM AUSTRALIA : CLASSES—*continued.*

Classes.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
B. OTHER PRODUCE : RE-EXPORTS.					
<i>Australian Currency Values.</i>					
	£ A.	£ A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	12,778	19,036	20,756	28,537	51,979
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	62,904	68,814	75,378	66,886	73,818
III. Alcoholic liquors, etc. ..	30,096	33,656	31,927	42,820	51,446
IV. Tobacco, etc. ..	72,149	69,693	74,399	112,997	137,437
V. Live animals ..	30,461	23,469	31,040	19,687	20,912
VI. Animal substances, etc. ..	26,145	30,066	32,458	136,279	73,188
VII. Vegetable substances, etc. ..	5,264	15,979	11,292	9,092	9,745
VIII. Apparel, textiles, etc. ..	228,714	320,472	203,104	222,819	139,084
IX. Oils, fats, and waxes ..	87,489	162,530	164,253	101,711	197,809
X. Paints and varnishes ..	4,005	6,316	4,844	4,853	8,203
XI. Stones and minerals, etc. ..	1,475	1,763	3,938	2,443	2,198
XII. Metals, metal manufactures, and machinery ..	435,380	481,294	547,326	547,549	477,052
XIII. Rubber and leather, etc. ..	4,983	15,029	7,695	10,873	14,535
XIV. Wood and wicker, etc. ..	22,614	32,972	47,543	42,987	50,830
XV. Earthenware, etc. ..	8,030	7,945	9,502	9,428	4,546
XVI. Paper and stationery ..	78,194	78,606	75,548	128,388	100,443
XVII. Jewellery, etc. ..	111,196	65,026	81,360	74,188	26,584
XVIII. Optical, surgical, and scientific instruments ..	176,104	214,395	231,123	234,004	214,866
XIX. Drugs, chemicals, etc. ..	44,873	35,808	47,397	48,518	46,413
XX. Miscellaneous ..	141,960	189,826	238,822	164,647	154,134
XXI. Gold and silver; and bronze specie ..					(b)
Total	3,440,776	3,957,263	3,956,263	5,020,551	1,855,242
	(a)	(a)	(a)	(a)	(a) (c)

(a) Estimated British currency value, 1935-36, £ stg. 2,750,029; 1936-37, £ stg. 3,162,784; 1937-38, £ stg. 3,161,888; 1938-39, £ stg. 4,013,206; 1939-40, £ stg. 1,481,231. (b) Not available for publication. (c) Merchandise only.

C. TOTAL EXPORTS : AUSTRALIAN PRODUCE AND RE-EXPORTS.

Australian Currency Values.

	£ A.	£ A.	£ A.	£ A.	£ A.
I. Animal foodstuffs, etc. ..	20,596,948	21,400,916	25,596,792	27,251,449	34,375,259
II. Vegetable foodstuffs; non-alcoholic beverages, etc. ..	27,591,741	34,826,526	39,174,225	25,599,856	26,040,825
III. Alcoholic liquors, etc. ..	1,110,060	1,254,112	1,184,546	1,201,244	1,266,084
IV. Tobacco, etc. ..	228,749	263,604	280,927	350,943	290,521
V. Live animals ..	209,476	250,702	248,413	216,768	207,030
VI. Animal substances, etc. ..	58,531,920	70,380,155	53,774,174	47,328,798	61,635,319
VII. Vegetable substances, etc. ..	265,407	423,586	339,067	306,956	398,056
VIII. Apparel, textiles, etc. ..	603,802	854,845	785,113	668,851	857,446
IX. Oils, fats, and waxes ..	860,280	1,132,900	948,854	713,344	1,390,331
X. Paints and varnishes ..	123,686	162,181	191,887	178,252	175,031
XI. Stones and minerals, etc. ..	1,809,441	2,488,092	3,309,489	2,669,520	2,409,163
XII. Metals, metal manufactures, and machinery ..	7,247,160	9,465,649	9,521,911	10,058,351	13,717,872
XIII. Rubber and leather, etc. ..	746,279	1,025,810	842,542	756,063	1,482,748
XIV. Wood and wicker, etc. ..	985,996	1,084,368	1,411,300	1,109,275	1,016,780
XV. Earthenware, etc. ..	183,390	167,955	201,318	219,065	168,351
XVI. Paper and stationery ..	328,105	325,742	375,646	493,316	421,120
XVII. Jewellery, etc. ..	202,865	185,353	214,985	179,991	138,894
XVIII. Optical, surgical, and scientific instruments ..	295,272	371,861	382,957	384,713	390,430
XIX. Drugs, chemicals, etc. ..	617,902	808,927	808,174	766,185	1,061,487
XX. Miscellaneous ..	869,162	922,114	1,039,571	1,080,358	1,306,811
XXI. Gold and silver; and bronze specie ..					(b)
Total	136,963,887	162,376,784	157,580,120	140,496,312	148,749,558
	(a)	(a)	(a)	(a)	(a) (c)

(a) Estimated British currency value, 1935-36, £ stg. 109,372,407; 1936-37, £ stg. 129,664,318; 1937-38, £ stg. 125,837,870; 1938-39, £ stg. 112,201,372; 1939-40, £ stg. 118,762,122. (b) Not available for publication. (c) Merchandise only.

3. Imports of Principal Articles.—The next table shows the quantity, where available, and the value of the principal articles imported into Australia during the last five years. The articles are listed in the order in which they appear in the detailed classification :—

PRINCIPAL COMMODITIES IMPORTED: AUSTRALIA.

British Currency Values.

Article.		1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Fish, preserved in tins	lb. £	28,059,677	29,866,030	28,323,075	28,902,983	25,275,936
		773,020	819,644	879,631	946,276	878,481
Tea	lb. £	44,668,703	48,057,853	45,307,019	49,530,941	(b)
		2,078,334	2,141,812	2,394,335	2,482,883	2,804,264
Whisky	gal. £	537,024	458,327	533,689	523,346	(b)
		553,551	490,222	566,759	553,537	851,462
Tobacco and preparations thereof	£	1,614,226	1,717,677	2,011,004	1,863,887	1,926,516
Copra	cwt. £	374,780	431,589	387,580	484,181	(b)
		204,071	345,181	215,137	175,076	212,585
Fibres	£	644,464	845,062	1,016,969	897,755	1,298,942
Hides and skins	£	614,041	599,956	828,029	695,673	593,769
Pulp for paper-making	ton £	37,209	48,849	63,932	37,704	(b)
		253,610	343,153	570,218	321,547	441,770
Seeds	£	547,244	630,178	578,045	515,679	749,450
Socks and stockings	£	34,900	36,019	48,754	43,508	33,610
Gloves	£	369,424	357,629	393,016	368,464	361,537
Hats and caps	£	157,586	147,569	190,130	179,422	174,874
Trimmings and ornaments	£	333,246	361,346	418,018	385,995	432,404
Other apparel and attire	£	774,699	755,216	946,365	887,459	782,409
Carpets and carpeting	£	1,085,153	1,176,375	1,326,305	1,099,728	1,395,999
Floorcloths and linoleums	£	429,245	542,790	609,364	562,394	625,445
Piece Goods—						
Canvas and duck	£	507,284	506,104	751,446	569,588	685,839
Cotton and linen	£	4,153,052	4,414,015	5,719,314	4,826,030	6,841,613
Silk and artificial silk	£	2,704,410	2,853,771	3,373,618	2,624,118	3,737,607
Woolen or containing wool	£	260,871	283,306	325,102	282,262	275,255
All other piece goods	£	1,972,457	1,988,126	1,805,913	1,578,337	2,414,359
Sewing silks, cottons, etc.	£	526,652	470,522	580,248	502,789	536,101
Bags and sacks	£	1,677,322	1,656,220	1,563,251	1,509,618	2,940,623
Yarns—						
Artificial silk	£	613,675	634,392	818,800	534,328	1,152,592
Cotton	£	435,927	455,099	596,019	394,328	491,250
Woolen	£	80,560	53,882	61,528	48,414	45,078
Other	£	38,624	43,350	51,982	62,770	54,028
Oils, in bulk—						
Kerosene	gal. £	38,770,667	45,617,564	61,189,925	54,714,472	(b)
		467,861	560,415	833,892	660,898	
Lubricating (mineral)	gal. £	14,454,548	14,774,293	18,752,582	15,519,442	(b)
		729,360	752,163	989,265	780,861	
Petroleum	gal. £	319,336,547	341,547,869	402,979,105	399,517,906	(b)
		4,332,643	5,046,456	6,106,301	5,658,530	
Residual and solar	gal. £	97,176,403	104,284,965	114,049,824	130,288,368	(b)
		521,166	591,990	769,768	930,675	
Electrical machinery and appliances	£	2,457,603	2,896,999	3,524,395	3,678,755	2,966,255
Electrical cable and wire, covered	cwt. £	240,759	254,315	276,264	257,064	(b)
		903,582	1,073,068	1,437,220	1,234,413	1,420,946
Agricultural machinery	£	153,084	172,190	219,159	207,479	172,711
Metal-working machinery	£	532,070	785,711	1,056,843	1,322,911	(b)
Motive-power machinery	£	1,896,675	2,766,077	3,726,802	2,483,812	2,257,646
Iron and steel—						
Pipes and tubes	£	388,060	399,483	634,267	451,144	(b)
Plate and sheet	£	2,529,737	2,301,462	4,414,430	2,614,283	(b)
Cutlery and platedware	£	482,740	511,186	571,539	524,487	588,215
Tools of trade	£	877,247	871,285	1,122,218	852,395	903,158
Motor cars, chassis, bodies, and parts	£	6,676,224	6,534,873	8,637,341	7,523,854	6,632,259
Rubber and rubber manufactures	£	1,047,535	1,673,993	1,786,441	1,545,366	2,227,188
Timber, undressed, including sp. ft.	£	358,148,252	318,168,941	406,772,593	347,331,124	(b)
Logs (a)	£	1,416,467	1,250,500	1,989,595	1,480,159	1,490,428
Crockery	£	532,750	510,376	591,251	559,176	632,405
Glass and glassware	£	747,576	794,908	916,724	800,470	725,376
Paper, printing	£	2,031,637	2,593,305	2,468,531	2,710,334	3,122,237
Stationery and paper manufactures	£	1,789,091	1,767,800	1,951,580	1,908,629	1,901,038
Cinematograph films	lin. ft. £	73,804,140	65,328,947	77,509,452	73,509,662	77,214,210
		527,057	508,122	569,723	565,455	573,671
Drugs, chemicals, and fertilizers	£	4,370,127	4,515,446	5,304,092	5,598,553	6,005,343
Arms and explosives	£	995,635	582,058	540,018	1,080,108	(b)
Musical instruments, pianos, etc.	£	111,441	150,991	178,033	175,761	117,794
Outside packages	£	2,067,275	2,105,362	2,547,906	2,310,204	(b)
All other articles	£	23,230,167	25,955,627	32,448,426	29,585,775	(b)
Total Imports	£	85,252,458	92,640,462	113,975,060	102,156,352	115,075,505

(a) Exclusive of undressed timber not measured in super. ft.

(b) Not available for publication.

(c) Merchandise only.

4. Exports of Principal Articles of Australian Produce.—(a) Quantities. The following table shows the quantities of the principal articles of Australian produce

exported during the period 1934-35 to 1938-39. The articles are listed in the order in which they appear in the detailed classification.

Particulars for the year 1939-40 are not available for publication.

PRINCIPAL COMMODITIES EXPORTED : QUANTITIES, AUSTRALIA.

Article.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Butter	centl. 2,625,189	2,126,462	1,743,094	1,973,456	2,295,428
Cheese	168,294	129,726	139,230	272,454	359,336
Eggs in shell	doz. 21,718,740	17,365,132	16,473,894	11,287,393	10,144,344
Beef	centl. 2,120,991	1,968,232	2,338,542	2,938,035	2,710,638
Lamb	1,358,797	1,513,778	1,628,859	1,595,562	1,583,327
Mutton	603,144	266,295	455,724	422,462	281,558
Pork	156,361	235,777	268,165	339,594	307,164
Milk and cream	165,495	169,610	220,724	247,163	191,039
Fruits, dried	1,277,789	1,114,976	1,204,077	1,457,598	1,681,270
Fruits, fresh	2,284,592	2,517,404	2,493,176	2,456,004	2,752,381
Barley	1,450,854	1,736,042	1,302,810	2,398,234	1,309,084
Wheat	34,575,814	46,195,876	43,066,812	56,702,254	37,877,414
Flour	14,959,412	12,341,620	11,250,563	12,609,073	14,501,304
Sugar (cane)	cwt. 6,229,140	6,013,260	8,126,240	8,563,500	8,866,280
Wine	gal. 3,394,597	3,706,925	4,087,731	3,897,086	3,719,401
Tobacco, manufactured	centl. 3,853	5,938	7,454	8,060	9,665
Wool (in terms of greasy wool)	9,416,661	9,117,986	9,157,858	8,554,117	9,469,604
Pearl-shell	cwt. 43,467	56,306	52,058	53,289	52,532
Sandalwood	73,420	47,043	71,115	24,813	32,962
Tallow (unrefined)	827,136	450,324	648,774	541,136	562,500
Coal	ton 305,139	307,540	340,388	302,873	382,085
Concentrates	cwt. 2,212,324	4,368,514	3,629,890	5,411,613	5,916,685
Copper	69,188	83,439	69,022	38,121	21,555
Lead	3,673,347	3,882,745	3,480,876	4,089,805	4,999,919
Zinc—bar, block, dust	537,650	846,269	955,550	618,858	892,630
Tin—Ingots	22,097	16,012	13,524	14,665	29,431
Timber, undressed, including Logs (a)	sup. ft. 74,224,502	75,121,454	76,379,339	101,033,636	77,833,352
Soap	centl. 54,371	54,507	58,962	49,007	49,871

(a) Exclusive of undressed timber not measured in super. feet.

(b) Values. The values of the principal articles of Australian produce exported during the period 1935-36 to 1939-40 are given in the table hereunder :—

PRINCIPAL COMMODITIES EXPORTED : VALUES, AUSTRALIA.
Australian Currency Values.

Article.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£A.	£A.	£A.	£A.	£A.
Butter	9,832,733	8,801,643	10,781,124	12,891,837	15,894,718
Cheese	337,467	383,974	845,110	1,073,931	1,440,131
Eggs in shell	910,892	954,578	686,713	638,159	597,854
Meats	8,752,842	10,331,840	12,250,031	11,776,635	15,109,128
Milk and cream	722,301	849,465	963,836	791,011	1,126,017
Fruits, dried	1,987,164	2,059,358	2,683,856	2,864,676	1,993,686
Fruits, fresh	2,026,860	1,979,890	2,054,322	2,022,874	1,166,588
Fruits, preserved in liquid	805,797	1,011,994	1,287,962	1,267,070	1,349,484
Barley	369,391	504,495	805,943	341,935	520,521
Wheat	14,050,975	18,760,772	20,906,601	8,734,974	7,557,370
Flour	4,519,882	5,590,942	6,032,321	4,540,210	5,231,485
Sugar (cane)	2,757,903	3,707,360	4,020,576	4,177,584	6,185,797
Wine	931,624	1,042,969	943,241	981,143	933,767
Tobacco, manufactured	142,408	180,609	192,217	225,025	119,156
Hides and skins	5,649,427	7,296,498	6,180,776	4,094,754	4,157,709
Wool	52,339,514	62,502,629	46,982,679	42,629,461	56,848,399
Pearl-shell	302,491	319,631	345,580	244,266	224,646
Sandalwood	66,845	106,448	106,331	42,330	54,374
Tallow (unrefined)	661,465	819,597	620,869	483,034	847,973
Coal	276,553	300,457	354,754	347,054	251,055
Concentrates	1,110,167	1,816,776	2,289,672	1,827,422	(c)
Copper	178,330	136,620	33,630	15,666	(c)
Lead	3,837,381	4,817,749	4,913,762	4,266,566	(c)
Zinc—bar, block, dust	905,130	1,314,030	752,341	888,524	(c)
Tin—Ingots	200,807	193,928	187,466	70,137	(c)
Leather	639,966	890,956	702,503	626,198	1,327,057
Timber, undressed, including Logs (a)	844,952	913,547	1,202,447	926,504	751,535
Gold	92,086	88,462	75,878	74,594	102,482
Silver	10,709,718	11,825,898	13,910,680	14,958,633	(c)
Other articles	990,506	668,323	1,018,355	992,486	(c)
All other articles	6,540,525	8,248,074	9,555,769	10,361,078	23,105,384
Total Exports (Australian Produce)	133,523,111	158,419,521	153,623,857	135,475,761	146,894,316
	(b)	(b)	(b)	(b)	(d)

(a) Exclusive of undressed timber not measured in super. feet.

(b) Estimated British currency

value—1935-36, £ stg. 106,622,378; 1936-37, £ stg. 126,501,534; 1937-38, £ stg. 122,675,954; 1938-39, £ stg. 107,510,655; 1939-40, £ stg. 117,280,800. (c) Not available for publication. (d) Merchandise only.

5. Imports of Merchandise, Specie and Bullion.—The table hereunder gives the value in British currency of imports into Australia during each of the last five years grouped under the headings—Merchandise, and Specie and Bullion. The imports of merchandise are shown under the sub-headings of "free" and "dutiable" goods :—

IMPORTS OF MERCHANDISE, SPECIE AND BULLION : AUSTRALIA.

British Currency Values.

Year.	Merchandise.			Specie and Bullion.	Total Imports.
	Free Goods.	Dutiable Goods.	Total Merchandise.		
1935-36 ..	£ Stg. 32,693,465	£ Stg. 50,827,866	£ Stg. 83,521,331	£ Stg. 1,731,127	(a)85,252,458
1936-37 ..	37,705,653	52,885,927	90,591,580	2,048,882	(a)92,640,462
1937-38 ..	44,211,749	67,521,505	111,733,254	2,241,806	a113,975,060
1938-39 ..	40,665,193	58,647,957	99,313,150	2,843,202	a102,156,352
1939-40 ..	50,294,728	65,380,777	b115,675,505	(c)	(*)

(a) Estimated Australian currency value—1935-36, £A106,778,705; 1936-37, £A116,032,180; 1937-38, £A142,753,763; 1938-39, £A127,950,831. (b) 1939-40, £A144,883,570. (c) Not available for publication.

6. Exports of Merchandise, Specie and Bullion.—The next table shows the recorded value of exports from Australia during each of the last five years, grouped under the headings—Merchandise, and Specie and Bullion, giving the exports of Australian Produce and Other Produce separately :—

EXPORTS OF MERCHANDISE, SPECIE AND BULLION : AUSTRALIA.

Year.	Merchandise.			Specie and Bullion.			Total Exports. (a)
	Australian Produce.	Other Produce.	Total Merchandise.	Australian Produce.	Other Produce.	Total Specie and Bullion.	
1935-36	£ (b)121,222,827 (c) 97,263,733	£ 1,584,814 1,265,320	£ 123,407,641 98,529,053	£ 11,700,284 9,358,645	£ 1,855,962 1,484,709	£ 13,556,246 10,843,354	£ 136,963,887 109,372,407
1936-37	(b)145,923,712 (c)116,505,957	1,872,695 1,495,166	147,796,407 118,001,123	12,495,809 9,995,577	2,084,568 1,667,618	14,580,377 11,663,195	162,376,784 129,664,318
1937-38	(b)138,693,038 (c)110,732,964	1,939,762 1,548,712	140,632,800 112,281,676	14,930,762 11,942,985	2,016,558 1,613,222	16,947,320 13,556,203	157,580,120 125,837,879
1938-39	(b)119,524,594 (c) 95,428,818	2,008,706 1,603,757	121,533,300 97,032,575	15,951,167 12,759,349	3,011,845 2,409,448	18,963,012 15,168,797	140,496,312 112,201,372
1939-40	(b)146,894,316 (c)117,280,891	1,855,242 1,481,231	148,749,558 118,762,122	(d)	(d)	(d)	(d)

(a) Does not include the value of Ships' Stores. See later table. (b) Australian currency values. (c) British currency values. (d) Not available for publication.

7. Imports in Tariff Divisions.—In the following table the imports into Australia during the last five years have been classified in accordance with the sixteen divisions of the Customs Tariff.

IMPORTS IN TARIFF DIVISIONS: AUSTRALIA.

British Currency Values.

Tariff Division.	Imports.				
	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
I. Ale, Spirits, and Beverages	810,479	775,444	940,419	914,006	1,258,250
II. Tobacco and preparations thereof	1,614,226	1,717,677	2,011,004	1,863,887	1,926,516
III. Sugar	21,542	28,326	31,545	40,034	43,961
IV. Agricultural Products and Groceries	5,832,041	6,762,587	6,438,463	6,331,568	7,522,654
V. Textiles, Felts and Furs, and Manufactures thereof, and Attire	15,456,564	16,221,963	18,648,002	15,921,221	21,993,120
VI. Metals and Machinery	17,659,405	19,260,713	26,736,437	22,168,275	21,920,137
VII. Oils, Paints, and Varnishes	7,380,167	8,367,745	10,269,721	9,559,838	13,610,874
VIII. Earthenware, Cement, China, Glass, and Stone	1,996,432	2,117,595	2,581,309	2,308,556	2,407,329
IX. Drugs and Chemicals	3,406,834	3,387,632	3,821,966	4,035,376	4,406,467
X. Wood, Wicker, and Cane	1,976,646	1,787,427	2,770,894	2,114,721	2,079,313
XI. Jewellery and Fancy Goods	1,807,147	1,772,176	2,203,995	2,045,947	2,120,209
XII. Hides, Leather, and Rubber	1,506,155	2,314,197	2,142,089	1,875,175	2,756,456
XIII. Paper and Stationery	5,534,365	6,239,326	7,133,843	6,473,254	7,038,922
XIV. Vehicles	7,885,946	7,988,486	10,415,428	9,263,302	11,273,138
XV. Musical Instruments	111,441	150,991	178,033	285,638	208,753
XVI. Miscellaneous	8,158,740	8,753,533	10,914,478	10,400,018	10,313,008
— Free Goods not specially mentioned in Tariff	2,363,201	2,945,762	4,495,628	3,712,334	4,196,398
Total Merchandise ..	83,521,331	90,591,580	111,733,254	99,313,150	115,675,505
Specie and Bullion ..	1,731,127	2,048,882	2,241,806	2,843,202	(a)
Grand Total ..	85,252,458	92,640,462	113,975,060	102,156,352	(a)

(a) Not available for publication.

8. Imports and Net Customs Revenue.—The percentage of net Customs revenue collected on the total value of all merchandise imported in each year was as follows:—1935-36, 22.3 per cent.; 1936-37, 22.0 per cent.; 1937-38, 20.4 per cent.; 1938-39, 21.9 per cent.; and 1939-40, 20.6 per cent. Primage duty was in force during these years, and adding this to net customs revenue, the percentages were as follows:—1935-36, 26.7 per cent.; 1936-37, 25.3 per cent.; 1937-38, 23.5 per cent.; 1938-39, 25.0 per cent.; and 1939-40, 23.7 per cent. The percentages of net Customs revenue, omitting primage, on the total value of dutiable goods only were—1935-36, 36.6 per cent.; 1936-37, 37.7 per cent.; 1937-38, 33.7 per cent.; 1938-39, 38.6 per cent.; and 1939-40, 36.4 per cent. The calculations are based on uniform currency values and on the assumption that the value of clearances approximated to the value of imports during the same period.

9. Protective and Revenue Customs Duties.—In the following table the value of goods cleared for home consumption classified under protective and revenue duties and the gross duty collected are shown for the United Kingdom and other countries :—

IMPORTS (CLEARANCES) CLASSIFIED UNDER PROTECTIVE AND REVENUE DUTIES : AUSTRALIA.

Australian Currency Values.

Item.	1936-37.			1937-38.			1938-39.		
	United Kingdom.	Other Countries.	Total.	United Kingdom.	Other Countries.	Total.	United Kingdom.	Other Countries.	Total.
	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.
Dutiable Goods :—									
Protective	10,347	7,380	17,727	11,940	9,758	21,698	10,981	9,479	20,460
Revenue	14,087	35,065	49,152	16,141	43,917	60,058	13,623	38,036	51,659
Total Dutiable Goods ..	24,434	42,445	66,879	28,081	53,675	81,756	24,604	47,515	72,119
Free Goods	22,990	23,012	47,226	28,151	26,842	58,183	22,607	26,119	54,536
	(a)	(a)		(a)	(a)		(a)	(a)	
Total All Goods	47,424	65,457	114,105	56,232	80,517	139,939	47,211	73,634	126,655
	(a)	(a)		(a)	(a)		(a)	(a)	

PERCENTAGE OF TOTAL GOODS CLEARED FOR HOME CONSUMPTION.

	%	%	%	%	%	%	%	%	%
Dutiable Goods :—									
Protective	9.1	6.5	15.6	8.6	6.9	15.5	8.6	7.5	16.1
Revenue	12.3	30.7	43.0	11.5	31.4	42.9	10.8	30.0	40.8
Total Dutiable Goods ..	21.4	37.2	58.6	20.1	38.3	58.4	19.4	37.5	56.9
Free Goods	20.2	20.2	41.4	20.1	19.2	41.6	17.9	20.6	43.1
Total All Goods	41.6	57.4	100.0	40.2	57.5	100.0	37.3	58.1	100.0

GROSS CUSTOMS DUTY COLLECTED.

	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.	£A 1,000.
Dutiable Goods :—									
Protective	2,035	3,311	5,346	2,335	4,040	6,375	2,139	3,991	6,130
Revenue	1,981	18,615	20,596	1,984	21,199	23,183	1,783	20,449	22,232
Total Dutiable Goods ..	4,016	21,926	25,942	4,319	25,239	29,558	3,922	24,440	28,362

AVERAGE AD VALOREM RATE OF DUTY ON GOODS CLEARED FOR HOME CONSUMPTION.

	%	%	%	%	%	%	%	%	%
Dutiable Goods :—									
Protective	19.7	44.9	30.2	19.6	41.4	29.4	19.5	42.1	30.0
Revenue	14.1	53.1	41.9	12.3	48.3	38.6	13.1	53.8	43.0
Total Dutiable Goods ..	16.4	51.7	38.8	15.4	47.0	36.2	15.9	51.4	39.3

(a) Exclusive of goods admitted free for Commonwealth, Consuls, etc., and free reimported not distributed according to United Kingdom and other origin.

§ 9. Ships' 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' stores have been specially recorded as such, and have been omitted from the export figures. The value of these stores shipped each year during the period 1930-31 to 1939-40, showing bunker coal separately, is given in the following table:—

VALUE OF STORES SHIPPED ON OVERSEA VESSELS—AUSTRALIA.

Period.	Bunker Coal.	All Stores (including Coal).	Period.	Bunker Coal.	All Stores (including Coal).
	£ A.	£ A.		£ A.	£ A.
1930-31	607,537	1,653,141 <i>a</i>	1935-36	576,549	1,808,291 <i>a</i>
1931-32	534,897	1,559,574 <i>a</i>	1936-37	564,071	1,740,437 <i>a</i>
1932-33	550,277	1,621,640 <i>a</i>	1937-38	578,456	2,091,249 <i>a</i>
1933-34	495,051	1,620,907 <i>a</i>	1938-39	561,063	2,105,619 <i>a</i>
1934-35	544,877	1,712,547 <i>a</i>	1939-40	492,155	2,539,848 <i>a</i>

(*a*) Estimated British currency value—1930-31, £ stg. 1,408,032; 1931-32, £ stg. 1,225,119; 1932-33, £ stg. 1,294,723; 1933-34, £ stg. 1,294,137; 1934-35, £ stg. 1,367,303; 1935-36, £ stg. 1,443,745; 1936-37, £ stg. 1,389,570; 1937-38, £ stg. 1,669,660; 1938-39, £ stg. 1,681,133; 1939-40, £ stg. 2,027,823.

In addition to bunker coal, the principal items of ships' stores supplied to oversea vessels in 1939-40 were—Oils, £A990,544 (mainly fuel oils); meats, £A288,423; butter, £A64,500; fish, £A41,408; and vegetables, fresh, £A44,533.

The net Customs duty collected on ships' stores carried to Australia on oversea vessels and consumed in Australian waters amounted in 1939-40 to £A50,308.

§ 10. Movement of Specie and Bullion.

i. Imports and Exports.—The following tables show the values of gold and silver specie and bullion, and of bronze specie imported into and exported from Australia during the years 1934-35 to 1938-39.

Particulars for the year 1939-40 are not available for publication.

IMPORTS AND EXPORTS, SPECIE AND BULLION: AUSTRALIA.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
IMPORTS.					
	£ Stg.	£ Stg.	£ Stg.	£ Stg.	£ Stg.
Gold—Specie	206	1,093	69	1,070	14,637
Bullion	1,679,380	1,634,417	1,998,311	2,191,969	2,757,488
Total ..	1,679,586	1,635,510	1,998,380	2,193,039	2,772,125
Silver—Specie	3,057	77,939	34,092	29,576	50,738
Bullion	15,704	17,333	16,211	18,866	20,143
Total ..	18,761	95,272	50,303	48,442	70,881
Bronze—Specie	142	345	199	325	196
GRAND TOTAL	(<i>a</i>)1,698,489	(<i>a</i>)1,731,127	(<i>a</i>)2,048,882	(<i>a</i>)2,241,806	(<i>a</i>)2,843,202

(*a*) Estimated Australian currency value—1934-35, £A2,127,357; 1935-36, £A2,168,237; 1936-37, £A2,566,225; 1937-38, £A2,807,862; 1938-39, £A3,561,111.

IMPORTS AND EXPORTS, SPECIE AND BULLION: AUSTRALIA—continued.

Items.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
EXPORTS.					
Gold—Specie ..	£ A. 206,618	£ A. 994,924	£ A. 181,785	£ A. 96,820	£ A. 110,204
Bullion ..	9,609,980	11,532,943	13,705,405	15,815,523	17,843,088
Total ..	9,816,598	12,527,867	13,887,190	15,912,343	17,953,292
Silver—Specie ..	106,122	151,671	101,947	43,232	42,726
Bullion ..	530,822	874,495	587,974	989,296	966,716
Total ..	636,944	1,026,166	689,921	1,032,528	1,009,442
Bronze—Specie ..	2,899	2,213	3,266	2,449	278
Total—					
Australian Produce ..	8,694,612	11,700,284	12,495,809	14,930,762	15,951,167
Other Produce ..	1,761,829	1,855,962	2,084,568	2,016,558	3,011,845
GRAND TOTAL ..	10,456,441 (a)	13,556,246 (a)	14,580,377 (a)	16,947,320 (a)	18,963,012 (a)

(a) Estimated British currency value—1934-35, £ stg. 8,365,212; 1935-36, £ stg. 10,843,354; 1936-37, £ stg. 11,663,195; 1937-38, £ stg. 13,556,203; 1938-39, £ stg. 15,168,797.

2. Imports and Exports by Countries.—The next table shows the imports and exports of specie and bullion from and to various countries during the year 1938-39:—
Particulars for the year 1939-40 are not available for publication.

IMPORTS AND EXPORTS OF SPECIE AND BULLION BY COUNTRIES: AUSTRALIA, 1938-39.

Country.	Imports.			Exports.		
	Specie.	Bullion.	Total.	Specie.	Bullion.	Total.
	£ Stg.	£ Stg.	£ Stg.	£ A.	£ A.	£ A.
Australia (a) ..	50,918	..	50,918	..	..	..
United Kingdom ..	13,331	976	14,307	109,240	1,909,128	2,018,368
Ceylon ..	..	..	..	..	903,829	903,829
India ..	..	..	..	..	23,533	23,533
Malaya (British) ..	..	..	..	200	..	200
New Zealand ..	..	379,144	379,144	5,446	459	5,905
Pacific Islands—						
Fiji ..	..	699,824	699,824	..	..	..
Gilbert and Ellice Islands Colony ..	..	..	..	140	..	140
Nauru ..	..	..	..	500	..	500
Papua ..	..	85,461	85,461	615	..	615
Solomon Islands ..	..	582	582	75	..	75
Territory of New Guinea ..	..	1,600,691	1,600,691	30,581	..	30,581
Union of South Africa ..	..	10,044	10,044	..	..	..
Total, British Countries ..	64,249	2,776,722	2,840,971	146,797	2,836,949	2,983,746
France ..	..	..	..	..	7,327	7,327
Germany ..	..	..	..	..	7,745	7,745
Netherlands East Indies ..	..	..	..	6,403	..	6,403
Switzerland ..	..	869	869	..	..	..
United States of America ..	1,322	40	1,362	8	15,957,783	15,957,791
Total, Foreign Countries ..	1,322	909	2,231	6,411	15,972,855	15,979,266
GRAND TOTAL ..	65,571	2,777,631	2,843,202 (b)	153,208	18,809,804	18,963,012 (c)

(a) Australian produce reimported. (b) Estimated Australian currency value—£A3,561,111.
(c) Estimated British currency value—£ Stg. 15,168,797.

§ 11. Exports according to Industries.

1. **Classification.**—The following table gives an analysis of the exports of Australian produce according to the main classes of industry in which the goods were produced for the years 1938-39 and 1939-40 in comparison with those for the year 1913. The index-number based on the year 1913 shows the variations in the total recorded value only of exports in each industrial group, and has not been adjusted either for price-changes or in accordance with the variation of the Australian £ in relation to sterling.

A graph is published on page 754 of this chapter which shows the value of exports of Australian produce according to industrial groups from 1920-21 to 1939-40.

EXPORTS OF AUSTRALIAN PRODUCE ACCORDING TO INDUSTRIAL ORIGIN.

VALUE OF EXPORTS.

Industrial Group.	1913. (a)		1938-39.		1939-40.	
	£A	Index No.	£A	Index No.	£A	Index No.
Agriculture	10,677,734	100	26,206,305	245	26,798,754	251
Pastoral	42,057,346	100	59,115,286	141	79,082,128	188
Dairy and Farmyard	3,854,734	100	14,975,986	389	19,690,285	511
Mines and Quarries (b)	21,926,310	100	23,983,912	109	27,118,382	124
Fisheries	424,849	100	288,382	68	280,248	66
Forestry	1,106,549	100	1,055,880	95	974,091	88
Total, Primary Produce	80,047,522	100	125,625,751	157	153,943,888	192
Manufacturing	2,304,693	100	8,649,379	375	13,688,800	594
Total	82,352,215	100	134,275,130	163	167,632,688	204

(a) Base year. (b) Australian production of gold substituted for exports of gold each year. (c) Estimated British currency value, 1938-39, £ stg. 107,205,692; index-number 130; 1939-40, £ stg. 133,838,473; index-number 163.

2. **Relative Importance of Industrial Groups.**—In the previous table the value of commodities in each industrial group of exports of Australian produce is that recorded at date of shipment from Australia, with the exception that the value of the production of gold in Australia in each year has been substituted in the Mines and Quarries group for actual shipments of gold in each year. This has been done to eliminate the exports of gold for monetary purposes. In order of importance the pastoral group occupied the highest place and in 1913 the value of commodities included in this group represented 51.1 per cent. of the total exports, as compared with 44.0 per cent. in 1938-39, and 47.2 per cent. in 1939-40.

Exports of agricultural produce rank next in importance and were slightly higher in 1939-40 than in the previous year. From 13.0 per cent. of the total exports in 1913, agricultural produce increased to 16.0 per cent. in 1939-40.

According to value, exports of dairy and farmyard produce increased from 4.7 per cent. in 1913 to 11.0 per cent. in 1934-35, declined during the succeeding years to 8.4 per cent. in 1937-38, and improved to 11.7 per cent. in 1939-40. Though the products of mines and quarries declined seriously subsequent to the year 1913, a recovery has been made in more recent years, the figures for 1939-40 representing 16.2 per cent. of the total exports. The manufacturing group of exports, which represented 2.8 per cent. in 1913, increased to 8.2 per cent. in 1939-40.

Compared with the year 1913, exports of agricultural produce in 1939-40 showed an increase of 151 per cent., pastoral produce 88 per cent., dairy and farmyard produce 411 per cent., mines and quarries 24 per cent., the manufacturing group 494 per cent., and total exports 104 per cent. The exports of the products of fisheries and forests were lower in 1939-40 than in 1913.

3. **Australian Production and Exports according to Industry.**—The following table shows the total values of Australian production and Australian exports during the period of ten years, 1929-30 to 1938-39, classified according to industries; the proportion of each industrial group to total production and to total exports; and in the last column the percentage exported of the production of each industrial group:—

VALUE OF AUSTRALIAN PRODUCTION AND EXPORTS, ACCORDING TO INDUSTRY : 1929-30 TO 1938-39.

Australian Currency Values.

Industrial Group.	Value of Production during Ten Years.	Percentage on Total Production.	Value of Exports during Ten Years.	Percentage on Total Exports.	Percentage Exported of the Production in each Industrial Group.
	£A1,000.	%	£A1,000.	%	%
Agriculture	773,849	20.05	288,134	24.14	37.23
Pastoral	833,096	21.59	574,862	48.16	69.00
Dairy and Farmyard	474,098	12.28	113,855	9.54	24.02
Mining	215,291	5.58	149,351	12.50	69.37
Forestry and Fisheries	108,896	2.82	12,428	1.04	11.41
Total, Primary Produce	2,405,230	62.32	1,138,630	95.38	47.34
Manufacturing	1,454,244	37.68	55,132	4.62	(a)3.79
Total	3,859,474	100.00	1,193,762	100.00	(a)30.93

(a) See letterpress in the concluding paragraph of this section.

The figures relating to value of production and value of exports are subject to the qualifications mentioned previously. A period of ten years is embraced, and the values of production and of exports therein give a very fair index of the relative importance of the several industrial groups. Of the total production 62.32 per cent. was classified as primary produce and 37.68 per cent. as manufactured articles. The main contributing groups in the primary produce section were pastoral with 21.59 per cent., agriculture with 20.05 per cent., and dairy and farmyard produce with 12.28 per cent. of the total production.

Exports of primary produce represented 95.4 per cent. of the total exports. The primary groups in order of value were pastoral 48.2 per cent., agricultural 24.2 per cent., mining 12.5 per cent., dairy and farmyard 9.5 per cent., and forestry and fisheries 1.0 per cent. The manufacturing group accounted for the other 4.6 per cent.

The figures in the last column of the table are of special interest, as they show the percentage exported of the production of each industrial group. Of the total primary production during the period, 47.34 per cent. was exported. Approximately 37 per cent. of the agricultural production, 69 per cent. of the pastoral production, 24 per cent. of the dairy and farmyard production, 69 per cent. of the mining production, and 11 per cent. of the production of forestry and fisheries combined were sent abroad.

The total exports of gold bullion and specie are not included in the value of exports of the mining industry, the actual production of gold during the period being taken.

On account of the inherent difficulties of classifying production and exports by industries, the figures given for the manufacturing industry should not be interpreted too literally. In the first place, the value of manufacturing "production" stated is not the total value of output, but only the "value added" by manufacturing processes, while the value of manufactured exports represents the total value of the goods, including raw materials, etc. Secondly, some of the exported goods classified as primary produce have been increased in value by manufacturing processes, but have not been changed in form sufficiently to warrant their inclusion as manufactured products, e.g., flour, butter and sugar.

§ 12. Australian Index of Export Prices.

1. **The Old Annual Series.**—With the exception of a few years after 1929–30 an annual index of export prices has been published by this Bureau since its inception. An index was at first obtained by valuing the exports (other than gold) of each successive year at the prices of 1901, and dividing the values so obtained into the export values actually recorded. These computations were carried back to 1901. In 1918 the procedure was changed and brought into harmony with the methods adopted by the Bureau for constructing other price indexes. The average quantities of the principal exports (other than gold) for the nineteen and a half years from 1st January, 1897, to 30th June, 1916, were taken, and valued at the prices of each successive year. Comparisons of the resulting totals for different years were assumed to give the required comparisons of export price-levels for those years. The two methods would, however, give the same results only if the proportion of different exports for each year in question was the same as the average for the nineteen and a half years. The proportion was, in fact, varying appreciably from year to year with the seasons. The old index was, therefore, based on a different system of weighting in each year, so that the results were not comparable for different years. The new method gave comparable and satisfactory results so long as the proportion of different exports was not widely different from the average of 1897 to 1916. After the War of 1914–19, however, the relative importance of different exports changed considerably. By about 1930 it began to appear that the change was great enough to throw some doubt on the accuracy of the index. It was published with increasing reluctance until 1929–30, after which it was withdrawn from publication.

Following that year endeavours were made to design and compile new series of index-numbers which would reflect more accurately the short- and intermediate-period fluctuations in export prices.

2. **The New Monthly Series.**—An attempt was made to overcome some of the difficulties occasioned by variations in the proportions of the different exports by compiling two separate series of monthly index-numbers. The first series was compiled in very much the same way as the old annual index-numbers, although certain important changes have been made in the data utilized. These are described below. For the present it may be noted that 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. It is thus an index purely of price changes. The second 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 latter is compiled in such a way as to take more close account of the actual quantities of each article exported at current prices; and hence to indicate with rather greater accuracy the extent to which price-movements have affected the actual value of our current exports. It will be clear, therefore, that the two series are designed to measure different things, any differences between the results being explicable on wider grounds than mere differences in formulae.

Reference has already been made to the fact that the data on which the new series are based differ from those utilized in the old series of annual index-numbers. These changes apply to both of the new series.

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. Declared unit values are not satisfactory even in an annual index-number, partly because the returns are not always sufficiently accurate, and partly because there is a constant variation in the proportions of different grades and qualities included in the actual exports of any given period. An obvious example of the latter type of inaccuracy is furnished by the case of wool, the poorer grades of which are shipped during certain months of the off-season. In a monthly series of index-numbers, declared unit-values are even less satisfactory, as the difficulties are greatly magnified over short periods, during which the inaccuracies have little chance of averaging out.

Moreover, the export parities have in all cases been based on prices f.o.b. Australian ports. Where freight and selling charges form an appreciable percentage of the selling price, the use of unadjusted oversea quotations results in some distortion of the amplitude of the percentage fluctuations in prices.

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.

Each series of index-numbers takes account of 20 items, which constitute about 85 per cent. of the total value of exports of merchandise and silver and gold production.

3. Monthly Index (Fixed Weights).—The original "multipliers" used for the first series of index-numbers were, in round figures, the average annual exports (or production, in the case of gold) during the five years 1928-29 to 1932-33. This period was chosen some time ago as being fairly representative of the mutual relationship of the different export commodities over the period from 1928 to 1933 and, so far as it was possible to judge at the time, over the ensuing few years. As from July, 1936, the "multipliers" were revised to bring them into accord with observed changes in the composition of Australian exports. They 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.

The twenty items, together with the units of quantity and the "multipliers", are given in the following table. It should be noted that (i) the "multiplier" allotted to wheat has been increased to take into account the "wheat equivalent" of flour exported, (ii) that allotted to greasy wool has been increased to take into account the "greasy equivalent" of scoured wool, tops and wool on skins, and (iii) those allotted to metals have been increased to take into account the metallic contents of ores and concentrates exported. This is the only satisfactory method of dealing with these commodities, for which it is not possible to secure satisfactory export price quotations in their own right.

EXPORT PRICE INDEX : WEIGHTING SYSTEM (FROM 1st JULY, 1936).

Item.	Unit of Quantity.	Quantity "Multipliers" for New Index-numbers.	Percentage Value Weights if applied to 1939-40.
1. Wheat (and wheat equivalent of flour) ..	Bushel	101,000,000	14.23
2. Sultanas	Ton	38,200	1.24
3. Lexias	"	3,000	0.12
4. Currants	"	13,400	0.37
5. Sugar (cane)	"	305,000	3.09
6. Wool (as in the grease)	lb.	975,000,000	45.46
7. Tallow	Cwt.	600,000	0.50
8. Cattle hides	lb.	28,000,000	0.71
9. Calfskins	"	1,800,000	0.10
10. Beef (frozen)	"	182,000,000	2.68
11. Lamb (frozen)	"	138,000,000	3.27
12. Mutton (frozen)	"	44,000,000	0.53
13. Pork (frozen)	"	16,000,000	0.43
14. Butter	Cwt.	2,140,000	12.46
15. Silver	Oz.	7,300,000	0.68
	(standard)		
16. Copper	Ton	3,600	0.19
17. Tin	"	1,300	0.32
18. Zinc	"	99,000	1.83
19. Lead	"	208,500	3.36
20. Gold (production)	Oz. (fine)	937,000	8.43
			100.00

The relative importance of the several items in the whole index is roughly indicated in the last column, which shows in percentage form the "value aggregates" for 1939-40, i.e., the average prices for that year multiplied by the "quantity multipliers."

The monthly index-numbers of export prices in terms of Australian currency for the period January, 1928, to December, 1940, are set out in the following table. Index-numbers are also given of the same prices in terms of English sterling for the period January, 1931, to December, 1940. Differences in the value of English and Australian currency were sufficiently negligible to be ignored in the eighteen months preceding July, 1929.

MONTHLY EXPORT PRICE INDEX : AUSTRALIA.

(Base : 1928 = 1,000.)

Month.	1928.	1931.	1932.	1933.	1934.	1935.	1936.	1937.	1938.	1939.	1940.
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(i) IN TERMS OF AUSTRALIAN CURRENCY.

January ..	1,036	514	595	548	785	580	772	957	755	653	811
February ..	1,036	557	593	518	759	567	779	934	736	651	811
March ..	1,052	587	562	510	739	564	785	988	730	635	813
April ..	1,058	585	552	516	726	605	790	1,000	722	630	814
May ..	1,061	578	547	561	676	644	790	983	725	630	815
June ..	988	553	533	607	648	652	747	946	697	648	816
July ..	997	535	550	659	620	656	769	954	710	657	814
August ..	975	509	580	661	627	664	804	952	686	653	811
September ..	965	515	604	708	581	714	790	901	661	741	813
October ..	936	597	567	676	564	749	820	880	668	769	814
November ..	946	646	553	714	557	741	893	802	656	771	815
December ..	936	595	550	710	550	736	920	796	647	776	814
Simple Average	1,000	564	566	616	653	656	805	923	699	686	813

(ii) IN TERMS OF ENGLISH CURRENCY.

January ..	1,036	428	475	438	627	463	616	764	603	521	648
February ..	1,036	428	473	414	606	453	622	746	588	520	648
March ..	1,052	451	449	407	590	450	627	789	583	507	649
April ..	1,058	449	441	412	580	483	631	798	576	503	650
May ..	1,061	443	437	448	540	514	631	785	579	503	651
June ..	998	425	426	485	517	521	596	755	556	517	651
July ..	997	411	439	526	495	524	612	762	567	525	650
August ..	975	391	463	528	501	530	642	760	548	521	648
September ..	965	395	482	565	464	570	631	719	528	592	649
October ..	936	458	453	540	450	598	655	703	533	614	650
November ..	946	496	442	570	445	592	713	640	524	616	651
December ..	936	474	439	567	439	588	735	636	517	620	650
Simple Average	1,000	437	452	492	521	524	643	737	559	548	650

4. **Monthly Index (Changing Weights).**—The second series of the new index-numbers is designed merely for comparisons with the corresponding month, or period of months, of the previous year. The same price quotations are used, but the "multipliers" are much more closely in accord with the actual experience of the periods in question.

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 had been 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 above could have been expressed more shortly, of course, by saying that Fisher's "ideal" formula has been used.

The index-numbers for two or more months of one year, as compared with the corresponding period of the previous year, are computed in very much the same way. The process merely involves the cumulative addition of the aggregates computed for the individual months, and extraction of the index-numbers as explained above.

In order to indicate more clearly the method of computation followed, and to enable comparisons to be made with the results obtained from the first series of index-numbers, the following table sets out the data in detail for the trade year 1939-40.

MONTHLY EXPORT PRICE INDEX (CHANGING WEIGHTS) : AUSTRALIA.

Month.	Index-numbers Based on Quantities of 1939-40.	Index-numbers Based on Quantities of 1938-39.	Final Index-numbers (on "Ideal" Formula).	Index-numbers Based on Standard "Multipliers" (First Series).
(i) INDIVIDUAL MONTHS.				
(Base : Prices in corresponding month of previous year = 1,000.)				
July	936	935	936	925
August	986	954	970	952
September	1,112	1,140	1,126	1,121
October	1,105	1,167	1,136	1,151
November	1,161	1,181	1,171	1,175
December	1,201	1,211	1,206	1,202
January	1,215	1,232	1,224	1,242
February	1,233	1,263	1,248	1,246
March	1,275	1,298	1,287	1,280
April	1,291	1,297	1,294	1,292
May	1,293	1,264	1,278	1,294
June	1,287	1,285	1,286	1,259

**MONTHLY EXPORT PRICE INDEX (CHANGING
WEIGHTS): AUSTRALIA—continued.**

Month.	Index-numbers Based on Quantities of 1939-40.	Index-numbers Based on Quantities of 1938-39.	Final Index-numbers (on "Ideal" Formula).	Index-numbers Based on Standard "Multipliers" (First Series).
(ii) PERIODS OF THE TRADE YEAR ENDING IN MONTH STATED.				
<i>(Base: Prices in corresponding period of previous year = 1,000.)</i>				
July	936	935	936	925
August	958	944	951	938
September	1,009	1,015	1,012	997
October	1,037	1,064	1,051	1,035
November	1,074	1,097	1,085	1,062
December	1,101	1,121	1,111	1,085
January	1,121	1,135	1,128	1,107
February	1,137	1,152	1,145	1,124
March	1,152	1,168	1,160	1,140
April	1,165	1,178	1,172	1,155
May	1,177	1,185	1,181	1,167
June	1,185	1,191	1,188	1,174

Monthly export price index-numbers are now issued currently in regular press notices.

§ 13. External Trade of Australia and other Countries.

1. **Essentials of Comparisons.**—Direct comparisons of the external trade of any two countries are 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 the one may be declared by merchants, whereas in the other 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 arise 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 trade.

2. **"Special Trade" of Various Countries.**—Special trade may be defined according to the interpretation of the British Board of Trade, as (a) imports entered for consumption in the country (as distinguished from imports for transshipment or re-export), and (b) exports of domestic products.

In the following table the figures relate as nearly as possible to imports entered 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 figures relating to foreign countries have been extracted from the *Statistical Year Book of the League of Nations*.

**IMPORTS FOR HOME CONSUMPTION, AND EXPORTS OF DOMESTIC PRODUCTS
(MERCHANDISE ONLY): VARIOUS COUNTRIES, 1939.**

Country.	Trade.			Trade per Inhabitant.		
	Imports.	Exports.	Total.	Imports.	Exports.	Total.
	£1,000,000 Stg.	£1,000,000 Stg.	£1,000,000 Stg.	£ s. d. Stg.	£ s. d. Stg.	£ s. d. Stg.
Australia (a) ..	115.7	118.8	234.5	16 10 8	16 19 6	33 10 2
United Kingdom	885.5	439.5	1,325.0	18 12 1	9 4 8	27 16 9
Canada ..	165.2	203.5	368.7	14 13 8	18 1 7	32 15 3
India ..	124.0	145.1	269.1	0 6 9	0 7 11	0 14 8
New Zealand ..	39.5	44.8	84.3	25 13 2	29 2 3	54 15 5
Union of South Africa ..	90.4	33.9	124.3	8 18 0	3 6 8	12 4 8
Argentine Re- public ..	93.7	110.0	203.7	7 4 7	8 9 8	16 14 3
Belgium ..	135.4	150.1	285.5	16 2 11	17 18 0	34 0 8
China ..	36.0	27.7	63.7	0 1 7	0 1 3	0 2 10
Manchuria ..	100.7	38.1	138.8	2 14 6	1 0 7	3 15 1
Denmark ..	87.1	78.7	165.8	22 19 4	20 15 2	43 14 6
France ..	195.2	143.0	338.2	4 13 0	3 8 2	8 1 2
Germany ..	287.4	298.2	585.6	3 12 7	3 15 4	7 7 11
Italy ..	73.0	71.5	144.5	1 13 7	1 12 11	3 6 6
Japan ..	173.9	213.4	387.3	2 7 10	2 18 8	5 6 6
Netherlands ..	182.0	115.9	297.9	20 17 1	13 5 9	34 2 10
Netherlands East Indies ..	57.0	93.0	150.0	0 16 8	1 7 2	2 3 10
Norway ..	68.1	40.4	108.5	23 6 2	13 16 8	37 2 10
Poland ..	29.6	30.4	60.0	0 16 10	0 17 4	1 14 2
Sweden ..	134.4	101.5	235.9	21 6 0	16 1 7	37 7 7
Switzerland ..	93.6	64.8	158.4	22 4 9	15 4 0	37 8 9
U.S.A. ..	465.5	639.2	1,104.7	3 11 5	4 18 1	8 9 6
U.S.S.R. (Russia)	56.9	53.3	110.2	0 6 8	0 6 3	0 12 11

(a) Year ended 30th June, 1940.

**§ 14. Trade of the United Kingdom with Australia compared with that
of Competing Countries.**

Proportion of Trade from United Kingdom and Competing Countries.—The failure of the United Kingdom to maintain the position formerly held in the import trade of Australia has been a matter of more than ordinary interest for some years. 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. The imports to Australia include many commodities, such as tea, rice, raw coffee, unmanufactured tobacco, petroleum products, copra, timber, etc., which the United Kingdom could not supply. These items, in addition to others not available from that country, have, therefore, been omitted from the computation hereunder.

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. These countries have been selected as the principal competitors with the United Kingdom for the trade of Australia under the specified headings. Totals for the five years 1913 and 1935-36 to 1938-39 are shown in the table hereunder.

Particulars for the year 1939-40 are not available for publication.

AUSTRALIAN IMPORTS OF PRODUCTS OF VARIOUS COUNTRIES.

British Currency Values.

Nature of Imports.	Year.	United Kingdom.	France.	Germany.	Japan.	U.S.A.	All Countries.
		£Stg.	£Stg.	£Stg.	£Stg.	£Stg.	£Stg.
Foodstuffs of animal origin	1913 ..	301,025	3,093	12,071	6,988	289,229	947,697
	1935-36	247,197	1,269	..	64,668	17,212	1,412,896
	1936-37	281,017	1,208	1,148	61,703	250,934	1,509,813
	1937-38	286,568	1,151	1,771	218,674	251,297	1,565,765
	1938-39	300,283	993	548	175,629	269,761	1,599,827
Spirituos and alcoholic liquors	1913 ..	1,227,561	343,394	143,426	1,689	2,805	1,947,248
	1935-36	602,639	49,706	2,098	..	1,670	696,103
	1936-37	537,672	53,024	2,268	82	286	633,133
	1937-38	625,655	52,800	3,436	82	917	727,220
	1938-39	613,874	58,642	4,320	157	1,180	719,967
Apparel, textiles, and manufactured fibres	1913 ..	12,254,561	961,025	1,712,395	475,973	623,547	19,935,750
	1935-36	9,476,808	258,601	489,051	3,223,969	508,503	17,292,354
	1936-37	11,074,231	249,517	523,529	2,358,656	119,571	18,059,604
	1937-38	12,288,251	336,375	607,471	3,204,718	187,856	21,016,945
	1938-39	10,933,422	411,056	503,713	2,545,081	281,766	17,756,098
Metals, metal manufactures, and machinery	1913 ..	13,905,483	217,148	2,380,152	7,657	3,817,705	21,670,212
	1935-36	13,550,189	30,267	1,043,439	286,280	6,848,650	25,206,625
	1936-37	16,142,408	42,731	1,345,057	248,435	6,061,105	27,277,664
	1937-38	21,174,615	63,465	1,636,328	187,350	9,360,634	37,280,008
	1938-39	18,246,658	53,404	1,449,405	167,570	6,886,329	31,274,421
Paper and stationery	1913 ..	1,789,377	21,930	266,483	19,656	403,679	3,134,750
	1935-36	3,052,273	52,786	205,138	78,785	292,268	5,295,820
	1936-37	3,042,380	57,158	234,769	82,581	318,546	5,933,131
	1937-38	3,367,801	51,847	262,435	142,464	390,223	6,609,609
	1938-39	2,945,640	51,572	316,741	88,448	372,572	6,185,576
Jewellery, time-pieces, and fancy goods	1913 ..	521,290	88,070	263,688	19,307	138,217	1,442,292
	1935-36	232,717	19,545	127,992	195,592	71,017	1,194,566
	1936-37	243,601	26,891	153,485	197,094	82,846	1,256,235
	1937-38	275,796	29,130	178,755	208,609	132,078	1,581,555
	1938-39	275,301	31,330	172,867	175,305	121,981	1,431,605
Earthenware, cements, glass, etc.	1913 ..	650,138	49,245	453,188	21,493	62,887	1,565,727
	1935-36	879,191	8,115	170,663	27,804	127,791	1,990,283
	1936-37	980,126	13,862	167,352	18,558	79,753	1,774,183
	1937-38	998,637	11,101	200,822	228,858	71,928	2,047,362
	1938-39	946,220	16,980	204,527	182,983	89,857	1,861,974
Drugs, chemicals, and fertilizers	1913 ..	1,020,647	245,426	304,179	139,178	210,758	2,721,902
	1935-36	1,902,253	215,782	552,333	175,803	622,350	4,370,127
	1936-37	1,880,665	208,572	400,370	130,362	567,083	4,515,146
	1937-38	2,056,472	203,987	498,487	136,677	786,052	5,304,092
	1938-39	2,288,387	196,220	476,737	47,651	1,003,679	5,598,553
Rubber and leather and manufactures thereof, and substitutes therefor	1913 ..	485,216	68,686	347,045	688	433,837	1,717,935
	1935-36	218,850	5,924	78,082	40,250	98,325	1,185,812
	1936-37	241,252	5,700	35,109	42,193	83,039	1,831,914
	1937-38	253,378	4,674	29,398	50,168	121,323	1,915,442
	1938-39	247,671	4,979	47,374	38,215	114,235	1,689,598
Total, above-mentioned Imports	1913 ..	32,155,498	1,989,217	5,882,627	683,629	5,982,659	55,082,613
	1935-36	30,162,108	611,995	2,422,228	4,293,151	8,558,718	58,344,586
	1936-37	34,473,452	657,163	2,953,387	3,305,064	7,504,163	62,790,923
	1937-38	41,327,173	754,530	3,418,903	4,377,597	11,302,308	78,047,898
	1938-39	35,897,456	825,176	3,176,232	3,421,039	9,141,360	68,117,619
Total Imports (less bullion and specie)	1913 ..	40,948,803	2,222,631	7,029,325	950,302	10,907,512	78,196,109
	1935-36	33,835,898	700,108	2,963,049	4,960,571	13,001,326	83,518,869
	1936-37	38,559,366	868,910	3,596,584	4,004,475	12,059,149	90,501,880
	1937-38	46,226,172	964,554	4,170,624	5,319,086	17,758,684	111,733,254
	1938-39	40,419,283	1,028,133	4,131,212	4,093,191	14,647,305	99,313,150

Stated as percentages the figures in the preceding table are shown below.

Particulars for the year 1939-40 are not available for publication.

AUSTRALIAN IMPORTS OF PRODUCTS OF VARIOUS COUNTRIES : PERCENTAGES.

Nature of Imports.	Year.	United Kingdom.	France.	Germany.	Japan.	U.S.A.	All Countries.
		%	%	%	%	%	%
Foodstuffs of animal origin	1913 ..	31.77	0.33	1.27	0.74	30.52	100
	1935-36	17.50	0.09	0.00	4.58	15.30	100
	1936-37	18.61	0.08	0.08	4.05	16.62	100
	1937-38	18.30	0.07	0.11	13.97	16.05	100
	1938-39	18.77	0.06	0.03	10.98	16.86	100
Spirituous and alcoholic liquors	1913 ..	63.04	17.64	7.37	0.09	0.14	100
	1935-36	86.57	7.14	0.30	0.00	0.44	100
	1936-37	84.92	8.37	0.36	0.01	0.05	100
	1937-38	86.03	7.26	0.47	0.00	0.13	100
	1938-39	85.26	8.15	0.60	0.02	0.16	100
Apparel, textiles, and manufactured fibres	1913 ..	61.48	4.82	8.59	2.39	3.13	100
	1935-36	54.80	1.50	2.83	18.64	1.62	100
	1936-37	61.32	1.37	2.89	13.06	0.66	100
	1937-38	58.47	1.60	2.89	15.25	0.89	100
	1938-39	56.51	2.32	2.84	14.33	1.59	100
Metals, metal manufactures, and machinery	1913 ..	64.17	1.00	10.98	0.04	17.62	100
	1935-36	53.76	0.12	4.14	1.14	27.17	100
	1936-37	59.17	0.16	4.93	0.91	22.22	100
	1937-38	56.80	0.17	4.39	0.50	25.11	100
	1938-39	52.51	0.15	4.17	0.48	19.82	100
Paper and stationery	1913 ..	57.41	0.70	8.50	0.34	12.88	100
	1935-36	57.64	1.00	3.93	1.49	5.52	100
	1936-37	51.27	0.96	3.95	1.39	5.36	100
	1937-38	50.95	0.78	3.97	2.16	5.00	100
	1938-39	47.62	0.83	5.12	1.43	6.02	100
Jewellery, time-pieces, and fancy goods	1913 ..	36.14	6.11	18.28	1.34	9.58	100
	1935-36	10.48	1.64	10.71	16.37	5.95	100
	1936-37	19.39	2.14	12.21	15.76	6.67	100
	1937-38	17.44	1.84	11.30	13.19	8.35	100
	1938-39	19.23	2.19	12.07	12.25	8.52	100
Earthenware, cements, glass, etc.	1913 ..	41.52	2.57	28.94	1.37	4.02	100
	1935-36	52.01	0.48	10.01	13.48	7.56	100
	1936-37	52.42	0.78	9.43	10.34	4.49	100
	1937-38	48.78	0.54	9.81	11.18	3.51	100
	1938-39	50.82	0.91	10.98	9.83	4.83	100
Drugs, chemicals, and fertilizers	1913 ..	37.49	9.02	11.18	5.11	7.74	100
	1935-36	43.53	4.94	8.06	4.02	14.24	100
	1936-37	41.64	4.61	10.85	2.88	12.55	100
	1937-38	38.77	3.85	9.40	2.58	14.82	100
	1938-39	40.87	3.50	8.52	0.85	17.93	100
Rubber and leather and manufactures thereof, and substitutes therefor	1913 ..	28.26	4.00	20.21	0.04	25.27	100
	1935-36	18.46	0.50	2.37	3.39	8.29	100
	1936-37	13.16	0.28	1.93	2.30	4.53	100
	1937-38	13.23	0.24	1.53	2.62	6.33	100
	1938-39	14.66	0.29	2.80	2.26	6.76	100
Total, above-mentioned articles	1913 ..	58.38	3.61	10.68	1.24	10.86	100
	1935-36	51.70	1.10	4.15	7.36	14.67	100
	1936-37	54.74	1.04	4.70	5.26	12.04	100
	1937-38	52.95	0.97	4.38	5.61	11.48	100
	1938-39	52.70	1.21	4.66	5.02	13.42	100
Total imports (less bullion and specie)	1913 ..	52.37	2.84	8.99	1.22	13.95	100
	1935-36	40.51	0.95	3.55	5.95	16.64	100
	1936-37	42.56	0.95	3.97	4.42	14.30	100
	1937-38	41.37	0.86	3.73	4.79	15.89	100
	1938-39	40.70	1.04	4.16	4.12	14.75	100

The total value of the commodities included in the competitive classes increased from £55,082,613 during 1913 to £122,631,560 during 1926-27, but declined during the economic depression to £29,576,008 in 1931-32. Subsequently the total value rose to £78,047,898 in 1937-38 only to fall away again in 1938-39 to £68,117,619. The principal classes of competitive imports are (a) metals, metal manufactures and machinery (value £31,274,421 in 1938-39) and (b) apparel, textiles and manufactured fibres (value

£17,756,098 in 1938-39). The value of goods included in these two groups represented 72 per cent. of the total value of competitive commodities during 1938-39.

In 1938-39 the United Kingdom supplied 52.70 per cent. of the total value of competitive goods. In 1913 the corresponding figure was 58.38 per cent. and in 1937-38 52.95 per cent. In four of the nine competitive groups of imports, the proportion supplied by the United Kingdom declined during 1938-39 as compared with the previous year. In the five groups—foodstuffs of animal origin; jewellery, timepieces and fancy goods; earthenware, cements, glass, etc.; drugs, chemicals and fertilizers; rubber and leather and manufactures thereof, etc.—which reported gains, the share of the total purchases supplied by the United Kingdom, was 18.77 per cent., 19.23 per cent., 50.82 per cent., 40.87 per cent., and 14.66 per cent. respectively.

The share of Japan in the competitive trade increased in proportion to other countries from 1.24 per cent. in 1913 to 8.11 per cent. in 1934-35, but declined appreciably during the next three years to 5.02 per cent. in 1938-39. The most important classes of competitive goods imported from Japan are silk piece goods, cotton and linen piece goods, yarns, crockery, fancy goods and sulphur. The total value of imports from Japan in the competitive groups during 1938-39 was £3,421,039, and of this total silk piece goods valued at £1,160,761 represented 34 per cent., and cotton and linen piece goods valued at £726,050 represented 21 per cent., or together 55 per cent. of the total competitive goods imported from Japan.

The position of the United States of America in the competitive trade improved from 10.86 per cent. in 1913 to 23.52 per cent. in 1928-29; after 1929-30 it declined progressively to 8.17 per cent. in 1932-33, but recovered somewhat in recent years and in 1938-39 represented 13.42 per cent. of the total. Of the total competitive trade from this country approximately 75 per cent. was represented by metals, metal manufactures and machinery.

The position of France declined from 3.61 per cent. in 1913 to 1.21 per cent. in 1938-39. Apparel, textiles, and drugs, chemicals and fertilizers are the most important imports from France.

The proportion of the imports supplied by Germany was 10.68 per cent. in 1913, 0.86 per cent. in 1923-24, and 4.66 per cent. in 1938-39. The principal classes of imports from Germany are manufactured metals and machinery, apparel and textiles, and drugs and chemicals.

§ 15. Oversea Trade in Calendar Years.

For the purpose of comparison with countries which record oversea trade in calendar years the following table has been compiled to show Australian imports and exports for each quarter of the calendar years 1936 to 1939:—

OVERSEA TRADE IN CALENDAR YEARS: AUSTRALIA.

Year.	Merchandise.		Bullion and Specie.		Total.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£ Stg.1,000.	£1,000.	£ Stg.1,000.	£,1000.	£ Stg.1,000.	£1,000.
QUARTER ENDED MARCH.						
1936 ..	21,456	{ (R) 38,535 (S) 30,767 }	349	{ (R) 3,010 (S) 2,407 }	21,805	{ (R) 41,545 (S) 33,174 }
1937 ..	21,520	{ (R) 43,463 (S) 34,701 }	483	{ (R) 3,483 (S) 2,787 }	22,003	{ (R) 46,946 (S) 37,488 }
1938 ..	27,919	{ (R) 36,440 (S) 29,094 }	535	{ (R) 4,177 (S) 3,340 }	28,454	{ (R) 40,617 (S) 32,434 }
1939 ..	25,097	{ (R) 30,905 (S) 24,675 }	(a)	(a)	(a)	(a)

OVERSEA TRADE IN CALENDAR YEARS: AUSTRALIA—(continued).

Year.	Merchandise.		Bullion and Specie.		Total.	
	Imports.	Exports.	Imports.	Exports.	Imports.	Exports.
	£ Stg. 1,000.	£ 1,000.	£ Stg. 1,000.	£ 1,000.	£ Stg. 1,000.	£ 1,000.
QUARTER ENDED JUNE.						
1936 ..	19,958	{ (R) 24,216 (S) 19,333 }	465	{ (R) 3,000 (S) 2,399 }	20,423	{ (R) 27,216 (S) 21,732 }
1937 ..	23,367	{ (R) 36,069 (S) 28,798 }	502	{ (R) 3,962 (S) 3,168 }	23,869	{ (R) 40,031 (S) 31,966 }
1938 ..	27,024	{ (R) 33,553 (S) 26,790 }	670	{ (R) 4,022 (S) 3,217 }	27,694	{ (R) 37,575 (S) 30,007 }
1939 ..	23,522	{ (R) 26,309 (S) 21,005 }	(a)	(a)	(a)	(a)
QUARTER ENDED SEPTEMBER.						
1936 ..	22,802	{ (R) 22,408 (S) 17,891 }	564	{ (R) 3,633 (S) 2,906 }	23,366	{ (R) 26,041 (S) 20,797 }
1937 ..	27,261	{ (R) 29,274 (S) 23,372 }	521	{ (R) 4,343 (S) 3,474 }	27,782	{ (R) 33,617 (S) 26,846 }
1938 ..	26,051	{ (R) 25,562 (S) 20,409 }	759	{ (R) 5,166 (S) 4,132 }	26,810	{ (R) 30,728 (S) 24,541 }
1939 ..	24,883	{ (R) 24,597 (S) 19,638 }	(a)	(a)	(a)	(a)
QUARTER ENDED DECEMBER.						
1936 ..	22,902	{ (R) 45,854 (S) 36,612 }	500	{ (R) 3,503 (S) 2,801 }	23,402	{ (R) 49,357 (S) 39,413 }
1937 ..	29,530	{ (R) 41,366 (S) 33,026 }	516	{ (R) 4,405 (S) 3,524 }	30,046	{ (R) 45,771 (S) 36,550 }
1938 ..	24,644	{ (R) 38,758 (S) 30,944 }	657	{ (R) 4,638 (S) 3,710 }	25,301	{ (R) 43,396 (S) 34,654 }
1939 ..	22,404	{ (R) 41,918 (S) 33,467 }	(a)	(a)	(a)	(a)
TOTAL FOR YEAR.						
1936 ..	87,118	{ (R) 131,013 (S) 104,603 }	1,878	{ (R) 13,146 (S) 10,513 }	88,996	{ (R) 144,159 (S) 115,116 }
1937 ..	101,678	{ (R) 150,172 (S) 119,897 }	2,022	{ (R) 16,193 (S) 12,953 }	103,700	{ (R) 166,365 (S) 132,850 }
1938 ..	105,638	{ (R) 134,313 (S) 107,237 }	2,621	{ (R) 18,003 (S) 14,399 }	108,259	{ (R) 152,316 (S) 121,636 }
1939 ..	95,906	{ (R) 123,729 (S) 98,785 }	(a)	(a)	(a)	(a)

(R) Recorded values, Australian currency. (S) Estimated British currency values.

(a) Not available for publication.

§ 16. Excise.

Although excise goods have no immediate bearing on oversea trade the rates of excise duty are in some cases related to the import duty on similar goods. Moreover as the Excise Acts are administered by the Department of Trade and Customs 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 XXVI. "Public Finance."

QUANTITIES OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY WAS PAID : AUSTRALIA.

Article.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	Proof gal.	Proof gal.	Proof gal.	Proof gal.	Proof gal.
Spirits—					
Brandy	181,428	186,603	193,923	198,582	226,990
Gin (Distilled from Barley, Malt, Grain, or Grape Wine, etc.)	221,370	229,870	282,349	269,118	297,409
Whisky	157,359	150,388	158,515	157,705	199,157
Rum	337,562	371,844	326,249	347,648	418,073
Liqueurs	3,661	758	5,591	5,705	8,046
Spirits, n.e.i.	28	195	415	170	481
Spirits for Industrial or Scientific Purposes	114,622	117,498	112,594	114,129	124,707
Spirits for Fortifying Wine	759,257	804,760	786,836	770,997	867,308
Spirits for making Vinegar	19,138	18,464	15,496	17,965	18,640
Amylic Alcohol and Fusel Oil	27	39	27	23	28
Concentrated Grape Must	36,448	(a)	(a)	(a)	(a)
Total, Spirits	1,830,900	1,844,909	1,881,995	1,882,043	2,160,839
Spirits for the manufacture of Scents, etc.(b)	liq. gal. 55,093	liq. gal. 58,864	liq. gal. 45,541	liq. gal. ..	liq. gal. ..
Spirits for the manufacture of Essences(c)	proof gal. ..	proof gal. ..	proof gal. 17,328	proof gal. 57,376	proof gal. 71,674
Spirits for the Manufacture of Scents, etc.(c) .. .. .	.. ..	.. ..	13,452	47,778	55,984
Beer	gal. 64,690,532	gal. 70,260,813	gal. 79,246,025	gal. 83,904,645	gal. 89,973,476
Tobacco — Manufactured, n.e.i.	lb. 14,556,348	lb. 14,948,726	lb. 15,462,073	lb. 15,734,675	lb. 15,998,628
Tobacco—Hand-made	41,903	40,019	47,418	41,774	21,206
Tobacco—Unmanufactured, etc. .. .. .	.. ..	.. ..	887,264	5,604,256	4,226,656
Total, Tobacco	14,598,251	14,988,745	16,396,755	21,380,705	20,246,490

(a) Not available.

(b) To 31st December, 1937.

(c) From 1st January, 1938.

QUANTITIES OF SPIRITS, BEER, TOBACCO, ETC., ON WHICH EXCISE DUTY
WAS PAID: AUSTRALIA—*continued.*

Article.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	lb.	lb.	lb.	lb.	lb.
Cigars—Machine-made ..	53,770	61,088	63,613	71,051	57,368
Cigars—Hand-made ..	168,036	195,553	204,475	187,450	167,362
Total, Cigars ..	221,806	256,641	268,088	258,501	224,730
Cigarettes—Machine-made ..	5,189,509	5,651,755	6,203,852	6,891,144	7,148,051
Cigarettes—Hand-made ..	556	169	272	114	2
Total, Cigarettes ..	5,190,065	5,651,924	6,204,124	6,891,258	7,148,053
	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.	60 papers or tubes.
Cigarette Tubes and Papers	81,590,257	86,588,851	90,046,428	101,977,824	104,986,390
	gross of boxes.	gross of boxes.	gross of boxes.	gross of boxes.	gross of boxes.
Matches	2,994,258	3,095,260	3,260,806	3,278,759	3,678,885
	gal.	gal.	gal.	gal.	gal.
Petrol	28,831,464	33,059,655	31,978,588	27,878,912	36,556,755
	doz. packs.	doz. packs.	doz. packs.	doz. packs.	doz. packs.
Playing Cards	107,127	122,639	109,907	117,412	142,776

§ 17. 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 Act (Section 93). On the expiry of the "book-keeping" period, these records were discontinued as from 13th September, 1910, and the latest published statements were for the year 1909. Later the Governments of Western Australia and Tasmania revived the records, and statistics of the subject are available again for those States.

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.

The Government Statist for South Australia publishes some figures for that State made up from the records of Western Australia and Tasmania, and from various other sources. Since February, 1940, statistics in some detail have been collected by the Government Statistician of Queensland. The statistics of interstate trade for New South Wales and Victoria are very meagre. The Melbourne Harbour 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.

CHAPTER XXV. PRIVATE FINANCE.

A. GENERAL.

In issues of the Official Year Book prior to No. 25 information relating to Private Finance was included in the Chapter dealing with Finance generally, but commencing with that issue a separate Chapter has been devoted thereto. The Chapter is subdivided into the following sections:—

Banking, including Savings Banks;
Companies;
Insurance;
Friendly Societies; and
Probates.

B. BANKING.

§ 1. Cheque-Paying Banks.

1. **Banking Legislation.**—(i) *Commonwealth Legislation.* Under Section 51 of the Commonwealth Constitution Act, 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.” Similar powers regarding bills of exchange and promissory notes are also granted under this section. The principal legislation enacted comprises the following: The Commonwealth Bank Act 1911–1932 constituting the Commonwealth Bank and providing for its management and that of the note issue; the Bank Notes Tax Act 1910 designed to force private notes out of circulation; and the Bills of Exchange and Promissory Notes Act 1909–1936 regulating the issue of bills of exchange, cheques and promissory notes.

(ii) *State Legislation.* The Acts under which the various banks are incorporated differ somewhat. While most 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 Australasia, by Royal Charter; 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, the newer banks are generally registered under a “Companies Act,” or some equivalent Act. This is also the case with those banks which, after the crisis of 1893, were reconstructed. Banks transacting business in any State are obliged, under the existing State laws, to furnish a quarterly statement of their assets and liabilities, and they have since the year 1908 furnished to the Commonwealth Statistician, under the Census and Statistics Act 1905–1938, quarterly statements which contain the average of the thirteen weekly statements prepared by each bank. These returns form the basis on which the statistics included herein have been compiled.

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 interests 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, p. 1010.

3. **Presentation of Banking Statistics.**—In presenting statistical tabulations relating to average liabilities and assets, it is considered desirable to show the figures for the Commonwealth Bank separately from those of other Cheque-paying Banks. The aggregate business of all trading banks is, however, given in additional paragraphs. The figures quoted in all cases refer to the average liabilities and assets within the Commonwealth of Australia.

4. **Banks in Operation, Capital Resources, etc.**—(i) *Year 1939–40.* The paid-up capital of Cheque-paying Banks, together with their reserve funds, the dividend rate per cent., and the amount of their last dividends are shown in the following table. The

information relates to the balance-sheet last preceding 30th September, 1940. It must be noted that in the case of some of the banks the reserve funds are invested in Government securities, while in other cases they are used in the ordinary business of the banks, and in a few instances they are partly invested and partly used in business:—

CHEQUE-PAYING BANKS: CAPITAL RESOURCES, 1939-40.

Bank.	Paid-up Capital.	Reserves.	Balance on Profit and Loss Account. (a)	Total Shareholders' Funds.	Reserve Liability of Shareholders.	Dividends. (b)	
						Amount for year.	Average Rate per cent.
Australian Joint-Stock Banks—	£	£	£	£	£	£	%
Bank of New South Wales ..	8,780,000	6,150,000	395,100	15,325,100	8,780,000	526,800	0
Commercial Banking Co. of Sydney Ltd.	4,739,012	4,300,000	305,979	9,344,991	4,739,013	355,426	7½
National Bank of Australasia Ltd. ..	5,000,000	3,300,000	312,282	8,612,282	1,800,000	300,000	6
Commercial Bank of Australia Ltd. ..	4,117,350	2,000,000	264,157	6,381,507	..	260,720	{ Ord. 6½ 7½ Pref. 4
Ballarat Banking Co. Ltd. ..	159,000	112,000	17,467	288,467	141,000	9,945	6½
Queensland National Bank Ltd. ..	1,750,000	860,000	65,838	2,675,838	..	87,500	5
Brisbane Permanent Building and Banking Co. Ltd. ..	750,000	220,000	45,064	1,015,064	..	37,500	5
Bank of Adelaide ..	1,250,000	1,000,000	67,859	2,317,859	1,250,000	68,750	5½
Bank of Australasia ..	4,500,000	4,475,000	388,981	9,363,981	4,500,000	282,797 (c)	8
Union Bank of Australia Ltd. ..	4,000,000	4,850,000	284,350	9,134,350	8,000,000	225,000 (c)	7
English, Scottish and Australian Bank Ltd.	3,200,000	3,310,000	451,804	6,761,804	2,000,000	163,625 (c)	3½
Total Australian Joint-Stock Banks	38,045,362	30,577,000	2,598,881	71,221,243	31,210,013	2,138,063	..
Other Cheque-paying Banks—							
Commonwealth Bank of Australia—							
General Bank ..	4,000,000	2,990,874	..	6,990,874	..	..	..
Rural Credits ..	2,000,000	355,810	..	2,355,810	..	..	..
Rural Bank of New South Wales (d) ..	14,128,637	11,901,346	..	16,029,983	..	..	..
State Bank of South Australia ..	(g) 2,612,800	..	..	2,012,800	..	..	..
Bank of New Zealand ..	6,328,125	3,575,000	673,169	10,576,294	..	574,210	(h)
Comptoir National d'Es-compte de Paris (i) ..	2,857,143	3,214,832	153,249	6,225,224	..	(j)	(j)
Yokohama Specie Bank Ltd. (k) ..	10,000,000	14,298,158	1,757,600	26,056,058	..	1,000,000	10

(a) Includes dividends declared but not paid at date of balance-sheet. (b) Dividends paid and payable out of profits earned during 1939-40. (c) Less British Income Tax. (d) See sub-par. (ii) below. (e) Total stocks and debentures issued, including liability in respect of deposits taken over by the Commonwealth Bank, December, 1931. (f) Includes £1,103,884 Special Reserve Account established under Section 12 (2) of Rural Bank of New South Wales Act 1932. (g) Capital advanced by Government of South Australia and Sale of Bonds. (h) Preference "A," 10 per cent.; Preference "B," 7 3/11 per cent.; "C," Long Term Mortgage, 6 per cent.; "D," Long Term Mortgage 7½ per cent.; Ordinary, 10 per cent. (i) Approximate. Figures converted at rate of 140 Francs to £. (j) Not available. (k) Approximate. Figures converted at rate of 10 Yen to £.

(ii) *Suspension of Payments, etc.*—Particulars of the suspension of payments by the Rural Bank Department of the Government Savings Bank of New South Wales, the amalgamation of this bank with the Commonwealth Savings Bank, the creation of the Rural Bank, and the amalgamations and absorptions of various other banks during the years 1931 to 1933 are given in previous issues of the Official Year Book.

5. **Commonwealth Bank.**—(i) *General.* A brief account of the foundation of the Commonwealth Bank is given in Nos. 6 to 10 of the Official Year Book. The Bank

began operations in the Savings Bank Department in July, 1912, and general banking was commenced in January, 1913. In 1920 the note issue passed to the control of the Bank.

The scope of the Bank was considerably broadened in 1924 when the control was entrusted to a Board of Directors consisting of a Governor, the Secretary to the Treasury and six others "who are or have been actively engaged in agriculture, commerce, finance or industry." Commencing without any capital the Bank had accumulated profits amounting to about £4,500,000 in 1924. Of this sum £4,000,000 was transferred to the capital fund of the Bank, and authority was given to increase the capital to £20,000,000. When it was in a position to do so the Board was to fix and publish the rates at which it would discount and rediscount bills of exchange. The trading banks were required to settle their balances by cheques drawn on the Commonwealth Bank, but there was to be no compulsion regarding the amount to be kept; subsequently the banks voluntarily opened accounts with the Commonwealth Bank. All banks were required to furnish to the Treasurer quarterly statements of their average weekly liabilities and assets on a basis similar to that used previously in furnishing statistics to State authorities. No alteration was made regarding the distribution of the profits of the Bank. Apart from the net earnings of the note issue which are payable to the revenue of the Commonwealth, one-half of the profits are allocated to the Bank Reserve Fund and the other half to the National Debt Sinking Fund on Commonwealth account. Action has not yet been taken to increase the capital of the Bank nor has a discount rate been published.

A Rural Credits Department of the Bank was created by amending legislation in 1925 for the purpose of making short-term credit available for the orderly marketing of primary produce. Portion of the capital for the new department to the extent of £2,000,000 was provided by an annual appropriation of 25 per cent. of the net profits of the note issue.

The Commonwealth Bank Act 1927 provided for the separation of the Savings Bank Department from the General Bank and its establishment as a separate institution, and the transfer to the "Commonwealth Savings Bank of Australia" of all assets and liabilities of the Savings Bank Department. The date on which this amending Act became operative was fixed by proclamation as 9th June, 1928. The new institution was to be managed by a Commission consisting of three Commissioners, one of whom was to be a member of the Bank Board, but, as appointments to the Commission have not yet been made, the Bank Board is still controlling the Savings Bank.

The operations of the Bank, which holds in addition to the Commonwealth Government's accounts, those of the States of Victoria (portion only), Queensland, South Australia, Western Australia and Tasmania, and many local governing bodies, have developed towards those of a Central Bank. Unlike ordinary commercial banks, it does not offer special inducements to attract private accounts. The Bank played a most important part in the financing of Government deficits during the depression years. Since 1st July, 1927, the Bank has published a weekly statement of the accounts of the note issue and general banking departments of the Bank.

(ii) *Aggregate Profits.* Particulars of the aggregate net profits from the initiation of the Bank to the end of each of the last five financial years are as follows:—

COMMONWEALTH BANK : AGGREGATE PROFITS.

Date.	Aggregate Net Profit to Date.			
	General Bank.	Savings Bank.	Rural Credits Department.	Total.
	£	£	£	£
30th June, 1936 ..	8,611,922	3,978,570	524,746	13,115,238
" 1937 ..	8,967,854	4,284,344	574,264	13,826,462
" 1938 ..	9,299,154	4,575,896	607,153	14,482,203
" 1939 ..	9,655,733	4,892,178	638,733	15,186,644
" 1940 ..	10,112,526	5,265,119	676,464	16,054,109

In accordance with the provisions of Section 30 of the Bank Act and Section 9 (2) of the National Debt Sinking Fund Act, half of the net profits of the Bank have been placed to the credit of the Bank's Reserve Fund and half to the credit of the National Debt Sinking Fund. Up to 30th June, 1940, the latter fund had benefited to the extent of £5,262,396.

(iii) *Liabilities in Australia.*—(a) Year 1939–40. The following table gives particulars of the average liabilities in Australia for each quarter of the year 1939–40 :—

**COMMONWEALTH BANK OF AUSTRALIA : LIABILITIES,
QUARTERLY AVERAGES.(a)**

Quarter Ended—	Bills in Circula- tion.	Balances Due to Other Banks. (b)	Deposits.			Total Liabilities.
			Not Bearing Interest.(c)	Bearing Interest.	Total Deposits.	
	£	£	£	£	£	£
September, 1939	419,841	19,801,074	17,716,853	42,673,039	60,389,892	80,610,807
December, 1939..	535,009	25,577,106	20,308,494	41,430,931	61,739,425	87,851,540
March, 1940 ..	675,665	33,478,243	23,495,805	45,594,374	69,090,179	103,244,087
June, 1940 ..	596,807	28,968,233	30,053,407	50,169,377	80,222,784	109,787,824

(a) Excludes Commonwealth Savings Bank. (b) Includes deposits of "Other Cheque-paying Banks". (c) Government "Set-off" Accounts (Interstate) deducted.

(b) *Quarters ended June, 1936 to 1940.* The average liabilities in Australia for the quarter ended June in each of the years 1936 to 1940 are given in the table below :—

**COMMONWEALTH BANK OF AUSTRALIA : AVERAGE LIABILITIES,
QUARTERS ENDED JUNE.(a)**

Quarter Ended June—	Bills in Circula- tion.	Balances Due to Other Banks. (b)	Deposits.			Total Liabilities.
			Not Bearing Interest.(c)	Bearing Interest.	Total Deposits.	
	£	£	£	£	£	£
1936.. ..	240,081	16,938,233	11,992,847	33,683,557	45,676,404	62,854,718
1937.. ..	274,326	24,459,313	16,534,597	37,635,236	54,169,833	78,903,472
1938.. ..	314,840	19,404,009	18,505,546	45,256,710	63,762,256	83,481,105
1939.. ..	350,474	18,745,765	18,127,674	43,274,759	61,402,433	80,498,672
1940.. ..	596,807	28,968,233	30,053,407	50,169,377	80,222,784	109,787,824

(a) Excludes Commonwealth Savings Bank. (b) Includes deposits of "Other Cheque-paying Banks". (c) Government "Set-off" Accounts (Interstate) deducted.

(iv) *Assets in Australia.* (a) Year 1939–40. The average assets in Australia for each quarter of the year 1939–40 were as follows :—

COMMONWEALTH BANK OF AUSTRALIA : ASSETS, QUARTERLY AVERAGES.(a)

Quarter Ended—	Coin.	Bullion.	Austra- lian Notes.	Govern- ment and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets).c d	Total Assets.
September, 1939	1,058,096	380,809	3,015,226	52,891,394	670,626	161,928	31,259	19,696,960	77,915,298
December, 1939	796,712	801,699	2,671,741	54,208,957	670,045	175,229	116,498	21,792,163	81,233,644
March, 1940 ..	874,461	712,269	3,182,448	41,661,104	661,241	621,082	104,589	32,506,993	86,324,187
June, 1940 ..	874,600	824,582	2,569,450	33,086,001	624,427	1,273,658	159,620	37,411,771	76,824,109

(a) Excludes Commonwealth Savings Bank. (b) Includes Treasury Bills. (c) Includes short-term loans in Australia other than Treasury Bills. (d) Government "Set-off" Accounts (Interstate) deducted.

(b) *Quarters ended June, 1936 to 1940.* Particulars of the average assets in Australia for the quarter ended June in each of the last five years are given in the following table :—

**COMMONWEALTH BANK OF AUSTRALIA : AVERAGE ASSETS,
QUARTERS ENDED JUNE.(a)**

Quarter Ended June—	Coin.	Bullion	Australian Notes.	Government and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets). (c)	Total Assets.
	£	£	£	£	£	£	£	£	£
1936 ..	718,802	384,112	5,184,487	440,068,305	818,301	122,616	14,146	9,398,104	56,708,873
1937 ..	740,085	330,535	4,172,308	443,626,856	762,422	91,318	29,834	11,311,802	61,065,160
1938 ..	864,415	353,039	4,020,697	41,952,657	719,234	108,051	28,288	15,159,773	63,206,154
1939 ..	1,056,811	339,725	3,936,325	44,934,725	694,372	121,758	43,070	18,947,594	70,074,320
1940 ..	874,600	824,582	2,569,450	33,086,001	624,427	1,273,658	159,620	13,411,771	76,824,109

(a) Excludes Commonwealth Savings Bank. (b) Includes Treasury Bills. (c) Includes short-term loans in Australia other than Treasury Bills. (d) Government "Set-off" Accounts (Interstate) deducted.

6. **Other Cheque-paying Banks.**—(i) *Liabilities in Australia.* (a) *Year 1939-40.* Particulars of the average liabilities in Australia of "Other Cheque-paying Banks" for each quarter from September, 1939, to June, 1940, are given in the table following :—

OTHER CHEQUE-PAYING BANKS : LIABILITIES, QUARTERLY AVERAGES.

Quarter Ended—	Notes in Circulation not Bearing Interest.	Bills in Circulation not Bearing Interest.	Balances Due to Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.	Bearing Interest. (a)	Total.	
	£	£	£	£	£	£	£
September, 1939	167,025	3,023,957	1,393,924	117,985,868	205,259,246	323,245,114	327,830,020
December, 1939	166,904	3,316,350	1,045,001	129,034,370	205,858,833	334,893,203	339,421,458
March, 1940 ..	166,890	3,393,263	1,077,428	140,403,104	215,976,739	356,379,843	361,017,424
June, 1940 ..	166,877	3,679,950	1,170,227	140,725,097	218,026,271	358,751,368	363,768,422

(a) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(b) *Quarters ended June, 1936 to 1940.* The next table shows the average liabilities in Australia of "Other Cheque-paying Banks" for the quarters ended June from 1936 to 1940.

**OTHER CHEQUE-PAYING BANKS : AVERAGE LIABILITIES,
QUARTERS ENDED JUNE.**

Quarter Ended June—	Notes in Circulation not Bearing Interest.	Bills in Circulation not Bearing Interest.	Balances Due to Other Banks.	Deposits.			Total Liabilities.
				Not Bearing Interest.	Bearing Interest. (a)	Total.	
	£	£	£	£	£	£	£
1936 ..	167,447	2,806,899	1,386,509	110,636,515	187,491,212	298,127,727	302,488,582
1937 ..	167,360	2,850,852	1,308,872	121,764,787	199,152,389	320,917,176	325,744,260
1938 ..	167,212	2,992,693	1,608,182	122,538,540	205,212,523	327,781,072	332,549,159
1939 ..	167,097	3,098,079	1,617,564	122,097,761	207,286,459	329,384,220	334,266,960
1940 ..	166,877	3,679,950	1,170,227	140,725,097	218,026,271	358,751,368	363,768,422

(a) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(ii) *Assets in Australia.* (a) Year 1939-40. The average assets in Australia of the banks are shown in the following table:—

OTHER CHEQUE-PAYING BANKS : ASSETS, QUARTERLY AVERAGES.

Quarter Ended—	Coin.	Bullion.	Australian Notes. (a)	Government and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all Other Assets. (c)	Total Assets.
	£	£	£	£	£	£	£	£	£
September, 1939	1,919,053	983,599	28,969,523	42,583,308	10,667,536	2,640,374	1,921,784	317,147,562	406,834,739
December, 1939	1,995,922	364,614	35,393,966	48,194,139	10,768,697	3,107,923	2,299,627	315,588,802	417,713,699
March, 1940	2,036,893	294,337	42,691,427	76,575,417	10,826,620	3,333,141	2,217,901	302,339,232	440,364,968
June, 1940	1,928,342	278,045	37,555,530	85,647,336	10,950,073	3,097,814	2,366,024	309,967,796	451,790,960

(a) Includes Cash with Commonwealth Bank.
term loans in Australia other than Treasury Bills.

(b) Includes Treasury Bills.

(c) Includes short-

(b) *Quarters ended June, 1936 to 1940.* The average assets in Australia of "Other Cheque-paying Banks" for the quarter ended June in each of the years 1936 to 1940 are given below:—

**OTHER CHEQUE-PAYING BANKS : AVERAGE ASSETS,
QUARTERS ENDED JUNE.**

Quarter Ended June—	Coin and Bullion.	Australian Notes. (a)	Government and Municipal Securities. (b)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all Other Assets. (c)	Total Assets.
	£	£	£	£	£	£	£	£
1936	2,023,765	29,473,860	45,610,796	8,979,458	2,734,715	1,900,411	282,512,858	373,235,863
1937	2,299,482	36,877,205	46,004,134	9,397,590	2,775,214	2,185,774	282,962,158	382,501,647
1938	2,505,942	31,543,420	44,887,709	10,023,145	2,805,047	1,228,940	308,041,359	402,215,562
1939	3,019,974	28,109,786	48,885,718	10,492,683	2,776,480	2,210,992	313,740,609	409,236,242
1940	2,206,387	37,555,530	85,647,336	10,950,073	3,097,814	2,366,024	309,967,796	451,790,960

(a) Includes Cash with Commonwealth Bank.
short-term loans in Australia other than Treasury Bills.

(b) Includes Treasury Bills.

(c) Includes

7. All Cheque-paying Banks.—(i) *General.* Particulars of the aggregate average liabilities and assets in Australia of all Cheque-paying Banks in the Commonwealth, including the Commonwealth Bank of Australia, are given in the subjoined paragraphs.

(ii) *Liabilities in Australia.* (a) Year 1939-40. The average liabilities in Australia of all Cheque-paying Banks for each quarter of the year 1939-40 were as follows:—

ALL CHEQUE-PAYING BANKS : LIABILITIES, QUARTERLY AVERAGES.(a)

Quarter Ended—	Notes in Circulation.	Bills in Circulation.	Balances Due to Other Banks.(b)	Deposits.			Total Liabilities.
				Not Bearing Interest.(c)	Bearing Interest.(d)	Total Deposits.	
	£	£	£	£	£	£	£
September, 1939	167,025	3,443,798	11,194,998	135,702,721	247,932,285	383,635,006	408,440,827
December, 1939	166,904	3,851,359	16,622,107	149,342,864	247,289,764	396,632,628	427,272,998
March, 1940	166,890	4,068,928	14,555,671	163,898,909	261,571,113	425,470,022	464,261,511
June, 1940	166,877	4,276,737	10,138,460	170,778,504	268,195,648	438,974,152	473,556,246

(a) Excludes Commonwealth Savings Bank.

(b) Deposits of Other Cheque-paying Banks with Commonwealth Bank are treated in returns as "Balances due to Other Banks".

(c) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted.

(d) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(b) *Quarters ended June, 1936 to 1940.* The next table shows the average liabilities in Australia for the quarters ended June from 1936 to 1940.

ALL CHEQUE-PAYING BANKS : AVERAGE LIABILITIES, QUARTERS ENDED JUNE.(a)

Quarter Ended June—	Notes in Circulation.	Bills in Circulation.	Balances due to Other Banks. (b)	Deposits.			Total Liabilities.
				Not Bearing Interest.(c)	Bearing Interest.(d)	Total.	
	£	£	£	£	£	£	£
1936 ..	167,447	3,046,980	18,324,742	122,629,362	221,174,769	343,804,131	365,343,300
1937 ..	167,360	3,125,178	26,268,185	138,299,384	236,787,225	375,087,009	404,647,732
1938 ..	107,212	3,307,533	21,012,191	111,044,095	230,490,233	391,513,328	416,030,264
1939 ..	167,097	3,448,553	20,363,329	140,225,435	250,561,218	390,786,653	414,765,632
1940 ..	166,877	4,276,757	30,138,460	170,778,504	268,195,648	438,974,152	473,556,246

(a) Excludes Commonwealth Savings Bank. (b) Deposits of Other Cheque-paying Banks with Commonwealth Bank are treated in returns as "Balances due to Other Banks." (c) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted. (d) Includes Inscribed Deposit Stock of the E. S. and A. and Queensland National Banks.

(iii) *Assets in Australia.* (a) Year 1939-40. Particulars of the average assets in Australia for each quarter of the year 1939-40, are given in the following table :—

ALL CHEQUE-PAYING BANKS : ASSETS, QUARTERLY AVERAGES.(a)

Quarter Ended—	Coin.	Bullion.	Australian Notes. (b)	Government and Municipal Securities. (c)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances, Discounts, Overdrafts, and all other Assets (not including Contingent Assets). (d) (e)	Total Assets.
	£	£	£	£	£	£	£	£	£
September, 1939	2,977,149	1,364,408	31,984,749	95,174,702	11,347,162	2,802,302	1,953,043	336,844,522	484,748,037
December, 1939 ..	2,792,634	1,166,313	38,065,573	102,403,096	11,438,742	3,283,152	2,416,125	337,380,965	498,946,734
March, 1940 ..	2,961,354	1,006,606	45,873,807	118,236,521	11,487,861	3,934,223	2,322,490	334,846,225	520,689,153
June, 1940 ..	2,802,942	1,102,627	40,124,980	118,733,337	11,574,500	4,371,472	2,525,044	347,379,567	528,615,069

(a) Excludes Commonwealth Savings Bank. (b) Includes Cash with Commonwealth Bank. (c) Includes Treasury Bills. (d) Includes short-term loans in Australia other than Treasury Bills. (e) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted.

(b) *Quarters ended June 1936 to 1940.* The average assets in Australia for the quarter ended June in each of the years 1936 to 1940 were as follows :—

ALL CHEQUE-PAYING BANKS : AVERAGE ASSETS, QUARTERS ENDED JUNE.(a)

Quarter ended June—	Coin and Bullion.	Australian Notes. (b)	Government and Municipal Securities. (c)	Landed and House Property.	Balances Due from Other Banks.	Notes and Bills of Other Banks.	Advances and all other Assets.(d)	Total Assets.
	£	£	£	£	£	£	£	£
1936..	3,126,679	34,658,347	625,679,101	9,797,750	2,857,331	1,914,557	291,910,062	429,944,736
1937..	3,370,102	41,040,603	689,637,990	10,160,012	2,866,532	2,215,668	294,273,960	443,566,807
1938..	3,813,396	35,564,117	86,840,306	10,742,379	3,003,098	2,257,228	323,201,132	465,421,716
1939..	4,416,510	32,046,111	93,820,443	11,187,055	2,898,238	2,254,002	332,688,203	479,310,562
1940..	3,905,569	40,124,980	118,733,337	11,574,500	4,371,472	2,525,644	347,379,567	528,615,069

(a) Excludes Commonwealth Savings Bank. (b) Includes Cash with Commonwealth Bank. (c) Includes Treasury Bills. (d) Short-term loans in Australia other than Treasury Bills included. (e) Government "Set-off" Accounts, Interstate (Commonwealth Bank) deducted.

(iv) *Cash Reserve Ratios.* The following table shows for the quarter ended June of each of the years 1931 to 1940 the percentages of cash on liabilities "at call" and "total liabilities" respectively for the Commonwealth Bank and the Other Cheque-paying Banks. These percentages relate throughout to business within Australia.

(a) *Commonwealth Bank.* Cash reserves comprise coin, bullion and Australian notes. "Call" liabilities comprise deposits not bearing interest and balances due to other banks. The latter item is assumed to be approximately equivalent to the cash with Commonwealth Bank of the Other Cheque-paying Banks which is included in their quarterly statements with Australian Notes.

(b) *Other Cheque-paying Banks.* Cash reserves comprise coin, bullion, Australian notes and cash with the Commonwealth Bank, while "call" liabilities include deposits not bearing interest and notes in circulation. In computing the percentages in this table particulars relating to the Rural Bank of New South Wales have been excluded.

It is not strictly correct to assume that a division of deposits with Cheque-paying Banks into those bearing interest and not bearing interest would in all cases coincide with a definite division into fixed deposits and current accounts respectively, but in the absence of the data required to permit of an accurate apportionment, such a division has been adopted for the purposes of this analysis.

CHEQUE-PAYING BANKS : CASH RESERVE RATIOS.

Quarter Ended June--	On Liabilities "At Call."		On Total Liabilities.	
	Commonwealth Bank.	Other Cheque-paying Banks. (a)	Commonwealth Bank.	Other Cheque-paying Banks. (a)
	%	%	%	%
1931	11.6	65.3	8.4	19.6
1932	18.4	56.7	10.7	17.3
1933	21.9	46.2	10.1	14.6
1934	14.2	52.5	9.1	17.4
1935	16.4	36.1	8.4	12.9
1936	21.7	28.1	10.0	10.3
1937	12.8	32.1	6.6	12.0
1938	13.8	27.7	6.3	10.2
1939	14.5	25.4	6.6	9.3
1940	7.2	28.1	3.9	10.7

(a) Rural Bank of New South Wales excluded.

(v) *Advances, and Advances and Securities. Percentage on Total Deposits.* The percentages of advances, and of advances and securities on total deposits, respectively for the Commonwealth Bank, the Other Cheque-paying Banks, and for All Cheque-paying Banks, are shown in the following table. The data on which the percentages are based relate only to business within Australia.

For the Commonwealth Bank and Other Cheque-paying Banks, "Advances" are represented by the item "Advances, discounts, overdrafts, and all other assets (not including contingent assets)," which are combined with "Government and Municipal Securities" (including short-term loans in Australia) under the heading "Advances and Securities." "Deposits" include deposits of all kinds except those of Other Cheque-paying Banks with the Commonwealth Bank, i.e., "Cash with Commonwealth Bank."

In computing the percentages in this table, particulars relating to the Rural Bank of New South Wales have been excluded.

CHEQUE-PAYING BANKS : PERCENTAGE OF ADVANCES, AND ADVANCES AND SECURITIES ON TOTAL DEPOSITS.

Quarter Ended June—	Advances on Total Deposits.			Advances and Securities on Total Deposits.		
	Commonwealth Bank.	Other Cheque-paying Banks. (a)	Total. (a)	Commonwealth Bank.	Other Cheque-paying Banks. (a)	Total. (a)
	%	%	%	%	%	%
1931	56.5	92.8	89.9	228.7	101.1	111.3
1932	33.5	82.7	77.3	137.3	98.1	102.4
1933	18.0	85.3	77.0	137.2	104.1	108.2
1934	16.9	79.9	72.4	128.2	97.2	100.9
1935	16.4	87.1	77.8	113.2	104.7	105.8
1936	20.6	90.2	80.9	108.3	105.2	105.6
1937	20.9	83.8	74.6	101.4	97.8	98.3
1938	27.1	89.4	78.8	90.0	102.8	100.7
1939	30.9	90.9	81.4	104.0	105.5	105.2
1940	46.6	82.2	75.7	87.9	105.9	102.6

(a) Rural Bank of New South Wales excluded.

(vi) *Deposits per head of Population.* Particulars of the average deposits per head of population, calculated on the mean population of the quarter, are given for the quarter ended June of each of the last five years in the following table. The figures given, which are based on the aggregate for all Cheque-paying Banks in each State, are not adjusted on account of the Government "set-off" accounts of the Commonwealth Bank.

ALL CHEQUE-PAYING BANKS : DEPOSITS(a) PER HEAD OF POPULATION.

Quarter Ended June—	N.S.W.(b)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
	£	£	£	£	£	£	£	£
1936	47.5	65.6	45.9	44.6	43.2	36.5	33.1	51.3
1937	52.5	70.7	47.9	49.1	44.8	38.1	37.1	55.5
1938	54.3	72.1	51.1	49.6	46.4	39.9	41.5	57.2
1939	54.9	70.3	49.8	49.2	43.5	42.5	40.5	56.6
1940	61.9	79.5	51.1	51.6	47.4	42.0	61.2	62.5

(a) Excludes deposits with Commonwealth Savings Bank. (b) Includes Australian Capital Territory.

It may be mentioned here that deposits of "other Cheque-paying Banks" with the Commonwealth Bank are treated in the returns as "balances due to Other Banks."

(vii) *Proportion of Non-Interest Bearing Deposits to Total Deposits.* The sub-joined table shows for each State the proportion of non-interest bearing deposits to the total deposits with all Cheque-paying Banks during the quarter ended June of each of the years 1936 to 1940. Government "set-off" accounts of the Commonwealth Bank have been deducted in arriving at the percentage for all States combined.

ALL CHEQUE-PAYING BANKS: PROPORTION OF NON-INTEREST BEARING DEPOSITS(a) TO TOTAL DEPOSITS.

Quarter ended June—	N.S.W.(b)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Nor. Terr.	Total.
	%	%	%	%	%	%	%	%
1936 ..	40.6	32.1	39.1	27.9	38.3	39.1	63.2	35.7
1937 ..	41.6	32.8	39.3	29.2	41.7	38.4	67.2	36.8
1938 ..	40.5	31.7	40.4	27.8	40.3	37.4	65.1	36.0
1939 ..	39.3	30.7	41.0	28.7	41.7	43.3	65.6	35.9
1940 ..	42.8	35.8	40.5	28.9	39.3	41.8	72.3	38.9

(a) Excludes deposits with Commonwealth Savings Bank.

(b) Includes Australian Capital Territory.

8. **Deposit Rates.**—Particulars of interest rates for deposits since 1920 are given hereunder. It should be mentioned that the rates allowed by the Commonwealth Bank have not always been the same as those given by the other trading banks.

BANK DEPOSIT RATES.

Dates from which rates operated.	Deposits for—			
	Three Months.	Six Months.	Twelve Months.	Two Years.
	Per cent. per annum.	Per cent. per annum.	Per cent. per annum.	Per cent. per annum.
24th July, 1920	3½	4	4½	5
19th August, 1927	4	4	4½	5
28th January, 1930	4½	4½	5	5½
26th June, 1931	3½	3½	4	4½
27th November, 1931	3	3½	3½	4
8th March, 1932	2½	3	3½	4
May-June, 1932 (a)	2½	3	3½	3½
1st November, 1932 (b)	2½	2½	3	3½
7th February, 1933	2	2½	2½	3
12th April, 1934	2	2½	2½	2½
9th August, 1934	1½	2½	2½	2½
11th October, 1934	1½	2	2½	2½
17th December, 1934	1	1½	2½	2½
24th March, 1936 (c)	2	2½	2½	3
24th January, 1940	1½	2½	2½	2½
28th May, 1940	1½	2	2½	2½

(a) All Banks did not take simultaneous action.

(b) Bank of New South Wales reduced the rates for 6, 12 and 24 months terms by one-quarter of 1 per cent. from 23rd August, 1932.

(c) Commonwealth Bank only. Bank of New South Wales from 2nd March and Bank of Adelaide from 3rd March.

The "Premiers' Plan" included, *inter alia*, provisions for the reduction of bank rates of interest on both deposits and advances.

9. **Clearing House Returns.**—(i) *Annual Clearings.* Particulars of the aggregate bank clearings for each capital city compiled from information supplied by the Commonwealth Bank, Sydney, are given in the following table. Since October, 1929, transactions connected with the issue and redemption of Treasury Bills have resulted in largely inflated clearings. These transactions are of an abnormal character, and for the years 1935 to 1939 are shown separately. A weekly average of bank clearings is published in the *Monthly Review of Business Statistics* and the *Quarterly Summary of Australian Statistics*.

CLEARING HOUSE RETURNS : VALUE OF BILLS, CHEQUES, ETC. 1870 TO 1939.

Year.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1870 (a) ..	..	64,532	..	..	..	..	64,532
1880 (a) ..	..	85,877	..	..	..	..	85,877
1890 ..	..	315,190	..	..	..	..	315,190
1895 ..	108,509	130,787	..	..	..	..	239,296
1900 ..	144,080	159,949	..	..	..	..	304,029
1905 ..	189,826	187,632	32,255	..	..	..	409,713
1910 ..	274,344	261,383	61,060	..	..	..	596,787
1915 ..	357,803	299,295	96,291	60,950	..	..	814,339
1920 ..	764,546	725,006	160,539	166,011	80,758	..	1,896,860
1925 ..	909,114	803,083	192,968	171,092	101,085	25,557	2,202,899
1930 (b) ..	872,390	697,641	167,999	125,684	89,034	23,092	1,975,840
1931 (b) ..	683,176	566,865	144,814	96,867	71,356	18,057	1,581,135
1932 (b) ..	588,733	592,356	141,511	106,865	75,678	19,259	1,524,402
1933 (b) ..	641,400	619,230	148,335	112,250	79,689	19,864	1,620,768
1934 (b) ..	716,084	676,407	165,555	118,656	84,628	22,463	1,783,793
1935—							
Ordinary Trans- actions ..	775,986	724,327	181,889	132,689	94,705	24,713	1,934,309
Treasury Bills Transactions	247,683	52,369	..	..	..	..	300,052
Total ..	1,023,669	776,696	181,889	132,689	94,705	24,713	2,234,361
1936—							
Ordinary Trans- actions ..	842,610	755,196	188,906	139,959	101,880	27,665	2,056,216
Treasury Bills Transactions	250,829	43,176	..	..	..	..	294,005
Total ..	1,093,439	798,372	188,906	139,959	101,880	27,665	2,350,221
1937—							
Ordinary Trans- actions ..	937,334	844,488	204,493	157,596	104,891	29,874	2,278,676
Treasury Bills Transactions	262,630	43,424	..	..	..	..	306,054
Total ..	1,199,964	887,912	204,493	157,596	104,891	29,874	2,584,730
1938—							
Ordinary Trans- actions ..	942,423	838,609	217,217	159,015	109,102	30,786	2,297,152
Treasury Bills Transactions	269,264	40,655	..	..	..	..	309,919
Total ..	1,211,687	879,264	217,217	159,015	109,102	30,786	2,607,071
1939—							
Ordinary Trans- actions ..	932,367	812,563	222,988	152,334	107,089	33,898	2,261,239
Treasury Bills Transactions	285,884	52,068	..	..	..	..	337,952
Total ..	1,218,251	864,631	222,988	152,334	107,089	33,898	2,599,191

(a) Figures now published for these years exclude payments in coin.
Bills transactions since their introduction in 1920.

(b) Excludes Treasury

(ii) *Index of Annual Clearings.* The following index of bank clearings in each capital city for the years 1930 to 1939 has been computed from the figures in the previous paragraph. The base used is the average of the years 1927 to 1929. Clearings connected with the issue and redemption of Treasury Bills have been disregarded and no adjustment has been made on account of amalgamations of banking interests.

INDEX OF BANK CLEARINGS, 1930 TO 1939.

(Base: Average of Years 1927 to 1929 = 1,000.)

Year.	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart.	Total.
1927-29 ..	1,000	1,000	1,000	1,000	1,000	1,000	1,000
1930 ..	841	872	861	743	789	841	844
1931 ..	659	708	743	572	632	657	675
1932 ..	568	740	726	632	671	701	651
1933 ..	618	774	761	663	706	723	692
1934 ..	690	845	849	701	750	818	762
1935 ..	748	905	933	784	839	900	826
1936 ..	812	944	969	827	903	1,007	878
1937 ..	904	1,055	1,049	931	929	1,088	973
1938 ..	909	1,048	1,114	940	967	1,121	981
1939 ..	899	1,015	1,143	900	949	1,234	966

10. *Rates of Exchange.*—(i) *Australia on London.* The following statement, which has been prepared from data supplied by the General Manager of the Bank of New South Wales, Sydney, gives particulars of the various rates of exchange, Australia on London, in operation since 20th April, 1927. In earlier issues particulars were given of the rates in operation since 16th October, 1913. The details given show the value in Australia of £100 in London according to the rates quoted by the Associated Banks for buying and selling £100 in London on telegraphic transfer. In December, 1931, the Commonwealth Bank Board undertook the responsibility of regulating sterling exchange and announcing rates each week.

RATES OF EXCHANGE: AUSTRALIA ON LONDON, TELEGRAPHIC TRANSFER. FROM 20th APRIL, 1927.

Date on which Rate began to Operate.	Exchange.			Commission for £100 (Sterling).
	London.	Australia (Mean of Buying and Selling Rates).		
20th April, 1927 ..	£ sterling 100	£ 100	plus 0 6 3	s. d. 3 9
27th June, 1927 0 8 9	3 9
8th July, 1927 0 11 3	3 9
19th March, 1928 0 15 0	5 0
22nd July, 1929 1 0 0	5 0
3rd September, 1929 1 5 0	5 0
10th October, 1929 1 10 0	5 0
18th December, 1929 1 17 6	5 0
28th January, 1930 2 6 3	6 3
17th February, 1930 2 16 3	6 3
10th March, 1930 3 16 3	6 3
24th March, 1930 6 6 3	3 9
9th October, 1930 8 15 0	5 0
6th January, 1931 15 6 3	3 9
13th January, 1931 18 3 9	3 9
17th January, 1931 25 5 0	5 0
29th January, 1931 30 5 0	5 0
3rd December, 1931 25 5 0	5 0

The "Commission" which represents the Banks' "turn" on each £100 sterling exchanged has been computed by taking half the difference between the buying and selling rates.

(ii) *Sterling-Dollar rates.* The average of the daily quotations of the London-New York exchange rates are given for each month from January, 1935, to December, 1940, in the subjoined table:—

STERLING-DOLLAR RATES : AVERAGE RATE FOR EACH MONTH.

Month.	1935.	1936.	1937.	1938.	1939.	1940.
	\$ to £ Stg.	$ to £ Stg.	$ to £ Stg.	$ to £ Stg.	$ to £ Stg.	$ to £ Stg.
January ..	4.895	4.960	4.908	5.000	4.669	4.030
February ..	4.875	4.996	4.894	5.018	4.686	4.030
March ..	4.776	4.971	4.885	4.985	4.686	4.030
April ..	4.835	4.944	4.916	4.979	4.681	4.030
May ..	4.890	4.971	4.939	4.965	4.682	4.030
June ..	4.936	5.020	4.935	4.960	4.683	4.030
July ..	4.956	5.023	4.967	4.931	4.682	4.030
August ..	4.971	5.027	4.983	4.881	4.610	4.030
September ..	4.933	5.041	4.954	4.805	4.046	4.030
October ..	4.908	4.900	4.956	4.768	4.030	4.030
November ..	4.925	4.888	4.994	4.710	4.030	4.030
December ..	4.929	4.907	4.997	4.671	4.030	4.030

(iii) *Interstate.* Exchange rates between the several capital cities of the States at 30th June, 1940, were as follows:—

INTERSTATE EXCHANGE RATES, 30TH JUNE, 1940.

Between.	And—					
	Sydney.	Melbourne.	Brisbane.	Adelaide.	Perth.	Hobart and Launceston.
	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.	Rate per cent. s. d.
Sydney ..	..	2 6	2 6	5 0	7 6	5 0
Melbourne ..	2 6	..	5 0	2 6	5 0	2 6
Brisbane ..	2 6	5 0	..	7 6	10 0	7 6
Adelaide ..	5 0	2 6	7 6	..	2 6	5 0
Perth ..	7 6	5 0	10 0	2 6	..	7 6
Hobart and Launceston ..	5 0	2 6	7 6	5 0	7 6	..

§ 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; 1840 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 Government Savings Banks.

Post Office Savings Banks were established in all States except South Australia dating from 1863 onwards. After the Federation of the Australian States in 1900 Post Offices were controlled by the Commonwealth Government, but they continued to act as Savings Bank agencies for State institutions until the establishment of the Commonwealth Bank in 1912, when they acted as agents for that institution.

Savings Banks at present operating are the Commonwealth Savings Bank (all States); State Savings Bank of Victoria; State Savings Bank of South Australia; and the two trustee Banks—Hobart and Launceston.

2. **The Commonwealth Savings Bank.**—The Commonwealth Savings Bank opened for business in Victoria on 15th July, 1912; in Queensland on 16th September, 1912; in the Northern Territory on 21st October, 1912; 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 in 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 has since then operated independently, publishing its own balance-sheets and profit and loss accounts.

3. **Recent Amalgamations.**—Particulars relating to the absorption by the Commonwealth Savings Bank of the Government Savings Banks of New South Wales, and the State Savings Bank of Western Australia are given in Official Year Book, No. 29.

4. **Extension of Facilities.**—The prime object of the foundation of Savings Banks in Australia was the encouragement of thrift—deposits of one shilling and upwards being accepted—nevertheless the facilities offered, while preserving the original object, have led to developments in another direction. Although depositors may not operate on their accounts by means of cheques, they have practically all the other advantages of a current account in addition to receiving interest on their minimum monthly balances, while no charge is made by the banks for keeping the accounts.

For many years considerable use has been made of the Savings Bank account as an alternative to maintaining a fixed deposit with a Cheque-paying Bank. Deposits in Savings Banks may be withdrawn at any time with a minimum loss of interest, the rate of which is in some States greater than that offered by trading banks for six months' deposits.

5. **Classification of Depositors' Balances.**—The classification of deposits published by Savings Banks does not permit of 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 the above percentages.

6. **Number of Accounts.**—No statement is shown herein regarding the number of accounts because in some States it is possible for the same person to have an account in the Commonwealth Savings Bank as well as in the State Savings Bank. The effect of this multiplication of accounts was demonstrated by the reduction of numbers which followed the amalgamations referred to in par. 3 above.

7. **Rates of Interest on Deposits.**—The "Premiers' Plan" of 1931 provided, *inter alia*, for the reduction of bank rates of interest on deposits and advances. The Commonwealth Savings Bank reduced the rate of interest on depositors' balances by one per cent. from 1st July, 1931, and the other Savings Banks subsequently took similar action. The statements given hereunder show the rates of interest allowed at 30th June, 1934 to 1940 by State or Trustee Banks and by the Commonwealth Bank.

The table hereunder refers to interest rates allowed by State Savings Banks :—
STATE AND TRUSTEE SAVINGS BANKS : INTEREST RATES ON DEPOSITS.

Particulars.	State Savings Bank.			Trustee Savings Banks.		
	Victoria.	South Australia. (a)		Hobart.	Launceston.	
	Interest-bearing Limit.	£1,000.			£300.	£300.
		£1,000.	£1 to £500.	£501 to £1,000.		
	%	%	%	%	%	
Rates at 30th June—						
1934	2½; 3 (b)	3	2½	2¾; 3 (c)	2¾; 3 (c)	
1935	2; 2½ (b)	2¾	2½	2¾; 3 (c)	2¾; 3 (c)	
1936	2; 2½ (b)	2¾	2¾	2¾; 3 (c)	2¾; 3 (c)	
1937	2; 2½ (b)	2¾	2½	3; 3½ (c)	3; 3½ (c)	
1938	2; 2½ (b)	2¾	2½	3; 3½ (c)	3; 3½ (c)	
1939	2; 2½ (b)	3(d); 2¾(e)	2½	3; 3½ (c)	3; 3½ (c)	
1940	2; 2½ (b)	2¾(d); 2½(c)	2½	3; 3½ (c)	3; 3½ (c)	

(a) Interest on deposits in accounts closed during the year is generally allotted at a lower rate than that applicable to accounts remaining open. (b) Deposit stock. (c) Deposits fixed for twelve months. (d) On balances up to £200. (e) On balances £201 to £500.

Particulars regarding the rates allowed by the Commonwealth Savings Bank are incorporated in the following table:—

COMMONWEALTH SAVINGS BANK : INTEREST RATES ON DEPOSITS.(a)

Rate at 30th June—	£1 to £500.	£501 to £1,300.(a)
	%	%
1934	2¼	1¾
1935	2	1¾
1936	2	1¾
1937	2	1¾
1938	2	1¾
1939	2	1¾
1940	2	1¾

(a) Interest-bearing limit in all States except Queensland is £1,300. In Queensland it is £2,000. Interest is allowed by the Commonwealth Savings Bank at the rate shown under £1 to £500 on the first £500 of any deposit and at the rates shown under £501 to £1,300 (Queensland, £2,000) for the remainder.

On 1st July, 1932, a reduction of one-quarter of one per cent. in the rate of interest allowed on deposits became effective, followed by a similar reduction from 1st November, 1932. Further reductions of one-quarter of 1 per cent. operated from 1st June, 1934, and 1st January, 1935, respectively.

8. Statistical Returns.—Commencing from July, 1931, monthly returns have been furnished by Savings Bank authorities, and the collated data are disseminated in the form of monthly press notices. In addition, the particulars are published in the *Quarterly Summary of Australian Statistics* and the *Monthly Review of Business Statistics* issued by this Bureau. The information given in the following paragraphs relates to the deposits at 30th June in each year. For convenience of reference the information has been grouped under the following headings:—

- (i) All Savings Banks;
- (ii) Commonwealth Savings Banks; and
- (iii) State (including Trustee Banks in Tasmania) Savings Banks

9. All Savings Banks.—(i) *Returns for Year 1939-40.* The following statement gives details of the business transacted by all Savings Banks for the year 1939-40 :—

ALL SAVINGS BANKS : PARTICULARS, 1939-40.

State or Territory.	Amount on Deposit at 30th June, 1939.	Excess of Deposits over Withdrawals during year.	Interest Added during year.	Amount on Deposit at 30th June, 1940.
	£	£	£	£
New South Wales	87,473,789	-6,966,946	1,604,057	82,110,900
Victoria	80,461,051	-2,847,867	1,532,169	79,145,353
Queensland	29,044,712	-1,339,375	546,536	28,251,873
South Australia	27,358,907	-1,484,266	651,100	26,525,741
Western Australia	12,396,191	-765,585	229,545	11,860,151
Tasmania	8,396,347	-84,053	205,070	8,517,364
Northern Territory	98,814	90,481	2,631	191,926
Australian Capital Territory ..	318,804	25,133	6,297	350,234
Total	245,548,615	-13,372,478	4,777,405	236,953,542

Minus (-) indicates excess of withdrawals over deposits.

(ii) *Deposits—(a) Years 1936 to 1940.* The table hereunder shows for all Savings Banks the amount at credit of depositors and the average deposits per head of population at 30th June, 1936 to 1940 :—

ALL SAVINGS BANKS : DEPOSITS.

30th June.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	A.C.T.	Total.
TOTAL.									
	£	£	£	£	£	£	£	£	£
1936	79,999,948	73,890,120	27,131,659	25,308,586	11,517,220	6,818,300	57,700	238,685	224,962,218
1937	81,952,399	73,720,458	27,304,438	26,505,941	11,834,794	7,214,877	59,127	259,127	230,851,161
1938	86,015,685	78,877,000	28,206,457	27,243,657	12,037,486	7,691,510	67,921	292,461	240,432,177
1939	87,473,789	80,461,051	29,044,712	27,358,907	12,396,191	8,396,347	98,814	318,804	245,548,615
1940	82,110,900	79,145,353	28,251,873	26,525,741	11,860,151	8,517,364	191,926	350,234	236,953,542

PER HEAD OF POPULATION.

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1936	30 0 3	40 0 3	27 13 3	43 1 10	25 11 7	29 13 7	10 17 2	24 8 1	33 4 1
1937	30 8 9	40 16 3	27 10 5	45 0 6	26 1 13	1 0 11	10 16 10	25 4 4	33 15 10
1938	31 12 9	42 4 11	28 2 4	45 19 11	26 3 23	2 16 11	11 15 5	25 5 11	34 17 7
1939	31 16 11	42 15 4	28 11 6	45 18 5	26 12 8	35 9 7	15 19 4	26 9 0	35 5 6
1940	29 10 5	41 13 5	27 13 2	44 6 5	25 6 10	35 9 10	27 8 4	26 18 11	33 14 3

For a number of years prior to the depression deposits were steadily rising and at 30th September, 1929, the aggregate amount was £225,963,165. As the depression developed withdrawals were heavy and the amount on deposit declined to £193,375,397 in June, 1931. (The lowest point, although not actually recorded, was probably reached in May, 1931.) During the next twelve months the deposits rose to £197,966,307, and they have since risen year by year, with occasional seasonal declines, until the maximum level of £246,674,365 was recorded at 30th April, 1940. Since then there has been a considerable fall, caused largely by withdrawals in order to purchase war bonds and war savings certificates. The amount deposited at 30th June, 1940, which includes interest added, was £236,953,542.

(b) *Deposits per head and Purchasing Power.* Particulars of the deposits per head of population, actual and adjusted to purchasing power by the application of retail price index-numbers at 30th June, 1928 and in each year from 1931 to 1940, are given in the following table :—

ALL SAVINGS BANKS : DEPOSITS PER HEAD OF POPULATION.

At 30th June—	Actual.		Adjusted to Purchasing Power. (a)	
	£	Index-Number.	£	Index-Number.
		1928 = 1000		1928 = 1000
1928	34.14	1000	34.14	1000
1931	29.63	868	34.10	999
1932	30.10	882	36.48	1069
1933	30.51	894	38.52	1128
1934	31.55	924	39.14	1146
1935	32.41	949	39.77	1165
1936	33.20	972	40.00	1172
1937	33.79	990	39.52	1158
1938	34.88	1022	39.59	1160
1939	35.30	1034	39.09	1145
1940	33.78	989	35.94	1052

(a) On the basis of the "All Items" ("C") Series of Retail Price Index-number for June quarter in each year.

Since 1931 actual deposits per head increased by roughly 2 per cent. per annum until they reached a maximum of £35.30 in 1939. In 1940 they fell by 4.3 per cent. to £33.78. The purchasing power of deposits per head increased steadily from 1927 up to a maximum of £40.00 in 1936, since when, except for a very slight increase in 1938, the figure has declined each year reaching £35.94 in 1940, a decrease of 8.1 per cent. for the year.

In interpreting the above figures it should be remembered that Savings Bank accounts are used to some extent by institutions and business people, as well as by individuals for the investment of personal savings. The relative extent to which Savings Bank accounts are used for business purposes, etc., may, and probably does, fluctuate considerably from time to time.

10. Commonwealth Savings Bank.—(i) *Returns for Year 1939-40.* Returns for the States and Territories for the year 1939-40 have been incorporated in the table below :—

COMMONWEALTH SAVINGS BANK : RETURNS, 1939-40.

State or Territory.	Amount on Deposit 30th June, 1939.	Excess of Deposits over Withdrawals during year.	Interest Added during year.	Amount on Deposit 30th June, 1940.
	£	£	£	£
New South Wales	87,473,789	-6,966,946	1,604,057	82,110,900
Victoria	11,242,366	330,453	211,911	11,784,730
Queensland	29,044,712	-1,339,375	546,536	28,251,873
South Australia	3,166,990	-131,565	58,487	3,093,912
Western Australia	12,396,191	-765,585	229,545	11,860,151
Tasmania	2,357,983	-104,633	43,760	2,297,110
Northern Territory	98,814	90,481	2,631	191,926
Australian Capital Territory ..	318,804	25,133	6,297	350,234
Total	146,099,649	-8,862,037	2,703,224	139,940,836

Minus (-) indicates excess of withdrawals over deposits.

and Launceston. Although the accounts of these institutions are made up for half-yearly periods ending 28th February and 31st August, the managements have furnished particulars of deposits as at 30th June.

STATE SAVINGS BANKS: RETURNS, 1939-40.

State.	Amount on Deposit at 30th June, 1939.	Excess of Deposits over Withdrawals during year.	Interest Added during year.	Amount on Deposit at 30th June, 1940.
	£	£	£	£
Victoria	69,218,685	-3,178,320	1,320,258	67,360,623
South Australia	24,191,917	-1,352,701	592,613	23,431,829
Tasmania (a)	6,038,364	20,580	161,310	6,220,254
Total	99,448,966	-4,510,441	2,074,181	97,012,706

(a) Trustee Savings Banks, Hobart and Launceston.

NOTE.—The State Savings Banks in New South Wales, Queensland, Western Australia and Tasmania have been absorbed by the Commonwealth Savings Bank.

(ii) *Deposits—Years 1936 to 1940.* The following statement shows the amount on deposit with State Savings Banks at 30th June in each of the years 1936 to 1940 :—

STATE SAVINGS BANKS: DEPOSITS.

State.	At 30th June—				
	1936.	1937.	1938.	1939.	1940.
	£	£	£	£	£
Victoria	64,402,802	65,755,192	68,142,032	69,218,685	67,360,623
South Australia	22,606,164	23,588,757	24,151,868	24,191,917	23,431,829
Tasmania (a)	4,837,210	5,091,024	5,471,324	6,038,364	6,220,254
Total	91,846,176	94,434,973	97,765,224	99,448,966	97,012,706

(a) Trustee Savings Banks, Hobart and Launceston.

(iii) *Assets, 1939-40.* At 30th June, 1940, the assets of all State Savings Banks amounted to £107,265,914, distributed as shown hereunder :—

STATE SAVINGS BANKS: ASSETS, 30th JUNE, 1940.

Particulars.	Victoria.	South Australia.	Tasmania. (a)	Total.
	£	£	£	£
Government Securities	29,072,552	13,115,745	2,170,688	44,358,985
Municipal Securities	2,749,325	419,725	1,222,352	4,391,402
Other Public Securities	16,836,904	298,823	65,580	17,201,307
Mortgages	2,600,572	5,482,302	1,777,547	9,860,421
Outstanding Interest, Dividends and Rents	697,366	207,731	67,380	972,477
Landed and House Property	757,896	120,958	31,998	910,852
Fixed Deposits	19,903,000	5,341,750	1,010,000	26,254,750
Cash in hand, in transit and on Current Account	1,856,318	975,831	475,309	3,307,458
All other Assets	5,556	565	2,141	8,262
Total Assets	74,479,489	25,963,430	6,822,995	107,265,914

(a) At 31st August, 1940. See par. 11 (i).

(iv) *Profit and Loss Accounts, 1939-40.* Details of the Profit and Loss Accounts of the several State Savings Banks for the year 1939-40 are given in the following table :—

**STATE SAVINGS BANKS : PROFIT AND LOSS ACCOUNTS FOR YEAR
ENDED 30TH JUNE, 1940.**

Particulars.	Victoria.	South Australia.	Tasmania. (a)	Total.
<i>Dr.</i>	£	£	£	£
Interest allotted to Depositors ..	1,320,258	602,396	179,064	2,101,718
Amount carried to Reserves and Depreciation Funds ..	420,000	122,251	18,500	560,751
Writing off Bank Premises ..	85,200	(b)	5,630	90,830
Expenses of Management ..	569,713	161,579	38,117	769,409
All other Expenses ..	59,350	21,392	(c) 3,887	84,629
Balance carried forward ..	182,674	(d) 186,912	93,389	462,975
Total	2,637,195	1,094,530	338,587	4,070,312
<i>Cr.</i>				
Balance brought forward ..	172,079	(e) 147,698	93,272	413,049
Interest, Dividends, Rents, and all other Receipts	2,465,116	946,832	245,315	3,657,263
Total	2,637,195	1,094,530	338,587	4,070,312

(a) Year ended 31st August, 1940; see par. 11 (1).

(b) Bank premises written off from Reserve Fund.

(c) Includes £750, Taxation Reserve.

(d) Includes £50,000, provision for interest accrued on Depositors' Balances from 7th to 30th June, 1940, carried forward.

(e) Includes Reserve brought forward from 1938-39 (Provision for interest accrued on Depositors' Balances from 7th to 30th June, 1939, £50,000).

C. COMPANIES.

§ 1. General.

Statistics available in regard to registered companies embrace (a) Returns relating to Trustees, Executors and Agency Companies; (b) Returns relating to Registered Building and Investment Societies; and (c) Returns relating to Registered Co-operative Societies.

§ 2. Trustees, Executors and Agency Companies.

Returns for 1939 relate to two New South Wales, seven Victorian, one Queensland, four South Australian, two Western Australian, and four Tasmanian companies. The following table shows the liabilities and assets, and assets of trust funds administered for the year 1939 :—

TRUSTEES, EXECUTORS AND AGENCY COMPANIES, 1939.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Liabilities—							
Capital paid-up ..	310,000	486,780	88,375	224,454	112,593	90,000	1,312,202
Reserves and undistributed Profits ..	363,662	469,609	17,199	229,960	92,238	63,082	1,235,750
Other Liabilities ..	33,259	70,861	29,199	540	11,744	5,357	150,960
Total Liabilities ..	706,921	1,027,250	134,773	454,954	216,575	158,439	2,698,912
Assets—							
Government and Municipal Securities ..	262,969	175,635	21,150	214,652	28,560	27,969	730,935
Loans on Mortgages ..	173,401	51,516	..	36,186	38,783	98,058	397,944
Other Loans and Advances ..	..	10,742	24,070	30,086	511	9,732	75,141
Real Property ..	172,461	637,089	65,433	140,225	123,358	10,000	1,148,566
Deposits in Banks ..	85,647	28,437	7,379	6,736	9,137	10,381	147,717
Other Assets ..	12,443	123,831	16,741	27,069	16,226	2,299	198,609
Total Assets ..	706,921	1,027,250	134,773	454,954	216,575	158,439	2,698,912
Assets of Trust Funds Administered(a) ..	85,309,040	92,122,095	10,370,193	31,666,778	11,527,986	6,001,386	236,997,478

(a) Includes particulars of trust funds administered by Public Trustees.

§ 3. Registered Building and Investment Societies.

1. Summary.—Returns have been received relating to 314 Societies, but the information is not exhaustive, as particulars regarding unimportant organizations are not included.

REGISTERED BUILDING AND INVESTMENT SOCIETIES : SUMMARY, 1939.

Particulars.	N.S.W. 1938-39.	Vic. 1939.	Q'land. 1938-39.	S. Aust. 1939.	W. Aust. 1938-39.	Tas. 1939.	Total.
Societies making returns—							
Permanent .. No.	7	20	7	6	7	4	51
Terminating .. No.	235	2	5	15	6	..	263
Total .. No.	242	22	12	21	13	4	314
Number of shareholders ..	(d) 39,784	9,618	12,737	10,569	29,432	5,133	107,273
Number of shares ..	(c) 422,731	857,587	988,663	41,602	(a) ..	45,883	62,335,866
Number of borrowers ..	(e) 5,740	14,232	6,899	2,672	4,292	1,612	35,447
Income for year from interest, etc. .. £	491,547	410,627	126,303	33,010	100,028	41,107	1,202,622
Working expenses for year .. £	348,902	212,523	109,275	9,659	17,023	6,854	704,236
Amount of deposits during year .. £	549,052	1,974,801	97,045	145,945	294,763	14,105	3,075,711
Repayment of loans during year .. £	709,657	1,190,833	359,508	112,320	316,618	133,532	2,822,468
Loans granted during year .. £	f) 5,335,551	1,178,441	454,878	134,283	361,877	127,742	7,592,772

(a) Not available. (b) Exclusive of Western Australia. (c) Includes 149,828 shares in Star Bowkett and 235,769 in other terminating societies and excludes 2 investment societies. (d) Includes 17,553 shareholders in Star Bowkett and 18,911 in other terminating societies. (e) Permanent Societies only. (f) Includes £4,584,230 for other terminating societies.

2. **Liabilities and Assets.**—The balance-sheets of the companies in respect of which particulars of liabilities and assets are stated hereunder cover periods ended during the year 1939. The figures quoted for the States of South Australia and Tasmania refer to the calendar year 1939, while those for the remaining States are for the fiscal year 1938-39.

REGISTERED BUILDING AND INVESTMENT SOCIETIES : LIABILITIES, 1939.

State.	Paid-up Capital or Subscriptions.	Reserve Funds. (a)	Deposits.	Bank Overdrafts and other Liabilities.	Total Liabilities.
	£	£	£	£	£
New South Wales ..	2,695,111	700,500	727,242	(b) 7,171,301	11,294,154
Victoria ..	2,180,954	988,411	2,587,750	382,378	6,139,493
Queensland ..	1,821,677	67,624	22,862	74,825	1,986,988
South Australia ..	566,788	89,411	128,727	9,267	794,193
Western Australia ..	1,346,163	18,000	107,067	78,388	1,549,618
Tasmania ..	396,138	108,144	223,356	13,277	740,915
Total ..	9,006,831	1,972,090	3,797,004	7,729,436	22,505,361

(a) Includes Profit and Loss Account.

(b) Includes £7,019,319 for other terminating Societies.

REGISTERED BUILDING AND INVESTMENT SOCIETIES : ASSETS, 1939.

State.	Advances on Mortgage.	Landed and House Property, Furniture, etc.	Cash in Hand and on Deposit and other Assets	Total Assets.
	£	£	£	£
New South Wales ..	10,687,315	(b) 252,170	354,669	11,294,154
Victoria ..	5,802,451	188,952	148,090	6,139,493
Queensland ..	1,933,351	15,830	37,807	1,986,988
South Australia ..	718,034	26,536	49,623	794,193
Western Australia ..	1,441,008	26,931	81,679	1,549,618
Tasmania ..	580,552	9,950	150,413	740,915
Total ..	21,162,711	520,369	822,281	22,505,361

(a) Includes £7,681,037 for other terminating Societies.

(b) Permanent Societies only.

§ 4. Co-operative Societies.

1. **General.**—Prior to 1931 the returns relating to Co-operative Societies were divided into two classes—(i) those engaged in the manufacture and marketing of primary products and trade requirements; and (ii) those engaged in retailing general household requirements. The former may be described briefly as Producers' Co-operative Societies and

the latter as Consumers' Co-operative Societies. Particulars of those Producers' Societies which are also Consumers' Societies were compiled separately for the first time for the year 1931. The particulars given for New South Wales relate to societies registered under the Co-operation Act 1923-1938.

CO-OPERATIVE SOCIETIES: SUMMARY, 1939.

Particulars.	N.S.W. 1938-39. (a)	Vic. 1938-39.	Qld. 1938-39.	S.A. 1939.	W.A. 1938-39.	Tas. 1938-39.	Total.
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PRODUCERS' SOCIETIES.

Number of Societies ..	123	58	115	34	3	11	344
Number of Branches ..	(b) 20	20	59	12	13	19	113
Number of Members ..	55,860	38,575	59,434	7,090	4,240	7,984	174,083
Gross Turnover (Sales) £	17,451,032	3,724,520	14,653,871	1,218,688	542,319	582,259	38,172,680
Other Income .. £	218,196	254,225	385,601	162,138	29,764	21,798	1,071,722
Total Income .. £	17,669,228	3,978,745	15,039,472	1,380,826	572,083	604,057	39,244,411
Total Purchases during Year £	14,830,187	3,193,466	11,423,051	967,507	414,045	449,481	31,277,737
Other Expenditure .. £	2,685,035	767,232	3,213,885	353,247	114,746	143,163	7,277,308
Total Expenditure .. £	17,515,222	3,960,698	14,636,936	1,320,754	528,791	592,644	38,555,045
Rebates and Bonuses .. £	(d) 15,197	15,197	87,131	36,317	32,993	4,458	176,096
Dividends on Share Capital £	41,003	21,668	41,869	9,144	1,931	3,148	118,763

CONSUMERS' SOCIETIES.

Number of Societies ..	45	21	14	9	4	3	96
Number of Branches ..	(b) 1	10	12	42	1	2	67
Number of Members ..	40,806	10,920	7,299	44,748	1,442	578	105,793
Gross Turnover (Sales) £	2,701,131	797,353	387,960	1,070,929	77,915	69,307	5,104,593
Other Income .. £	39,276	20,094	5,192	22,576	2,133	662	89,933
Total Income .. £	2,740,407	817,447	393,152	1,093,505	80,048	69,969	5,194,528
Total Purchases during Year £	2,066,488	664,461	337,970	846,351	62,799	55,373	4,033,942
Other Expenditure .. £	473,676	116,263	50,046	194,036	12,798	10,822	857,641
Total Expenditure .. £	2,540,164	780,724	388,016	1,040,387	75,597	66,695	4,891,583
Rebates and Bonuses .. £	152,313	33,552	2,765	52,354	4,917	1,020	247,421
Dividends on Share Capital £	17,758	5,684	1,663	15,014	293	281	41,293

SOCIETIES WHICH ARE BOTH PRODUCERS' AND CONSUMERS'.

Number of Societies ..	..	8	4	3	72	..	87
Number of Branches ..	..	6	13	1	35	..	55
Number of Members ..	..	3,410	4,498	582	15,272	..	23,762
Gross Turnover (Sales) £	..	1,086,622	1,117,495	149,066	1,702,721	..	4,055,844
Other Income .. £	..	9,705	5,550	32,468	349,019	..	396,742
Total Income .. £	..	1,096,327	1,123,045	181,474	2,051,740	..	4,452,586
Total Purchases during Year £	..	932,474	945,137	149,145	1,573,833	..	3,600,589
Other Expenditure .. £	..	150,005	170,927	24,784	461,396	..	807,106
Total Expenditure .. £	..	1,082,479	1,116,064	173,929	2,035,223	..	4,407,695
Rebates and Bonuses .. £	..	9,719	3,031	5,564	8,761	..	27,075
Dividends on Share Capital £	..	1,983	2,052	1,867	4,496	..	10,398

(a) Particulars relate to Societies registered under Co-operation Act 1923-1938. Particulars shown under Producers' Societies refer to Rural Societies, and under Consumers to Trading. (b) Not available. (c) Excluding New South Wales. (d) Included with purchases.

2. Liabilities and Assets.—The next table gives the liabilities and assets :—

CO-OPERATIVE SOCIETIES : LIABILITIES AND ASSETS, 1939.

Particulars.	N.S.W.(a) 1938-39.	Vic. 1938-39.	Qld. 1938-39.	S.A. 1939.	W.A. 1938-39.	Tas. 1938-39.	Total.
PRODUCERS' SOCIETIES.							
Liabilities—							
Paid-up Capital ..	£	£	£	£	£	£	£
Loan Capital ..	1,077,787	940,388	1,238,688	199,391	53,744	87,083	3,597,081
Bank Overdrafts ..	(b)	142,605	769,473	262,501	..	38,700	(c)1,213,369
Accumulated Profits ..	940,001	700,676	786,172	200,254	4,496	30,607	2,662,206
Reserve Funds ..	} 1,026,739	110,615	214,451	66,163	16,751	13,698	} 3,747,140
Sundry Creditors ..		318,174	1,559,692	341,254	50,943	28,660	
Other Liabilities ..	} 1,730,273	442,029	2,217,318	322,626	56,855	91,215	} 5,405,937
Total Liabilities ..		56,721	73,959	406,238	4,223	5,380	
	4,774,800	2,711,208	6,858,853	1,798,517	187,012	295,343	16,625,733
Assets—							
Land and Buildings ..	} 2,368,617	} 1,225,749	1,239,283	211,014	55,155	102,742	} 8,312,627
Machinery, Plant and other fixed Assets ..			2,668,057	342,628	43,865	55,517	
Stocks ..	942,750	361,512	525,797	799,360	16,327	49,576	2,695,322
Sundry Debtors ..	1,190,714	825,139	1,906,263	166,584	39,299	60,146	4,188,145
Cash in hand and on deposit ..	113,761	80,338	216,820	9,224	17,264	14,379	451,786
Profit and Loss Account ..	} 158,958	86,796	32,253	12,197	..	3,236	} 977,853
Other Assets ..		131,674	270,380	257,510	15,102	9,747	
Total Assets ..	4,774,800	2,711,208	6,858,853	1,798,517	187,012	295,343	16,625,733

CONSUMERS' SOCIETIES.

Particulars.	£	£	£	£	£	£	£
Liabilities—							
Paid-up Capital ..	591,854	172,838	63,723	457,066	9,894	26,608	1,315,983
Loan Capital ..	(b)	52,010	7,728	122,993	..	6,117	(c)188,848
Bank Overdrafts ..	60,815	84,075	28,681	42,591	3,741	1,409	221,312
Accumulated Profits ..	} 422,299	15,610	7,726	39,553	910	2,491	} 775,750
Reserve Funds ..		165,564	24,115	144,516	4,465	8,501	
Sundry Creditors ..	} 267,057	57,174	35,203	33,042	7,824	1,932	} 417,006
Other Liabilities ..		6,715	1,336	2,021	450	2,152	
Total Liabilities ..	1,342,025	493,986	168,512	841,782	27,284	45,310	2,918,899
Assets—							
Land and Buildings ..	} 528,779	} 170,712	31,618	305,550	8,020	17,255	} 1,119,337
Machinery, Plant and other fixed Assets ..			7,703	45,808	2,285	1,607	
Stocks ..	355,500	115,383	43,464	245,685	7,775	14,215	782,022
Sundry Debtors ..	236,906	128,827	65,380	80,272	5,884	6,416	523,685
Cash in hand and on deposit ..	88,504	61,671	4,382	20,131	1,844	5,677	182,209
Profit and Loss Account ..	} 132,336	7,463	13,265	11,916	1,665	..	} 311,646
Other Assets ..		9,936	2,700	132,420	411	140	
Total Assets ..	1,342,025	493,986	168,512	841,782	27,284	45,310	2,918,899

SOCIETIES WHICH ARE BOTH PRODUCERS' AND CONSUMERS'.

Particulars.	£	£	£	£	£	£	£
Liabilities—							
Paid-up Capital ..	..	54,232	73,846	19,947	414,246	..	562,271
Loan Capital ..	..	15,171	2,452	..	168,859	..	186,482
Bank Overdrafts ..	..	31,062	56,209	10,300	299,521	..	397,092
Accumulated Profits ..	..	44,885	5,520	1,989	25,276	..	77,670
Reserve Funds ..	..	60,175	41,227	17,637	188,527	..	307,560
Sundry Creditors ..	..	54,694	82,138	8,388	338,444	..	483,664
Other Liabilities ..	..	23,113	5,749	14,438	28,594	..	71,894
Total Liabilities ..	..	283,332	267,141	72,699	1,463,467	..	2,686,630
Assets—							
Land and Buildings ..	..	} 135,967	77,739	7,988	205,426	..	} 585,765
Machinery, Plant and other fixed Assets ..	..		67,160	10,361	81,124	..	
Stocks ..	..	59,798	40,591	15,508	236,024	..	351,921
Sundry Debtors ..	..	46,297	62,038	16,564	753,619	..	878,518
Cash in hand and on deposit ..	..	3,567	6,397	3,284	40,278	..	53,526
Profit and Loss Account ..	..	..	718	1,025	13,392	..	15,135
Other Assets ..	..	37,703	12,498	17,060	133,604	..	201,774
Total Assets ..	..	283,332	267,141	72,699	1,463,467	..	2,686,630

(a) Particulars relate to Societies registered under Co-operation Act 1923-1938. Particulars shown under Producers' Societies refer to Rural Societies, and under Consumers to Trading. (b) Not available. (c) Excludes New South Wales.

D. INSURANCE.

§ 1. General.

Although insurance business is conducted under State laws where such laws are in existence, or otherwise under various Companies Acts or Special Acts, Section 51 of the Commonwealth Constitution Act confers the necessary powers on the Commonwealth Parliament to legislate in regard to "insurance other than State insurance; also State insurance extending beyond the limits of the State concerned." Legislation by the Commonwealth Parliament includes the Life Assurance Companies Act 1905 limiting the amount of assurance payable on the death of children, the Marine Insurance Act 1909 defining the limits of marine insurance and regulating the terms of contracts, etc., and the Insurance Act 1932-1937, the principal features of which are given hereunder.

Companies, persons or associations of persons carrying on insurance business in the Commonwealth or in any Territory of the Commonwealth are required to deposit money or approved securities with the Commonwealth Treasurer, to the extent specified in the schedule hereunder:—

SCHEDULE OF DEPOSITS.

Class of Company.	Life Assurance Business.	Other Insurance Business.
Existing companies (Australian and foreign)	£1,000 for every £5,000 of net liability up to a maximum deposit of £50,000	£1,000 for each £5,000 of annual premium income. Maximum deposit £40,000. Minimum deposit £1,000.
New companies—Australia	£5,000 per annum until maximum of £50,000 is reached. For mutual companies, after the initial deposit of £5,000, £1,000 per annum until deposit reaches a maximum of £50,000	Initial deposit, £5,000. £1,000 for every £5,000 by which the annual premium income exceeds £25,000. Maximum deposit £40,000
Overseas—		
British	£50,000	£50,000
Foreign	£60,000	£60,000

Money deposited is to be invested by the Treasurer in prescribed securities according to the selection of the depositor, and all interest accruing on deposits or securities is to be paid to depositors. Deposits are to remain as security against liability to policy-holders, and are to be available to satisfy judgments obtained in respect of policies.

If the value of money and approved securities deposited has depreciated below the value required by the Act, the Treasurer may require the depositor to lodge additional deposits to bring the total to the prescribed value.

After this Act became law, State laws governing insurance deposits ceased to operate. 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. Whilst deposits so remained with the State, the depositors, to the extent of the value of their deposits, were exempt from liability to make deposits under the Commonwealth Act, and the conditions of State laws continued to apply to the deposits until the Commonwealth Treasurer required their return to depositors who immediately had to make deposits with the Commonwealth to the prescribed extent.

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

The following shows particulars of deposits under the Insurance Act 1932, at 30th June, 1940 :—

DEPOSITS UNDER INSURANCE ACT, 30th JUNE, 1940.

Class of Insurance.	Deposited with—		Total.
	Commonwealth.	States.	
	£	£	£
Life	405,639	911,924	1,317,563
Other	762,900	1,906,120	2,669,020
Total	1,168,539	2,818,044	3,986,583

§ 2. Life Assurance.

1. **General.**—Since 1907 statistical returns have been collected from life assurance institutions, with results which are in the main satisfactory. The results for each of the earlier years may be found in the several Official Year Books and *Finance Bulletins*. The figures in the succeeding paragraphs refer to Australian business only, except where otherwise indicated.

2. **Institutions Transacting Business.**—(i) *General.* The number of institutions transacting life assurance business in Australia during 1939 was 26, including four oversea companies. Of the twenty-two Australian institutions, six are purely mutual, and fifteen are public companies. One office is a State Government institution.

(ii) *Ordinary and Industrial Business.* Of the institutions enumerated in the preceding paragraph, fourteen transacted both ordinary and industrial business. Ordinary and industrial business have, where possible, been kept separate, and figures relating to companies whose head offices are outside Australia have been restricted to the Australian business.

3. **Australian Business.** (i) *Ordinary.* (a) 1939. The following table shows particulars for each class of policy in existence during 1939. The amount assured in 1939 represents an average of more than £60 per head of population.

ORDINARY LIFE ASSURANCE : AUSTRALIAN BUSINESS 1939.

Class of Policy.	No. of Policies.	Sum Assured.	Average per Policy.
	No.	£	£
Assurances—			
Whole Life	449,599	223,236,758	497
Endowment	716,326	172,355,475	241
Other	26,494	21,884,822	826
Endowments	50,868	9,813,837	193
Total	1,243,287	427,290,892	344
Annuities	3,826	(a) 384,334	(a) 100

(a) Amount per annum.

(b) 1935 to 1939. Similar particulars for each of the last five years are shown below. The increase in annuities is due to the inclusion of a staff pension scheme providing deferred annuities commencing at retirement and temporary assurance in the event of death prior to retirement.

ORDINARY LIFE ASSURANCE 1935 TO 1939 : AUSTRALIAN BUSINESS.

Year.	Assurance and Endowment Policies.				Annuities.	
	Policies in Force.	Amount.	Average per Policy.	Annual Premium Income.	No.	Amount per Annum.
	No.	£	£	£		£
1935 ..	965,597	326,018,315	338	10,873,331	2,705	265,615
1936 ..	1,038,055	352,024,524	339	11,911,755	2,977	305,093
1937 ..	1,116,033	380,134,886	341	12,634,971	3,549	376,052
1938 ..	1,181,412	403,813,927	342	13,279,373	3,681	(a)314,499
1939 ..	1,243,287	427,290,892	344	13,954,391	3,826	384,334

(a) Particulars of certain contingent annuities formerly included under this heading have been reclassified and excluded, commencing with this year.

(ii) Industrial. (a) 1939. Information in regard to industrial business in existence during 1939 is given in the following table:—

INDUSTRIAL LIFE ASSURANCE : AUSTRALIAN BUSINESS 1939.

Class of Policy.				No. of Policies.	Sum Assured.	Average per Policy.
				No.	£	£
Assurances—						
Whole Life ..	..	..	..	166,725	3,949,038	24
Endowment ..	..	..	..	2,196,703	103,264,181	47
Other ..	..	..	..	..	..	..
Endowments ..	..	..	..	128,314	4,648,461	36
Total ..	..	..	..	2,491,742	111,861,680	45
Annuities ..	..	..	..	2	(a) 58	(a) 29

(a) Amount per annum.

(b) 1935 to 1939. Similar information for each of the last five years is shown below:—

INDUSTRIAL LIFE ASSURANCE 1935 TO 1939 : AUSTRALIAN BUSINESS.

Year.	Assurance and Endowment Policies.				Annuities.	
	Policies in Force.	Amount.	Average per Policy.	Annual Premium Income.	No.	Amount per Annum.
	No.	£	£	£		£
1935 ..	1,920,116	83,316,521	43	4,780,269	2	58
1936 ..	2,078,460	90,748,635	44	5,215,624	2	58
1937 ..	2,253,863	99,544,760	44	5,691,704	2	58
1938 ..	2,368,340	105,452,157	45	6,094,667	2	58
1939 ..	2,491,742	111,861,680	45	6,490,164	2	58

4. Receipts and Expenditure.—(i) *Ordinary Business.* The following table shows the aggregate Australian receipts for the last five years of all the institutions doing business in Australia. In the latter year premiums—new and renewal—amounted to over 64 per cent., and interest, dividends and rent to 35 per cent. of the Australian receipts.

ORDINARY LIFE ASSURANCE: AUSTRALIAN RECEIPTS.

Heading.	Amount.				
	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Premiums—New ..	1,588,553	1,994,529	1,886,633	1,653,395	1,613,219
Renewal ..	9,284,778	9,917,226	10,748,338	11,625,978	12,341,172
Annuity Premiums ..	395,172	281,285	268,399	197,200	183,866
Interest, dividends and rents ..	5,896,289	6,368,726	6,778,610	7,173,402	7,546,589
Other receipts ..	23,297	143,327	76,238	15,374	13,192
Total Receipts ..	17,188,089	18,705,093	19,758,218	20,665,349	21,698,038

In 1939 claims accounted for 57 per cent. of the total expenditure; surrenders 13 per cent.; expenses of management 8 per cent.; commission 7 per cent.; and licence fees and taxes 2 per cent.

ORDINARY LIFE ASSURANCE: AUSTRALIAN EXPENDITURE.

Heading.	Amount.				
	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Claims	6,926,774	7,111,822	7,373,965	7,417,756	7,935,462
Surrenders	1,637,494	1,590,232	1,574,087	1,698,860	1,842,516
Annuities	171,517	187,659	213,386	214,255	219,473
Commission	856,890	1,021,474	1,015,820	1,004,844	1,007,721
Expenses of management	1,052,207	1,115,843	1,132,610	1,136,674	1,178,073
Licence fees and taxes	287,840	272,543	246,669	264,467	316,335
Shareholders' dividends	80,389	89,273	92,319	96,963	101,437
Cash bonuses paid to policy-holders ..	283,013	246,920	242,924	259,319	260,435
All other expenditure	136,523	161,918	227,239	255,427	(a) 1,185,284
Total Expenditure	11,432,647	11,797,684	12,119,019	12,348,565	14,046,736

(a) Includes £843,104 reserves for taxation and other special purposes.

The excess of receipts over expenditure during the past five years was as follows:—1935, £5,755,442; 1936, £6,907,409; 1937, £7,639,199; 1938, £8,316,784; and 1939, £7,651,302. During the same years the proportions that expenditures bore to receipts were as follows:—1935, 66.5 per cent.; 1936, 63.1 per cent.; 1937, 61.3 per cent.; 1938, 59.8 per cent.; and 1939, 64.7 per cent.

(ii) *Industrial Business.* The aggregate Australian receipts for the years 1935 to 1939 of institutions transacting industrial business were as follows:—

INDUSTRIAL LIFE ASSURANCE: AUSTRALIAN RECEIPTS.

Heading.	Amount.				
	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Premiums—New and Renewal	4,780,269	5,215,624	5,691,704	6,094,667	6,490,164
Interest, dividends and rents	1,287,113	1,383,615	1,506,503	1,631,831	1,751,531
Other receipts	44,067	37,905	42,342	44,659	46,402
Total Receipts ..	6,111,449	6,637,144	7,240,549	7,771,157	8,288,097

Expenditure during 1939 totalled £6,086,677. Claims amounted to over 51 per cent., commission to over 22 per cent., and expenses of management to over 11 per cent.

INDUSTRIAL LIFE ASSURANCE: AUSTRALIAN EXPENDITURE.

Heading.	Amount.				
	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Claims	1,687,728	2,120,803	2,499,247	2,754,027	3,132,459
Surrenders	186,988	198,675	182,210	194,547	498,932
Annuities	40	36	36	36	33
Commission	1,008,811	1,108,600	1,212,596	1,236,077	1,353,398
Expenses of management	558,800	590,832	642,528	681,294	717,794
Licence fees and taxes	65,156	62,802	58,367	68,210	82,259
Shareholders' dividends	54,718	60,561	63,446	55,313	56,476
All other expenditure	96,243	85,144	123,161	128,856	(a) 243,786
Total Expenditure	3,658,484	4,227,453	4,781,591	5,118,360	6,086,677

(a) Includes £96,500 reserves for taxation and other special purposes.

The excess of receipts over expenditure for each of the last five years was:—1935, £2,452,965; 1936, £2,409,691; 1937, £2,458,958; 1938, £2,652,797; and 1939, £2,201,420.

The proportions that expenditure bore to receipts were—1935, 60 per cent.; 1936, 64 per cent.; 1937, 66 per cent.; 1938, 66 per cent.; and 1939, 73 per cent.

5. *Liabilities and Assets, 1935 to 1939.*—(i) *General.* The liabilities of the Australian institutions 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 loans on mortgage and policies; government, municipal and similar securities; shares; freehold property, etc. Loans on personal security are granted by very few of the Australian institutions.

(ii) *Australian Liabilities and Assets.* For various reasons several institutions do not attempt the division of liabilities and assets between the industrial and ordinary branches, and, therefore, the figures in the following tables relate to ordinary and industrial branches combined.

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: AUSTRALIAN LIABILITIES.

Heading.	Amount.				
	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Shareholders' capital, paid-up	1,439,251	1,497,020	1,500,738	1,568,264	1,568,711
Assurance and annuity funds	109,850,093	116,883,577	139,158,733	148,128,869	155,521,457
Other funds	16,294,586	17,090,234	4,011,958	4,095,575	4,815,865
Claims admitted but not paid	1,246,957	1,279,646	1,335,180	1,282,790	1,917,989
All other liabilities ..	3,283,206	3,570,071	4,323,550	4,762,201	4,825,677
Total Australian Liabilities ..	132,114,093	140,320,548	150,330,159	159,837,699	168,649,699

(a) Includes Industrial Department Assurance Funds of the Australian Mutual Provident Society which in previous years have been included with "Other Funds": 1937, £15,852,577; 1938, £17,030,511; and 1939, £18,153,201.

Separate details of Liabilities in Australia and outside Australia are not available for the following institutions:—Mutual Life and Citizens' Assurance Coy. Ltd., National Mutual Life Association, Western Australian Insurance Coy. Ltd., and Mutual Life Insurance Co. of New York. The figures above do not, therefore, contain any particulars of their liabilities. The aggregate Australian assets of these institutions included hereunder are as follows:—1935, £44,879,839; 1936, £48,012,199; 1937, £50,778,336; 1938, £53,252,622; and 1939, £55,400,382. Assets and liabilities of the Liverpool and London and Globe Insurance Company Ltd. are also excluded as separate details for Life and General Departments are not available.

Assets for the years specified are set out in detail in the table hereunder:—

ORDINARY AND INDUSTRIAL LIFE ASSURANCE: AUSTRALIAN ASSETS.(a)

Heading.	Amount.				
	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Government and municipal securities ..	94,854,302	98,905,982	109,521,627	113,485,999	115,712,296
Mortgages	40,932,324	45,724,422	50,401,868	55,507,924	59,621,516
Loans on companies' policies	20,837,744	21,172,947	21,448,626	22,971,925	24,543,231
Landed and house property	8,381,943	9,945,381	10,969,919	12,231,645	12,822,673
Life interests and reversions	288,050	251,632	223,446	110,443	234,392
Other investments ..	5,338,344	6,868,756	7,900,516	8,281,378	10,019,683
Outstanding premiums	964,990	971,176	957,562	1,043,071	1,086,729
Outstanding interest, dividends and rents	1,734,581	1,779,555	1,686,488	1,776,593	1,811,002
Cash	3,018,955	2,086,028	2,419,171	2,536,319	2,398,869
Establishment and organization accounts	1,125,668	1,136,650	1,128,658	1,107,688	1,101,409
All other assets ..	1,615,933	1,599,355	1,758,473	1,757,204	1,718,147
Total Australian Assets ..	179,092,834	190,441,884	208,416,354	220,810,189	231,069,947

(a) Excludes Australian assets of Liverpool and London and Globe Coy. Assets of other companies referred to above are included herein.

(iii) *Total Assets.* It has been thought desirable to restrict wherever possible the figures relating to life assurance to business in Australia. Several of the companies whose head offices are in Australia, however, transact a large amount of business elsewhere, namely, in New Zealand, in South Africa, and in the United Kingdom, while in the case of the foreign companies, the Australian business is insignificant compared with that done elsewhere. Particulars as to this foreign business of both Australian and foreign companies appear in *Finance Bulletin* No. 31.

The total Australasian assets of all life companies operating in Australia amounted to £292,683,579 in 1939, of which government and municipal securities (£152,354,842), and mortgages (£66,925,562), represented almost 75 per cent.

6. *New Policies issued in Australia, 1939.*—(i) *Ordinary Business.* During 1939 142,157 new policies were issued for £48,263,322. The average amount per policy was £340, as compared with an average of £342 per policy for all policies which were in existence at the end of 1938.

(ii) *Industrial Business.* New policies to the number of 385,498 were issued during the year, for a total of £18,541,620. The average per policy which was over £48 was in excess of the average of £45 for all industrial policies current at the end of 1938.

7. *Policies Discontinued in Australia.*—(i) *Ordinary Business.* The volume of business which from various causes becomes void in each year is always large. The number and amount of policies, including annuities, discontinued in the last three years and the reasons for discontinuance are given in the following table:—

ORDINARY LIFE ASSURANCE : POLICIES DISCONTINUED IN AUSTRALIA.(a)

Mode.	1937.		1938.		1939.	
	No. of Policies.	Amount.	No. of Policies.	Amount.	No. of Policies.	Amount.
		£		£		£
Death or maturity ..	22,138	5,278,808	21,870	5,266,062	22,662	5,626,101
Surrender ..	15,191	4,658,027	16,758	5,191,624	18,503	5,870,056
Forfeiture ..	37,627	12,649,162	39,602	13,767,082	39,433	13,410,488
Transfer ..	(b)—7	(b)—47,746	(b)—72	(b)—71,664	(b)—131	b—102,931
Total ..	74,949	22,538,251	78,158	24,153,104	80,467	24,803,714

(a) Includes Annuities.

(b) Transfers to Australian registers exceed transfers from Australia.

(ii) *Industrial Business.* The number of policies discontinued in this Branch each year is also very large. Of the total amount of discontinuances during 1939 only about 23 per cent. was due to death or maturity, while nearly 66 per cent. was due to forfeiture. The large increases in the number and amount of discontinuances by surrender as compared with 1938 are due to the fact that, by the terms of the Industrial Life Assurance Act 1938 (Victoria), holders of policies, in Victoria, of six years duration, were accorded the right of a cash surrender value.

In view of this statutory right being granted to policy-holders in Victoria, various offices conducting industrial assurance undertook to extend the principle throughout Australia as from 1st January, 1939. Prior to that date it was the practice to grant cash surrender values to holders of industrial policies in cases of hardship or necessity only.

The number and amount of discontinuances by forfeiture have accordingly decreased.

INDUSTRIAL LIFE ASSURANCE: POLICIES DISCONTINUED IN AUSTRALIA.(a)

Mode.	1937.		1938.		1939.	
	No. of Policies.	Amount.	No. of Policies.	Amount.	No. of Policies.	Amount.
		£		£		£
Death or maturity ..	63,299	2,243,021	68,945	2,498,193	73,585	2,758,930
Surrender ..	13,124	604,244	14,767	677,227	33,766	1,371,696
Forfeiture ..	181,817	8,560,354	194,694	9,355,299	154,328	7,976,340
Transfer ..	134	6,989	76	7,756	417	25,131
Total ..	258,374	11,414,608	278,482	12,538,475	262,096	12,132,097

(a) Includes Annuities.

8. **Conspectus of Australian Life Assurance Legislation.**—A conspectus of Australian Life Assurance Legislation as then existing appears in Official Year Book No. 18, pp. 1041—59.

§ 3. Fire, Marine and General Insurance.

1. **Australasian Companies*.**—(i) *General.* Returns in some detail are available showing the revenue and expenditure, assets and liabilities, and investments of 40 insurance companies having their head offices either in Australia, New Zealand, or Fiji. The business transacted in respect of premium income by these companies represents approximately 58 per cent. of the aggregate Australian business, some particulars of which are given in par. 2 below.

(ii) *Revenue and Expenditure.* The most important items of revenue and expenditure are given below. The trade surplus in 1938—39 was £1,296,698, or 13.36 per cent. of premium income.

FIRE, MARINE AND GENERAL INSURANCE COMPANIES: SUMMARY OF REVENUE AND EXPENDITURE.

Heading.	1934—35.	1935—36.	1936—37.	1937—38.	1938—39.
No. of Companies ..	40	40	40	40	40
	£	£	£	£	£
Premiums, less reinsurances ..	6,387,181	6,970,718	7,819,726	8,864,364	9,707,920
Losses ..	3,371,346	3,767,682	4,358,863	5,027,877	5,417,153
Expenses, commission and taxes ..	2,329,111	2,390,898	2,512,992	2,719,823	2,994,069
Trade surplus ..	686,724	812,138	947,871	1,116,664	1,296,698
Interest, rent, etc. ..	681,395	691,713	755,302	828,272	1,011,208
Total surplus ..	1,368,119	1,503,851	1,703,173	1,944,936	2,307,906
Dividends and bonuses paid ..	611,359	675,541	680,260	708,576	708,944
Ratio to premium income of—	%	%	%	%	%
(a) Losses ..	52.78	54.05	55.74	56.72	55.80
(b) Expenses, etc. ..	36.47	34.30	32.14	30.68	30.84
(c) Trade surplus ..	10.75	11.65	12.12	13.60	13.36

* The statistical information in this paragraph has been extracted from the *Australasian Insurance and Banking Record*.

(iii) *Liabilities and Assets.* The liabilities and assets for the same period are set out in the following table. Comparison of the results for 1938-39 (40 companies), with those for 1934-35 (40 companies) shows that paid-up capital increased by 4.1 per cent., while reserves increased by 26.3 per cent. Government securities represent an increasing proportion of assets.

FIRE, MARINE AND GENERAL INSURANCE COMPANIES.

Heading.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
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PAID-UP CAPITAL, RESERVES AND LIABILITIES.

	£	£	£	£	£
Paid-up capital	6,554,157	6,566,758	6,674,188	6,676,188	6,823,065
Reserves and reinsurance funds (a)	11,233,914	11,773,597	12,623,437	14,347,012	14,184,021
Undivided profits	837,255	988,361	954,871	949,172	1,186,969
Losses unsettled	890,106	1,057,319	1,309,361	1,633,225	1,629,354
Sundry creditors, etc.	1,511,909	1,632,589	1,833,367	2,141,813	2,093,733
Dividends, etc., to pay	358,139	423,613	428,751	453,877	418,722
Life assurance funds (b)	3,342,977	3,594,919	3,860,147	4,153,530	4,448,233
Total Liabilities	24,728,457	26,037,156	27,684,122	30,354,817	30,784,097

INVESTMENTS AND OTHER ASSETS.

	£	£	£	£	£
Loans on mortgage	689,508	906,802	923,781	1,190,444	953,499
Government securities, etc.	15,840,586	16,865,834	18,186,694	19,666,290	20,287,975
Landed and other property	3,164,536	3,066,336	3,158,269	3,434,926	3,683,085
Fixed deposits, etc.	1,969,170	1,973,553	2,001,642	1,933,967	1,946,707
Loans on life policies (b)	272,608	307,938	347,400	380,594	423,282
Investments	252,878	234,226	252,234	176,995	55,078
Cash and bills receivable	1,056,452	966,288	996,553	1,340,647	1,241,924
Sundry debtors and other assets	1,482,719	1,716,179	1,817,549	2,230,954	2,192,547
Total Assets	24,728,457	26,037,156	27,684,122	30,354,817	30,784,097

(a) Including amount required as reserves against unexpired risks. (b) Some of the companies transact Life Business.

2. *Aggregate Australian Business.*—(i) *States.* While the foregoing statements relate to those companies only whose head offices are located in Australia, New Zealand or Fiji, the following particulars which are somewhat restricted in the range of information are in respect of all companies operating in Australia.

The appended table shows for each State the aggregate premium income, less reinsurances and returns, and claims paid, less reinsurances, together with the proportions of losses on premiums for all classes of insurance other than life for the years 1937-38 and 1938-39.

FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND LOSSES.

State.	Premiums, less reinsurance and returns.		Losses, less reinsurance.		Proportion of Losses on Premiums.	
	1937-38.	1938-39.	1937-38.	1938-39.	1937-38.	1938-39.
	£	£	£	£	%	%
New South Wales ..	6,590,333	6,942,723	3,517,159	3,841,460	53.37	55.33
Victoria ..	4,411,492	4,504,447	1,913,732	2,193,869	43.38	48.70
Queensland ..	2,138,840	2,327,293	1,072,782	1,070,895	50.16	46.01
South Australia ..	1,201,582	1,245,391	421,629	487,236	35.09	39.12
Western Australia ..	1,320,314	1,372,956	762,869	730,778	57.78	53.23
Tasmania ..	427,383	457,109	166,600	204,315	38.98	44.70
All States ..	16,089,944	16,849,919	7,854,771	8,528,553	48.82	50.61

(ii) *Classes of Insurance.* The statement hereunder shows premiums and losses in respect of the principal classes of risks, with the proportions of losses on premiums for the years 1937-38 and 1938-39:—

FIRE, MARINE AND GENERAL INSURANCE : PREMIUMS AND LOSSES,
PRINCIPAL CLASSES OF RISK.

Class of Risk.	Premiums, less reinsurance and returns.		Losses, less reinsurance.		Proportion of Losses on Premiums.	
	1937-38.	1938-39.	1937-38.	1938-39.	1937-38.	1938-39.
	£	£	£	£	%	%
Fire ..	5,518,991	5,597,575	1,809,218	2,222,405	32.78	39.70
Workers' Compensation ..	4,043,723	4,360,755	2,878,345	2,972,163	71.18	68.16
Motor Vehicle ..	3,550,005	3,847,938	2,113,606	2,324,078	59.54	60.40
Marine ..	975,580	1,075,897	259,100	243,254	26.56	23.90
Personal Accident ..	535,375	554,046	241,633	263,368	45.13	47.54
All other ..	1,466,270	1,471,708	552,869	503,285	37.71	34.20
Total ..	16,089,944	16,849,919	7,854,771	8,528,553	48.82	50.61

The volume of business measured by the amounts of premium income shows that fire insurances represented about 34 per cent. of the total during 1937-38 and 33 per cent. during 1938-39, while next in importance were workers' compensation 25 per cent. during 1937-38 and 26 per cent. during 1938-39, and motor vehicles 22 per cent. in 1937-38 and 23 per cent. in 1938-39.

During the three years 1932-33 to 1934-35 less than 45 per cent. of the premium income was required on the average to meet losses. In 1935-36 and in 1936-37 this proportion rose to about 50 per cent., fell slightly during 1937-38 to approximately 49 per cent., and rose again to about 51 per cent. in 1938-39.

E. FRIENDLY SOCIETIES.

1. *General.*—Friendly societies are an important factor in the social life of the community, as probably more than one-third of the total population of Australia comes either directly or indirectly under their influence. Their total membership is almost 600,000, 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, even when due allowance is made for young and unmarried members, be more than doubled to arrive at an estimate of the number of persons who receive some direct benefit from these societies. 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 are conformable to the law, and that the scale of contribution is sufficient to provide the promised benefits. Societies are obliged to forward annual returns as to their membership and their finances to the Registrar, and reports are published in most of the States dealing with the returns received. The figures in the following tables are for the year 1938-39 in respect of all States except Tasmania where they relate to the calendar year 1939.

2. Number of Societies, Lodges and Members.—The number of different societies and lodges, the total number of benefit members at the end of the year, and their average number during the year are shown in the following table:—

FRIENDLY SOCIETIES: SOCIETIES, LODGES AND MEMBERS, 1938-39.

State.	Number of Registered Friendly Societies.	Number of Lodges.	Benefit Members at End of Year.	Average No. of Benefit Members during the Year.
New South Wales(a)	33	2,402	211,170	211,653
Victoria	77	1,477	187,330	188,186
Queensland	23	594	72,035	71,962
South Australia(b)	17	(c) 874	74,486	74,595
Western Australia	13	369	27,632	27,154
Tasmania	19	187	24,626	(d) 24,727
Total	182	5,903	597,279	598,277

(a) Excludes twenty-one miscellaneous societies consisting of Medical Institutes, Dispensaries, and Burial Societies. (b) Excludes Juvenile Branches with 14,924 members. (c) Lodges containing male and female branches counted as two branches. (d) Estimated.

3. Sickness and Death Returns.—Sick pay is generally granted for a number of months at full rates, then for a period at half rates, and in some societies is finally reduced to quarter rates. The following table shows the total number of members who received sick pay during the year, the number of weeks for which they received pay in the aggregate, and the average per member sick, and further the number of benefit members who died during the year, together with the proportion of deaths per thousand average members:—

FRIENDLY SOCIETIES: SICKNESS AND DEATH RETURNS, 1938-39.

State.	Number of Members who received Sick Pay.	Total Number of Weeks Sick Pay Granted.	Average Number of Weeks per Member Sick.	Benefit Members.	
				Deaths.	Proportion of deaths per 1,000 (Average).
New South Wales	52,340	522,174	9.98	2,708	12.79
Victoria	45,012	500,111	11.11	2,096	11.14
Queensland	(a) 14,876	(a) 144,719	9.73	725	10.08
South Australia (b)	18,109	215,393	11.89	934	12.52
Western Australia	6,326	58,469	9.24	245	9.02
Tasmania	5,057	49,701	9.83	321	12.98
Total	141,720	1,490,567	10.52	7,029	11.75

(a) Females counted as half members in these totals.

(b) Excludes Juvenile Branches.

4. Revenue and Expenditure.—(i) *Revenue.* The financial returns are not prepared in the same way in each State, but an attempt has been made in the subjoined table to group the revenue under the main headings:—

FRIENDLY SOCIETIES: REVENUE, 1938-39.

State.	Entrance Fees, Members' Contributions and Levies.	Interest, Dividends and Rents.	All other Revenue.	Total Revenue.
	£	£	£	£
New South Wales ..	767,621	208,651	29,769	1,006,041
Victoria	697,063	270,639	62,796	1,030,498
Queensland	248,415	92,784	(a)	341,199
South Australia ..	251,400	139,567	52,696	443,663
Western Australia ..	108,579	29,627	5,333	143,539
Tasmania	88,569	21,616	14,292	124,477
Total	2,161,647	762,884	164,886	3,089,417

(a) Included in interest, dividends and rents.

(ii) *Expenditure.* The returns relating to expenditure are in greater detail than those for revenue. The figures show that the excess of revenue for the year was £434,990 for Australia, representing about 14s. 7d. per average benefit member.

FRIENDLY SOCIETIES: EXPENDITURE, 1938-39.

State.	Sick Pay.	Medical Attendance and Medicine.	Sums Paid at Death of Members and Members' Wives.	Adminis- tration.	All other Expendi- ture.	Total Expendi- ture.
	£	£	£	£	£	£
New South Wales ..	278,738	306,029	89,368	164,570	27,931	866,636
Victoria	287,061	292,746	53,139	141,923	113,518	888,387
Queensland	92,943	105,037	37,800	55,576	(a)	291,356
South Australia ..	109,687	100,257	43,430	48,642	72,773	374,789
Western Australia ..	34,602	40,905	13,451	25,639	8,363	122,960
Tasmania	29,641	31,335	22,402	18,346	8,575	110,299
Total	832,672	876,309	259,590	454,696	231,160	2,654,427

(a) Included in administration.

It appears from the above figures that sick pay averaged about 27s. 10d. per average benefit member, but, as the returns include pay at half and quarter rates, and as the proportion of these to full rates is not stated, the average given is somewhat indefinite. Medical attendance and medicine cost about 29s. 4d. per average benefit member.

5. Funds.—The two foregoing tables show that the surplus of revenue over expenditure in all States amounted to £434,990 for the year. Accumulations of profits arising in the sickness and funeral funds of these societies are invested pending claims by members, and at the end of the year 1939 the total funds of friendly societies amounted to £17,345,498 (£20 os. 10d. per benefit member), invested principally on mortgage loans on members' homes, real estate, and in Government and Municipal securities.

F. PROBATES.

1. Probates and Letters of Administration.—The following particulars give some idea of the number and value of estates of deceased persons in respect of the year 1939. Owing to differences in legislation in the various States, however, the figures are not entirely comparable. The details for each State are shown in the table hereunder :—

PROBATES AND LETTERS OF ADMINISTRATION, 1939.

Particulars.	New South Wales, 1938-39. (a)	Victoria, 1939.	Queensland, 1938-39.	South Australia, 1939.	Western Australia, 1939.(b)	Tasmania, 1939.(c)	Total.
Probates—							
Estates No.	10,668	6,725	1,136	2,117	1,185	602	22,433
Gross Value £	(d)	22,960,292	5,221,406	7,994,317	3,228,583	1,514,125	640,918,723
Net Value £	26,202,317	20,158,346	(d)	7,095,663	2,647,247	1,315,924	657,419,497
Letters of Administration—							
Estates No.	(d)	1,675	227	218	374	145	e 2,639
Gross Value £	(d)	(f)	394,038	240,674	300,821	160,102	e 1,095,725
Net Value £	(d)	(f)	(d)	198,707	228,245	117,571	e 544,523
Total—							
Estates No.	10,668	8,400	1,363	2,335	1,559	747	25,072
Gross Value £	(d)	22,960,292	5,615,444	8,234,991	3,529,404	1,674,317	642,014,448
Net Value £	26,202,317	20,158,346	(d)	7,294,370	2,875,492	1,433,495	657,964,020

(a) Total estates of deceased persons assessed for Death Duty. (b) Applications lodged.
 (c) Applications dealt with. (d) Not available. (e) Incomplete. (f) Included with Probates.

2. Intestate Estates—The number of intestate estates administered by the Curator during the year, and the amount of unclaimed money paid into Consolidated Revenue in each State during the year 1939, are given hereunder :—

INTESTATE ESTATES, 1939.(a)

Particulars.	N.S.W.	Vic. (b)	Q'land. (b)	S. Aust.	W. Aust.	Tas.	Total. (c)
Intestate estates placed under control of Curator during 1939—							
Number ..	(d)	e 234	693	195	474	70	1,666
Gross Value .. £	(d)	e 113,308	228,529	101,820	(f) 43,978	9,043	496,678
Net Value .. £	(d)	e 99,494	178,241	75,371	(d)	(d)	353,106
Unclaimed money paid into Consolidated Revenue by Curator during 1939 £	(d)	11,501	(g)8,982	1,406	5,092	(d)	26,981

(a) Not included above in the table of Probates and Letters of Administration granted. (b) Year ended 30th June, 1939. (c) Incomplete. (d) Not available. (e) Estates dealt with by Curator. (f) Amount collected during year. (g) Paid to Unclaimed Moneys Fund.

CHAPTER XXVI. PUBLIC FINANCE.

A.—GENERAL.

In early issues of the Official Year Book the plan was adopted of including in a single Chapter under the general heading of "Finance" the more important particulars available in connexion therewith. A departure was made in Official Year Book No. 25 by dividing the subject into separate Chapters with the two broad headings of "Public Finance" and "Private Finance". Notwithstanding that the financial transactions of Local Government Bodies and certain statutory Governmental Bodies come within the category of Public Finance, it is convenient to deal with these in a separate Chapter.

The subject of "Public Finance" has been dealt with in this Chapter under the two major divisions of Commonwealth Finance—including currency and coinage—and State Finance. The close financial relations between the Commonwealth and States particularly since the Financial Agreement has been in operation, however, demand a combination of these two divisions under the heading of Commonwealth and State Finance.

Certain banking activities are conducted by both Commonwealth and State Governments, but as the services provided are essentially connected with the banking system of the Commonwealth they have been included in the section of the Private Finance Chapter relating to Banking. An exception has been made in the case of the Commonwealth Bank Note Issue Department, which is dealt with in §9 "Currency and Coinage" of this Chapter.

B.—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 Chapter IV., "Finance and Trade," being Sections 81 to 105 of the Constitution Act. 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 to the Commonwealth from the States of certain specified departments, while Section 51, in outlining the powers of the Commonwealth Parliament, implies the transfer or creation of various other departments. Section 87 deals with the financial relations between the Commonwealth and the States. These matters have been treated in some detail in previous issues of the Official Year Book and on p. 868 of this issue a *résumé* is given of the constitutional obligations upon the Commonwealth regarding payments 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 Commonwealth Government.**—(i) *General.* The Commonwealth Government, like the State Governments, bases its accounts mainly upon three funds, the Consolidated Revenue Fund, the Trust Fund and the Loan Fund. The last mentioned fund came into existence in the financial year 1911-12, but on the outbreak of the War of 1914-19 it became so important that it was treated in two parts—a General Loan Fund mainly for purposes of Public Works, and a War Loan Fund for purely war purposes. From the year 1923-24 inclusive the loan expenditure on War Service Homes was debited against works loan expenditure. Previously such expenditure had been a charge on War Loans. Since the year mentioned the transactions of the War Loan Fund consists mainly of credits arising from repayments of expenditure during previous years.

(ii) *Receipts, Expenditure, etc.* The following statement shows for the period 1923-24 to 1939-40 the Receipts, Expenditure, Excess Receipts or Deficiency for the year, together with the accumulated result and the payments made from the excess receipts.

The receipts and expenditure on account of the Balance of Interest on States' Debts payable by the States to the Commonwealth under the Financial Agreement has been excluded.

COMMONWEALTH CONSOLIDATED REVENUE : RECEIPTS, EXPENDITURE, ETC.

Year.	Receipts.	Expenditure.	Ordinary Transactions.		Payments from Excess Receipts.	Accumulated Result.	
			Excess Receipts.	Deficiency.		Excess Receipts.	Deficiency. (a)
	£	£	£	£	£	£	£
1923-24 ..	65,078,688	62,500,354	2,578,334	..	07,415,755	2,591,153	..
1924-25 ..	67,697,124	67,178,748	518,376	..	..	3,109,529	..
1925-26 ..	70,203,572	70,577,204	..	373,632	£2,450,000	285,897	..
1926-27 ..	75,544,382	72,908,785	2,635,597	..	(d) 100,000	2,821,494	..
1927-28 ..	73,808,227	76,438,464	..	2,630,237	£2,820,000	..	2,628,743
1928-29 ..	74,894,799	77,253,774	..	2,358,975	..	..	4,987,718
1929-30 ..	77,143,389	78,614,392	..	1,471,003	..	..	6,458,721
1930-31 ..	69,566,920	80,324,539	..	10,757,619	..	..	17,216,340
1931-32 ..	71,532,298	70,218,207	1,314,091	..	..	1,314,091	..
1932-33 ..	73,512,809	69,966,201	3,546,608	..	..	4,860,699	..
1933-34 ..	73,941,953	72,640,383	1,301,570	..	..	6,162,269	..
1934-35 ..	77,309,105	76,657,900	711,205	..	g) 160,000	713,474	..
1935-36 ..	82,203,341	78,635,621	3,567,720	..	(h) 713,474	3,567,720	17,002,866
1936-37 ..	82,807,977	81,531,419	1,276,558	..	h) 567,720	1,276,558	15,935,146
1937-38 ..	89,458,154	85,963,421	3,494,733	..	h) 276,558	3,494,733	15,658,588
1938-39 ..	95,064,790	94,437,481	627,309	..	h) 494,733	627,309	15,658,588
1939-40 ..	111,913,784	108,985,409	2,928,375	..	(i) 627,309	2,928,375	15,658,588

(a) Met by temporary advance from loan fund. (b) £4,915,755 was used for debt redemption, and £2,500,000 transferred to Trust Funds. (c) Naval construction, £1,500,000; Main Roads, £750,000; Science and Industry investigations, £100,000; and prospecting for oil and precious metals, £100,000. (d) Prospecting for oil and precious metals. (e) Naval construction and Defence reserve, £2,250,000; Science and Industry investigation, £250,000; Civil Aviation, £200,000; Purchase of radium, £100,000; and Geophysical Survey of Australia, £20,000. (f) Excludes Interest, etc., paid on behalf of New South Wales and not recovered at 30th June, 1931. (g) Defence equipment, £4,160,000 and Financial Assistance to States, £2,000,000. (h) See table following.

(iii) *Excess Receipts.* Particulars of the excess receipts, accumulated balances and allocation of excess receipts for each of the past five years are as follows:—

COMMONWEALTH CONSOLIDATED REVENUE : EXCESS RECEIPTS.

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Accumulated balance	713,474	3,567,720	1,276,558	3,494,733	627,309
Excess receipts	3,567,720	1,276,558	3,494,733	627,309	2,928,375
Total for year	4,281,194	4,844,278	4,771,291	4,122,042	3,555,684
Expenditure from excess receipts—					
Grants to States	500,000	500,000	..	..	..
Defence equipment .. .. .	..	2,000,000	..	3,494,733	627,309
Post Office Works Provision .. .. .	..	..	1,000,000	..	..
Reduction of deficit	213,474	1,067,720	276,558	..	..
Total	713,474	3,567,720	1,276,558	3,494,733	627,309
Accumulated balance	3,567,720	1,276,558	3,494,733	627,309	2,928,375

It is proposed to allocate the accumulated surplus at 30th June, 1940, for Defence equipment.

§ 2. Consolidated Revenue Fund.

Division I.—Nature of Fund.

The provisions made for the formation of a Commonwealth Consolidated Revenue Fund, and the means to be adopted for operating on the fund, are contained in Sections 81, 82 and 83 of the Constitution.

Division II.—Revenue.

1. **General.**—The following table furnishes details of the revenue from each source and the amount per head of population under each of the main headings during the years 1935-36 to 1939-40 :—

COMMONWEALTH CONSOLIDATED REVENUE : SOURCES.

Source.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Taxation	63,617,306	62,773,452	69,048,485	74,036,899	90,010,663
Percentage of Total .. %	77.4	75.8	77.2	77.9	80.4
Per head of population (a) ..	£9 8 6	£9 4 6	£10 1 2	£10 13 10	£12 17 4
Business Undertakings	15,222,652	16,222,910	17,167,943	17,876,401	18,466,125
Percentage of Total .. %	18.5	19.6	19.2	18.8	16.5
Per head of population (a) ..	£2 5 1	£2 7 8	£2 10 0	£2 11 7	£2 12 9
Territories (b)	313,770	300,253	339,975	355,401	415,412
Percentage of Total .. %	0.4	0.4	0.4	0.4	0.4
Per head of population (a) ..	£0 0 11	£0 0 11	£0 1 0	£0 1 0	£0 1 2
Other Revenue—					
Interest, etc. (c)—					
Coinage	1,338,510	1,074,423	1,044,076	1,144,014	1,145,989
Defence	167,719	295,167	362,705	127,764	180,458
Civil Aviation	38,025	41,731	29,244	151,208	166,880
Health	4,080	4,418	5,55	5,745	11,171
Patents, Trade Marks, etc.	18,090	67,134	17,621	18,204	15,740
Bankruptcy	58,783	62,163	61,435	67,914	61,982
Commerce and Marine—	29,517	30,569	36,441	30,770	35,817
Wool Levy .. .. .	..	72,805	77,523	74,396	84,361
Marine	218,915	216,406	182,463	158,137	147,315
Other	11,206	Dr. 1,104	32,697	18,682	21,854
Pension Contributions	31,261	28,769	839,883	766,730	985,993
Net Profit on Australian Note Issue	855,720	898,585	10,940	..	..
Balance of Trust Accounts	72,837	477,048	219,107	232,525	104,024
Other	204,950	243,248	..	..	..
Total	3,049,613	3,511,362	2,910,751	2,796,089	3,021,584
Percentage of Total .. %	3.7	4.2	3.2	2.9	2.7
Per head of population (a) ..	£0 9 0	£0 10 4	£0 8 6	£0 8 1	£0 8 8
Grand Total	82,203,341	82,807,977	89,458,154	95,064,790	111,913,784
Per head of population (a) ..	£12 3 6	£12 3 5	£13 0 8	£13 14 6	£15 19 11
Balance of Interest on States' Debts—recoverable from States	24,786,646	25,081,605	25,580,374	25,584,456	26,299,098

(a) Based on mean population of each financial year. (b) Excluding Railways. (c) Excludes balance of Interest on States' Debts payable by States.

2. **Taxation.**—(i) *Total Collections.* (a) *Amount.* Collections under each heading for the years 1935-36 to 1939-40 are given below :—

TAXATION : TOTAL COLLECTIONS.

Heading.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Customs	28,068,870	28,782,784	32,972,666	31,160,462	34,830,306
Excise	13,368,847	14,210,248	15,410,339	16,471,903	18,994,600
Sales Tax	9,432,483	8,008,427	8,023,886	9,308,334	12,196,175
Flour Tax	1,150,724	Dr. 12,193	3,025	1,808,972	2,486,070
Land Tax	1,326,991	1,435,465	1,368,444	1,489,436	1,645,829
Income Tax	8,775,562	8,556,014	9,398,503	11,882,440	16,430,313
Gold Tax .. .. .	..	..	..	..	1,214,621
Estate Duties	1,472,860	1,792,600	1,872,654	1,915,352	2,212,690
Entertainments Tax	13	107	1	..	59
War-time Profits Tax	20,956	..	Dr. 1,033	..	..
Total Taxation	63,617,306	62,773,452	69,048,485	74,036,899	90,010,663
Percentage on Total Revenue ..	77.4	75.8	77.2	77.9	80.4

(b) *Percentages of Total Collections.* The following table shows the percentages of the collections under each class of taxation on the total collections for the last five years :—

TAXATION : PERCENTAGES ON TOTAL COLLECTIONS.

Heading.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	%	%	%	%	%
Customs	44.1	45.9	47.8	42.1	38.7
Excise	21.0	22.6	22.3	22.3	21.1
Sales Tax	14.8	12.7	11.6	12.6	13.5
Flour Tax	1.8	..	..	2.4	2.8
Land Tax	2.1	2.3	2.0	2.0	1.8
Income Tax	13.8	13.6	13.6	16.0	18.3
Gold Tax .. .. .	..	..	..	..	1.3
Estate Duties	2.4	2.9	2.7	2.6	2.5
Entertainments Tax .. .. .	..	..	..	..	..
War-time Profits Tax .. .. .	..	..	..	..	..
Total	100.0	100.0	100.0	100.0	100.0

(ii) *Customs Revenue. (a) Classified.* Particulars for the five years 1935-36 to 1939-40 are furnished in the following table :—

COMMONWEALTH CUSTOMS REVENUE : CLASSIFICATION.

Classes.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Stimulants	1,140,687	1,157,707	1,174,494	1,165,503	1,449,899
Narcotics	2,940,367	3,041,660	3,243,490	3,256,496	3,379,971
Sugar	1,618	4,204	5,380	7,238	5,812
Agricultural products	1,218,026	1,286,331	1,268,440	1,365,938	1,465,400
Apparel and textiles ..	2,635,663	2,752,891	3,169,485	2,801,103	3,217,479
Metals and machinery	2,235,917	2,195,393	2,762,044	2,385,882	2,161,144
Oils, paints, etc. ..	7,681,244	8,401,394	9,631,390	9,927,346	12,305,774
Earthenware, etc. ..	441,431	460,849	534,912	599,980	448,585
Drugs and chemicals ..	284,718	265,068	312,532	309,984	370,991
Wood, wicker and cane	529,402	726,350	779,677	739,057	649,237
Jewellery, etc. ..	415,606	451,511	522,365	480,916	586,270
Leather, etc. ..	361,469	412,714	497,950	477,163	504,682
Paper and stationery	459,206	447,048	488,716	453,548	435,677
Vehicles	1,793,188	2,186,245	2,696,560	2,061,762	1,555,746
Musical instruments ..	22,186	30,041	27,956	31,589	19,608
Miscellaneous articles	1,029,470	920,854	1,173,635	1,023,556	1,140,649
Primage	4,678,358	3,833,165	4,450,901	3,913,578	4,623,131
Special War Duty .. .. .	..	..	..	..	305,227
Other receipts	200,314	209,359	232,739	249,823	205,024
Total Customs Revenue ..	28,068,870	28,782,784	32,972,666	31,160,462	34,830,306

(b) *States.* The following table shows the Customs Duties collected in each State during the last five years:—

COMMONWEALTH CUSTOMS DUTIES : COLLECTIONS IN EACH STATE.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales (a)	12,141,828	12,807,629	14,831,986	14,070,130	15,228,153
Victoria	9,453,887	9,338,212	10,626,241	9,970,730	11,437,572
Queensland	2,682,260	2,652,736	2,955,788	2,977,792	3,419,454
South Australia (b) ..	1,861,204	1,906,269	2,332,090	2,090,020	2,447,372
Western Australia ..	1,585,967	1,704,018	1,814,435	1,653,906	1,843,192
Tasmania	343,724	373,920	412,126	397,884	454,563
Total	28,068,870	28,782,784	32,972,666	31,160,462	34,830,306

(a) Includes Australian Capital Territory.

(b) Includes Northern Territory.

(iii) *Excise Revenue.* (a) *Classified.* Particulars concerning the amount of Excise collected under each head during each of the five years ended 30th June, 1940, are given hereunder:—

COMMONWEALTH EXCISE REVENUE : CLASSIFICATION.

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Beer	5,621,051	6,109,526	6,893,739	7,288,579	8,780,470
Spirits (a)	1,478,700	1,492,318	1,579,486	1,604,220	1,899,931
Tobacco (b)	5,087,211	5,283,641	5,592,297	6,286,766	6,566,312
Cigarette papers ..	424,853	450,516	468,059	530,868	545,057
Petrol	630,068	706,884	681,870	581,978	989,869
Matches	81,039	77,438	81,510	81,960	91,903
Wireless valves ..	23,000	66,017	89,242	74,247	94,928
Playing cards	10,614	12,231	10,906	11,432	14,252
Licences	12,311	11,677	12,630	11,913	11,878
Total Excise Revenue ..	13,368,847	14,210,248	15,410,339	16,471,903	18,994,600

(a) Includes Concentrated Grape Must.

(b) Includes Cigars and Cigarettes.

(b) *States.* Excise collections in each State for the last five years were as follows:—

COMMONWEALTH EXCISE REVENUE : COLLECTIONS IN EACH STATE.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales ..	6,063,761	6,724,164	7,373,723	6,940,301	8,479,925
Victoria	4,100,054	4,265,286	4,871,017	5,687,832	6,533,146
Queensland	1,212,596	1,250,125	1,304,390	1,538,042	1,548,510
South Australia (a) ..	932,145	856,021	717,676	1,018,148	1,029,912
Western Australia ..	914,603	957,684	972,131	1,103,481	1,186,165
Tasmania	145,688	156,968	171,402	184,099	216,942
Total	13,368,847	14,210,248	15,410,339	16,471,903	18,994,600

(a) Includes Northern Territory.

(iv) *Other Taxation.* (a) *Collections paid to Revenue.* The following statement shows particulars of the collections on account of Land Tax, Estate Duty, Income Tax, War-time (1914-19) Profits Tax, Entertainments Tax, Sales Tax and Flour Tax during the last ten years War-time (1914-19) Profits and Entertainments taxes are now inoperative, particulars shown relating chiefly to arrears and refunds. Particulars of the Gold Tax introduced during 1939-40 are now included. A War-time (Company) Tax in respect of the present War and operative during 1940-41 has been imposed. Owing to certain accounting technicalities the figures herein differ slightly from those on the following pages showing further particulars of the several taxes.

OTHER TAXATION COLLECTIONS : AUSTRALIA.

Year ended 30th June—	Land Tax.	Estate Duty.	Income Tax.	Gold Tax.	War-time (1914-19) Profits Tax.	Entertainments Tax.	Sales Tax.	Flour Tax.
	£	£	£	£	£	£	£	£
1931 ..	2,758,598	2,068,865	13,604,374	..	Dr. 794	186,661	3,472,854	..
1932 ..	2,156,765	1,385,811	13,481,982	..	Dr. 33,755	133,072	8,425,067	..
1933 ..	1,650,311	1,126,996	10,878,718	..	Dr. 5,750	134,042	9,309,276	..
1934 ..	1,325,393	1,511,296	9,314,768	..	1,567	51,216	9,695,689	1,253,957
1935 ..	1,281,424	1,507,827	8,761,619	..	Dr. 17,663	Dr. 599	8,554,076	798,334
1936 ..	1,326,991	1,472,860	8,775,562	..	20,956	13	9,432,483	1,150,724
1937 ..	1,435,465	1,792,600	8,556,014	..	..	107	8,008,427	Dr. 12,193
1938 ..	1,368,444	1,872,651	9,398,503	..	Dr. 1,033	1	8,023,886	3,025
1939 ..	1,489,436	1,915,352	11,882,440	..	..	..	9,308,334	1,808,972
1940 ..	1,645,829	2,212,690	16,430,313	1,214,621	..	59	12,196,175	2,486,070

"Other Taxation" is assessed and collected in general by the Commissioner of Taxation. The organization comprises an office in each State assessing taxpayers who are concerned with that State only, and a Central Office assessing taxpayers whose interests are in more than one State. Taxes, however, may be paid to any office, so that the sums actually received by any office do not correspond to the assessments made by that office and frequently differ by very large amounts. Consequently the actual receipts by any State office, e.g., of income tax by the Queensland office, may include tax in respect of Central Office or New South Wales assessments, and, therefore, may not be a proper measure of income tax paid on account of income derived from Queensland.

The actual receipts by the various offices are the figures of necessity used by the Treasury for accounting purposes, and may be called the "Treasury" figures. These figures have been used in issues of the Official Year Book prior to No. 25. In order to give a more significant picture of the taxation in States, these figures have been discarded, and in their place are given figures supplied by the Commissioner of Taxation, which refer strictly to the assessments made on account of the State specified. The total of these figures do not quite agree with the total Treasury figures owing to certain technicalities of accounting, but the differences are small. The Taxation Office figures give a fair comparison between States, e.g., in taxation paid per head, but do not give the absolute measure of taxation, because the Central Office collections, which include taxation on account of all States, have not been allocated to the States. In the absence of precise information, it may be assumed as a rough approximation that Central Office collections may be divided among States in proportion to State office collections. It is probable, however, that a somewhat larger share is derived from the more populous States, New South Wales and Victoria.

(b) *Land Tax.* Commonwealth Land Tax was first imposed on the unimproved value of land in 1910-11. The following table shows the rates of Land Tax imposed for each assessment year from 1933-34 to 1940-41 :—

LAND TAX : RATE OF TAX PER £1 OF TAXABLE VALUE.

(T = Taxable Value.)

Assessment Year.	Residents.			Absentees.(a)				
	Taxable Value £1 to £75,000.	Taxable Value over £75,000.		Taxable Value £1 to £80,000.		Taxable Value over £80,000.		
		First £75,000.	Excess over £75,000.	First £5,000.	Excess over £5,000.	First £5,000.	Next £75,000.	Excess over £80,000.
1933-34 to 1937-38	$\frac{45}{100} \left(1 + \frac{T}{18,750} \right)$	d.	d.	d.	$\frac{45}{100} \left(2 + \frac{T-5,000}{18,750} \right)$	d.	d.	d.
1938-39 to 1939-40	$\left(\frac{1}{2} + \frac{T}{37,500} \right)$	2.25	4.05	.45	$\left(1 + \frac{T-5,000}{37,500} \right)$	.45	2.7	4.5
1940-41	$\left(1 + \frac{T}{18,750} \right)$	2.5	4.5	.5	$\left(2 + \frac{T-5,000}{18,750} \right)$	.5	3	5
		5	9	1	$\left(2 + \frac{T-5,000}{18,750} \right)$	1	6	10

(a) Absentees are not allowed an exemption of £5,000 granted to residents.

Land Tax receipts in each State and Central Office for the years 1935-36 to 1939-40 were as follows. The particulars shown differ slightly from those quoted in (a) above.

LAND TAX RECEIPTS.

State, etc.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Central Office	471,168	482,127	438,813	525,959	578,769
New South Wales	460,030	530,603	505,143	509,913	568,840
Victoria	266,033	277,718	277,512	290,798	333,194
Queensland	24,827	27,159	26,887	29,568	30,086
South Australia	55,104	54,878	48,295	55,280	64,865
Western Australia	42,881	51,835	59,074	63,854	53,351
Tasmania	12,036	11,539	12,237	12,879	16,388
Total	1,332,079	1,435,859	1,367,961	1,488,251	1,645,493

(c) *Estate Duty.* The Commonwealth Estate Duty Act 1914 and Estate Duty Assessment Acts 1914-1928 imposed a duty on the estates of deceased persons the net value of which exceeded £1,000. The rate of tax, where the value of the estate for duty did not exceed £2,000, was £1 per cent. Where the value of the estate for duty exceeded £2,000 the rate was increased by one-fifth of £1 for each £1,000 or part thereof in excess of £2,000, to a maximum rate of £15 per cent. on estates over £71,000. Where the estate passed to a widow, children or grand-children, duty was payable at two-thirds of the ordinary rate.

Under the Estate Duty Assessment Act (No. 12 of 1940) the Estate Duty Assessment Act 1914-1928 was amended to allow the following Statutory Exemption, namely :—
(a) Where the whole of the estate passes to the widow, children or grand-children of the deceased, the sum of £2,000 decreasing by £1 for every £10 by which the value exceeds £2,000 up to £10,000, and thereafter decreasing by £1 for every £2 by which the value

exceeds £10,000; (b) When no part of the estate passes to the widow, children or grand-children the sum of £1,000 decreasing by £1 for every £10 by which the value exceeds £1,000 up to £6,000, and thereafter decreasing by £1 for every £8 by which the value exceeds £6,000; (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).

Under the Estate Duty Act (No. 13 of 1940) the following new rates were fixed: £1 to £10,000, 3 per cent.; £10,001 to £20,000, 3 per cent. to 6 per cent.; £20,001 to £100,000, 6 per cent. to 18 per cent.; £100,001 to £500,000, 18 per cent. to 20 per cent.; over £500,000, 20 per cent.

Particulars of the collections in each State and Central Office for the last five years are appended. Owing to certain accounting technicalities, these figures differ slightly from the Treasury returns given in (a) above.

ESTATE DUTY RECEIPTS.

State, etc.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Central Office	721,724	989,688	902,266	999,202	1,165,049
New South Wales	314,912	324,365	396,003	422,567	391,978
Victoria	237,474	308,719	397,386	294,406	413,269
Queensland	74,117	76,784	85,335	60,041	82,153
South Australia	71,497	66,447	44,295	82,789	82,456
Western Australia	41,307	21,110	31,809	34,074	51,806
Tasmania	8,426	10,253	12,506	15,960	21,528
Northern Territory	73	..	119	..	..
Total	1,469,530	1,797,366	1,869,719	1,909,039	2,208,239

Particulars relating to the number and value of estates with duty assessed for each of the last five assessment years are given in the table hereunder:—

ESTATE DUTY ASSESSMENTS.

Particulars.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of Estates	No.	8,157	8,887	8,803	9,085	9,681
Gross Value (a) ..	£,000	52,965	56,009	59,419	60,964	65,699
Dutiable Value ..	£,000	42,594	45,121	47,723	49,340	53,069
Duty Payable ..	£	1,454,450	1,467,355	1,836,946	1,852,956	2,002,283
Average dutiable value	£	5,222	5,077	5,421	5,431	5,482
Average duty per estate	£	178	165	209	204	207

(a) Assessed values.

(d) *Income Tax.* The first Commonwealth Income Tax was levied during the year 1915-16. The Income Tax Assessment Act 1936 consolidated and amended the laws relating to the imposition, assessment and collection of income tax. Full details of this Act and a commentary on the Income Tax law are contained in an explanatory handbook* which also gives particulars relating to the pre-existing law. The following table shows the rate of tax on personal exertion and property incomes for the assessment years 1935-36 to 1940-41.

* "Explanatory handbook showing the differences between the Income Tax Assessment Act 1936 and the Income Tax Assessment Act 1922-1934" issued by the Commissioner of Taxation under the authority of the Commonwealth Treasurer, August, 1936.

INCOME TAX : RATE OF TAX PER £1 OF TAXABLE INCOME.—INDIVIDUAL.(a)

(T = Taxable Income(b))

Assessment Year.	Personal Exertion.			
	Taxable Income £1-£6,900.	Taxable Income Over £6,900.		
		First £6,900.	Excess over £6,900.	
1935-36	$\frac{85}{100} \left(3 + \frac{T}{160} \right)$	<i>d.</i> 39.20625	<i>d.</i> 76.5	
1936-37 and 1937-38	$\frac{76.5}{100} \left(3 + \frac{T}{160} \right)$	35.28562	68.85	
1938-39	$\frac{87.975}{100} \left(3 + \frac{T}{100} \right)$	40.57846	79.1775	
1939-40	$\frac{96.7725}{100} \left(3 + \frac{T}{160} \right)$	44.63632	87.09525	
	Taxable Income £1-£400.	Taxable Income £401-£1,500.	Taxable Income Over £1,500.	
			First £1,500.	Excess over £1,500.
1940-41	<i>d.</i> 16	$\left(16 + \frac{T-400}{25} \right)$	<i>d.</i> 60	<i>d.</i> 120

Assessment Year.	Property Income.					Further Tax. (c)
	Taxable Income. £1-£500.	Taxable Income £501-£1,500.	Taxable Income £1,501-£3,700.	Taxable Income over £3,700.		
				First £3,700.	Excess over £3,700.	
1935-36	$\left(3 + \frac{T}{100} \right)$	$\left(1 + \frac{14T}{1,000} \right)$	$\left(4\frac{1}{2} + \frac{23T}{2,000} \right)$	<i>d.</i> 47.3	<i>d.</i> 90	<i>d.</i> 12
1936-37 and 1937-38	$\frac{90}{100} \left(3 + \frac{T}{100} \right)$	$\frac{90}{100} \left(1 + \frac{14T}{1,000} \right)$	$\frac{90}{100} \left(4\frac{1}{2} + \frac{23T}{2,000} \right)$	42.57	81	..
1938-39	$\frac{103.5}{100} \left(3 + \frac{T}{100} \right)$	$\frac{103.5}{100} \left(1 + \frac{14T}{1,000} \right)$	$\frac{103.5}{100} \left(4\frac{1}{2} + \frac{23T}{2,000} \right)$	48.9555	93.15	..
1939-40	$\frac{113.85}{100} \left(3 + \frac{T}{100} \right)$	$\frac{113.85}{100} \left(1 + \frac{14T}{1,000} \right)$	$\frac{113.85}{100} \left(4\frac{1}{2} + \frac{23T}{2,000} \right)$	53.85105	102.465	..
	Taxable Income £1-£400.	Taxable Income £401-£1,200.	Taxable Income over £1,200.			
			First £1,200.	Excess over £1,200.		
1940-41	<i>d.</i> 20	$\left(20 + \frac{T-400}{20} \right)$	<i>d.</i> 60	<i>d.</i> 120		

(a) Minimum Tax payable is 10s. (b) Taxable Income is the Income remaining after all deductions (including the Statutory Exemption) have been made. (c) Payable on Taxable Income from property dividends, etc., in excess of £250.

Where income is derived from both Personal Exertion and Property sources the rates applicable to each part are those which would apply if the whole of the income had been derived from that source.

A statutory exemption is allowed from income after concessional deductions for wife, children, State taxes paid, insurance premiums, medical and hospital expenses, etc., have been made. For the years 1935-36 to 1939-40 this statutory exemption was £250 less £1 for every £2 by which the income exceeded £250. For 1940-41 the statutory exemption has been reduced to £200 less £1 for every £1 by which the income exceeds £200. The rate of tax payable by residents and non-residents is the same. Prior to 1936-37, however, non-residents were not allowed the statutory exemption.

Companies are assessed at a flat rate of tax, and are not allowed the benefit of a statutory exemption. The rate for the assessment years 1935-36 to 1937-38 was 12d. per £1 of taxable income. For the year 1938-39 it was 13.8d., and 24d. for 1939-40 and 1940-41. In addition to the 1935-36 tax a further tax of 12d. was payable on income from property, dividends, etc. An addition to the 1940-41 tax provides for the payment by non-private companies of a super tax of 1s. in £1 on all income over £5,000 and a tax of 2s. in £1 on undistributed profits.

The following table shows the receipts from income tax in each State and Central Office for the last five years. As previously mentioned, the totals differ from figures already given in (a) above.

INCOME TAX RECEIPTS.

State, etc.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	- £	£	£	£
Central Office	2,883,792	2,949,280	3,476,651	4,040,671	6,358,554
New South Wales	2,615,474	2,489,536	2,580,359	3,608,044	4,356,403
Victoria	1,823,450	1,773,769	1,952,543	2,397,469	3,276,642
Queensland	577,306	503,891	529,904	738,119	974,386
South Australia	398,578	370,895	413,877	551,129	654,190
Western Australia	349,374	340,369	326,144	369,314	528,296
Tasmania	107,393	104,684	123,902	153,671	224,506
Northern Territory	2,434	2,294	2,585	4,417	6,840
Total	8,757,801	8,534,718	9,405,965	11,862,834	16,379,817

In the table above, differences in the rapidity of assessment and collection will affect the comparison from year to year. With this proviso, the State collections (excluding Central Office collections) relative to population at the beginning of the year specified may be given:—

INCOME TAX RECEIPTS PER HEAD OF POPULATION.

(EXCLUDING CENTRAL OFFICE COLLECTIONS.)

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	s. d.	s. d.	s. d.	s. d.	s. d.
New South Wales	19 9	18 8	19 2	26 6	31 9
Victoria	19 10	19 3	21 1	25 8	34 10
Queensland	10 11	10 3	10 8	14 9	19 2
South Australia	13 8	12 8	14 1	18 7	22 0
Western Australia	15 8	15 1	14 4	16 1	22 8
Tasmania	9 5	9 1	10 8	13 1	19 0
Six States	17 6	16 6	17 5	22 9	28 0

Agreements made in 1923 between the Commonwealth and all the States, except Western Australia, provide that the Commonwealth tax and the State tax shall be collected by an officer acting for the Commonwealth and State, the Commonwealth appointing the State Commissioner as Deputy Commonwealth Commissioner for the State under the Income Tax Assessment Act of the Commonwealth. Provisions are included relating to the transfer of officers, the accounting of receipts and the division of expenses. A joint form of income tax return is to be used in cases where the income is derived in one State only. The respective agreements were to remain in operation for a period of five years, and thereafter until the expiration of not less than six calendar months, upon notice in writing by either party to the agreement.

In Western Australia an arrangement had previously been made, whereby the Commonwealth undertook the collection of the State income tax.

An amendment to the Income Tax Assessment Act 1936-1940 (The Income Tax Assessment Act (No. 2) 1940) provides for the collection of income tax by deduction of instalments from salaries and wages. The rates of deduction range from sixpence in the £1 on salaries and wages exceeding £3 17s., but not exceeding £4 10s. per week, to a maximum of 5s. in the £1 on salaries and wages exceeding £18 10s. per week. Although the deduction is made at the time of payment of the salary or wages, income tax is payable on annual assessment and provision exists for an employee, on payment of the tax assessed, to obtain a certificate of exemption which authorizes his employer to discontinue making further deductions during the currency of the certificate.

(e) *War-time (Company) Tax.* The War-time (Company) Tax Assessment Act 1940 and the War-time (Company) Tax Act 1940 provide for a tax on the amount by which the taxable profit, derived by any company during the preceding accounting period exceeds the statutory percentage of 8 per cent. on capital employed in the business.

The rate of tax ranges from 4 per cent. of the first 1 per cent. of profits in excess of 8 per cent. to 60 per cent. of profits in excess of 14 per cent.

Provision is made in the Act to increase the statutory percentage in cases where it is considered just that the statutory percentage should be increased, and to deduct from the tax payable any super tax payable under the Income Tax Act 1940.

Private and Co-operative Companies as defined by the Income Tax Assessment Act 1936-1940, Mutual Life Assurance Companies, and companies whose taxable profit does not exceed £1,000 or is derived from commissions, fees or charges for services rendered are exempted from the tax.

(f) *Sales Tax.* The Sales Tax was imposed in August, 1930, as part of the Budget proposals for the year 1930-31. The operation of the tax is controlled chiefly by a system of registration of taxpayers, and 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 used in primary production. Owing to the need for additional revenue for war purposes, certain of these exemptions were withdrawn as from 22nd November, 1940.

The following are the rates of sales tax imposed since its inception in August, 1930 : 2½ per cent. to 10th July, 1931 ; 6 per cent. to 25th October, 1933 ; 5 per cent. to 10th September, 1936 ; 4 per cent. to 21st September, 1938 ; 5 per cent. to 8th September, 1939 ; 6 per cent. to 2nd May, 1940 ; 8½ per cent. to 21st November, 1940 and 5 per cent., 10 per cent. and 15 per cent. from 22nd November, 1940.

The differential rates applicable as from 22nd November, 1940 relate to different classes of goods specified in Schedules in the Sales Tax (Exemptions and Classifications) Act 1935-1940. The rate of 5 per cent. applies (with one exception) to goods which were formerly exempt but have been brought back into the taxable field. The rate of 15 per cent. is applied to goods which may be described as being of a non-essential nature.

Particulars of the net amount of sales tax payable, and the sales of taxable, non-taxable and exempt goods in each State for 1939-40 are given in the following table. The figures regarding "Tax payable" are in respect of the periods 1st July to 30th June of each year adjusted on account of rebates of tax allowed in returns to taxpayers as deductions, while those relating to sales are in respect of the periods 1st June to 31st May.

SALES TAX AND AMOUNT OF SALES, 1939-40.(a)

State, etc.	Gross Taxable Sales.	Non-Taxable Sales.	Sales of Exempt Goods by Registered Persons.	Net Amount of Sales on which Sales Tax was payable.	Tax Collected.		
					Taxation Department.	Customs Department.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
New South Wales ..	85,813	89,443	116,342	79,631	4,638	486	5,124
Victoria ..	70,783	79,398	96,590	65,222	3,783	310	4,093
Queensland ..	23,709	10,976	38,757	22,866	1,286	85	1,371
South Australia ..	14,323	11,271	24,752	12,863	759	70	829
Western Australia ..	9,523	4,049	19,581	9,408	552	42	594
Tasmania ..	2,937	1,651	6,396	2,583	158	25	183
Northern Territory	18	2	61	16	1	1	2
Total ..	207,106	196,790	302,479	192,589	11,177	1,019	12,196

(a) The difference between the amount of tax collected and the amount of tax calculated at the ruling rate on the net amount of sales on which tax was payable is due to rebates allowed as deductions from tax without the corresponding deduction from "Net Sales".

Similar details for Australia as a whole for each year since the inception of the tax in 1930-31 are given in the following table:—

SALES TAX AND AMOUNT OF SALES, 1930-31 TO 1939-40.

Year.	Gross Taxable Sales.	Non-Taxable Sales.	Sales of Exempt Goods by Registered Persons.	Net Amount of Sales on which Sales Tax was payable.	Tax Collected.		
					Taxation Department.	Customs Department.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1930-31 ..	145,805	102,663	170,434	138,756	3,179	293	3,472
1931-32 ..	156,608	119,971	189,634	147,730	7,931	501	8,432
1932-33 ..	158,469	135,843	195,285	147,217	8,797	594	9,391
1933-34 ..	162,852	135,877	191,370	150,614	8,166	540	8,706
1934-35 ..	170,256	140,735	202,320	156,791	7,967	614	8,581
1935-36 ..	188,228	156,692	219,756	174,312	8,779	703	9,482
1936-37 ..	187,433	162,046	251,820	174,443	7,522	644	8,166
1937-38 ..	198,083	180,117	283,622	183,479	7,342	707	8,049
1938-39 ..	197,809	171,810	280,282	183,206	8,559	758	9,317
1939-40 ..	207,106	196,790	302,479	192,589	11,177	1,019	12,196
Total ..	1,772,649	1,502,544	2,287,002	1,649,227	79,419	6,373	85,792

In the foregoing tables exempt sales relate to goods exempted from sales tax under the Sales Tax Exemptions Act, while non-taxable sales relate to goods on which tax is not payable at the time of sale. In this latter case the sale has been made to a registered taxpayer who has quoted his certificate. These sales, however, become taxable before passing into consumption, unless used for a purpose exempted under the Act.

The figures given 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 above statistics.

(g) *Flour Tax.* A Flour Tax of £4 5s. per ton operated from 4th December, 1933 to 31st May, 1934, and of £2 12s. 6d. per ton from 7th January, 1935 to 24th February, 1936. On 5th December, 1938, the Flour Tax was again imposed in a more or less permanent form. The new legislation provided for a tax on flour (not exceeding £7 10s. per ton) varying as the price of wheat varies from 5s. 2d. a bushel at Williamstown. Provision is made in another Act for the imposition of a special tax on wheat when world parity rises above 5s. 2d. at Williamstown.

Net collections after allowing for refunds made and tax outstanding were as follows :—

FLOUR TAX.

State, etc.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales	450,785	Dr. 8,744	2,400	704,152	951,185
Victoria	320,770	Dr. 465	972	531,577	696,428
Queensland	153,994	Dr. 1,074	Dr. 329	237,854	334,040
South Australia	98,580	Dr. 283	Dr. 15	141,048	203,964
Western Australia	80,873	Dr. 1,623	Dr. 3	123,856	162,908
Tasmania	40,468	Dr. 4	..	55,346	72,220
Northern Territory .. ..	..	..	..	..	Dr. 8
Total	1,145,470	Dr. 12,193	3,025	1,793,833	2,420,737

(h) *Wool Levy.* The Wool Tax Acts, assented to in May, 1936, provide for a levy on all wool grown in Australia and shorn on or after 1st July, 1936. The levy is collected through wool-brokers and dealers who furnish quarterly returns on which the levy is assessed. The levy is payable prior to export on wool not previously taxed in the hands of a broker or dealer. The rates applicable are :—6d. per bale; 3d. per fadge or butt; and 1d. per bag. The amounts levied during the past four years were as follows :—

WOOL LEVY.

State.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£
New South Wales	32,616	32,689	28,889	35,175
Victoria	15,778	17,030	15,493	17,236
Queensland	11,070	13,962	14,451	15,738
South Australia	6,462	7,246	8,243	8,613
Western Australia	4,768	5,211	5,795	6,054
Tasmania	1,211	1,385	1,525	1,545
Total	72,805	77,523	74,396	84,361

(i) *Gold Tax.* The Gold Tax Collection Act 1939-1940 and the Gold Tax Act 1939 impose a tax on all gold, delivered to the Commonwealth Bank of Australia or to an agent of that bank on and after 15th September, 1939, of 50 per cent. of the amount by which the price payable by the bank for each fine ounce of gold delivered exceeds £9. The amount of tax collected during 1939-40 was £1,214,621.

(j) *Taxation Legislation.* A Royal Commission was appointed by the Commonwealth Government in October, 1932, to inquire into and report upon the simplification and standardization of the taxation laws of the Commonwealth and of the States so far as they relate to similar subject matters of taxation, e.g., income tax, land tax and death duties, and to make recommendations regarding uniformity in legislation and procedure. Four reports covering the field of inquiries were presented and as the result of subsequent conferences between the authorities concerned a substantial degree of legislative uniformity has been attained. Regular conferences are held to ensure the maintenance of uniformity.

3. *Business Undertakings.*—(i) *Postal Revenue.* Particulars concerning this branch of revenue for each of the financial years from 1935-36 to 1939-40 are contained in the following table:—

COMMONWEALTH POSTAL REVENUE.

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Private boxes and bags ..	68,488	70,589	73,039	74,235	74,799
Commission on money orders and postal notes ..	265,999	268,860	280,533	288,580	287,441
Telegraphs	1,289,772	1,370,518	1,377,623	1,372,300	1,401,204
Telephones	6,521,747	7,061,245	7,571,635	8,039,580	8,482,940
Postage	5,933,884	6,170,144	6,498,212	6,635,977	6,660,807
Radio	365,877	429,047	492,995	516,170	549,439
Miscellaneous	393,277	416,214	438,164	423,641	421,823
Total	14,839,044	15,786,617	16,732,201	17,350,491	17,878,453

The foregoing particulars do not include repayments of the States' proportion of pensions or contribution of officers towards pensions under State Acts.

Further particulars of Postal Revenue are given in Chapter V. "Transport and Communication."

(ii) *Railway Revenue.* The Commonwealth Government is responsible for four lines—the Trans-Australian, the Central Australian, the North Australian and the Australian Capital Territory lines. The appended table shows the amounts paid into the credit

of the Consolidated Revenue Fund on account of each of these railways for the last five years :—

COMMONWEALTH RAILWAY REVENUE.

Railway.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Trans-Australian ..	248,939	270,161	267,754	330,643	368,218
Central Australian ..	98,634	122,698	124,417	137,521	146,921
North Australian ..	30,656	36,440	37,768	50,471	60,797
Australian Capital Territory	5,379	6,994	5,803	7,275	11,736
Total	383,608	436,293	435,742	525,910	587,672

Further particulars are given in Chapter V. "Transport and Communication" (part B, Railways).

4. **Other Sources of Revenue.**—The most important investments of the Commonwealth Government from which interest is derived are—Loans to States, General Trust Funds, Loans placed in London, Fixed Deposits with the Commonwealth and other Banks, and certain advances. In 1939-40 the total included interest received from the British Government on Development and Migration Loans and advances for miscellaneous purposes, payable by States; Interest on General Trust Fund Investments; Interest, Nauru Island Agreement; repayments of principal and interest in respect of War Service Homes advances; and repayment of advances to the States for the benefit of Settlers. As previously mentioned, the "Balance of Interest on States' Debts" payable by States under the Financial Agreement has not been included in the "Grand Total" in the detailed statement.

Division III.—Expenditure.

1. **Nature of Commonwealth Expenditure.**—The disbursements by the Commonwealth Government of the revenue collected by it fell naturally, under the "book-keeping" system, into three classes, namely :—

- (a) Expenditure on transferred services ;
- (b) Expenditure on new services ; and
- (c) Payment to States of surplus revenue ;

Of these three, only the first two were actual expenditure, the last being merely a transfer, the actual expenditure being incurred by the States. In accordance with the provisions of the Constitution, the expenditure on transferred services was, under the "book-keeping" system, debited to the several States in respect of which such expenditure was incurred, while the expenditure on new services was distributed *per capita*. Surplus Commonwealth revenue was paid to the States monthly. Until the end of the year 1903-4, new works, etc., for transferred departments were treated as transferred expenditure, and were charged to the States on whose behalf the expenditure had been incurred. In subsequent years all such expenditure was regarded as expenditure on new services, and distributed amongst the States *per capita*. Under the arrangement which superseded the "book-keeping" system, a specific subsidy of 25s. per head of population was made annually by the Commonwealth to the States, and there was no further debiting of expenditure to the several States. The States Grants Act 1927 provided for the abolition of the *per capita* payments as from 30th June, 1927. From 1st July, 1928, the temporary provisions of the agreement between the Commonwealth and the several States under the Financial Agreement Act 1928 were operative, and on 1st July, 1929, the Commonwealth Government took over the debts of the State under this agreement which was ratified by all Governments concerned.

2. **Details of Expenditure from Consolidated Revenue.**—(i) *General.* The following table gives details of the expenditure from Consolidated Revenue during the last five years. The "Balance of Interest on States' Debts" (recoverable from the States) is placed at the foot of the table, but is not included in the "Grand Total" therein. Details for each Department, as constituted at 30th June, 1940, are stated hereafter.

* For an exposition of the "book-keeping system" see Official Year Book No. 6, p. 780.

COMMONWEALTH EXPENDITURE FROM CONSOLIDATED REVENUE.

Departments, etc.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
War and Repatriation (1914-19)					
Services (a)	18,241,399	18,723,953	18,948,300	19,256,812	18,834,542
Defence and War (1939-40) Services—					
War Services (1939-40)					15,315,993
Army (including Co-ordination)	1,592,868	2,023,372	2,060,732	3,324,650	3,770,571
Navy	2,254,799	2,580,704	2,497,733	2,755,085	3,005,000
Air	551,171	948,671	1,289,973	1,384,971	2,043,831
Supply and Development (including					
Munitions)	414,682	436,966	523,550	596,653	748,415
Governor-General	28,240	34,245	35,067	32,765	30,787
Parliament	390,120	505,287	516,494	444,873	449,876
Prime Minister	1,307,414	1,263,210	1,510,259	1,355,842	1,509,582
External Affairs	70,339	63,104	58,263	70,168	117,782
Treasury	2,277,647	1,958,085	2,403,259	2,582,362	2,663,351
Attorney-General	239,702	252,158	263,319	281,497	276,557
Interior	1,267,482	972,733	1,018,526	1,275,392	1,257,593
Civil Aviation	102,271	275,563	129,013	328,150	494,060
Trade and Customs	878,762	891,292	993,503	1,064,124	1,032,890
Health	268,921	241,443	402,003	338,155	289,174
Commerce	978,937	1,122,242	1,149,511	1,208,927	1,170,951
Business Undertakings—					
Postmaster-General	12,523,878	13,203,176	13,964,473	15,028,233	15,285,709
Railways	1,016,968	1,076,077	1,140,315	1,351,041	1,472,521
Total, Business Undertakings	13,540,846	14,279,253	15,104,788	16,379,274	16,758,230
Territories—					
Australian Capital Territory	566,289	585,869	615,401	637,228	656,078
Northern Territory	190,832	262,113	381,931	402,899	382,804
Papua	68,509	55,821	48,825	48,830	48,610
New Guinea	3,308	13,431	5,058	5,532	5,988
Norfolk Island	7,200	4,409	5,911	5,471	4,071
Total, Territories	836,138	921,643	1,057,126	1,099,960	1,097,551
New Works	3,237,317	4,319,562	3,551,776	6,565,268	(b) 3,036,445
Invalid and Old-age Pensions	12,797,726	13,998,793	15,798,687	15,991,782	16,459,245
Maternity Allowances	335,552	370,150	400,004	436,614	416,964
Payments to or for States—					
Interest on States' Debts	7,584,912	7,584,912	7,584,912	7,584,912	7,584,912
Sinking Fund on States' Debts	1,350,880	1,416,548	1,454,385	1,477,976	1,536,055
Special Grants	2,750,000	2,430,000	2,350,000	2,020,000	2,020,000
Federal Aid Roads	2,778,899	3,039,530	4,149,492	4,266,556	4,455,845
Other Grants	100,000	551,000	450,500	300,000	100,000
Total to or for States (c)	14,573,691	15,021,990	15,989,289	15,649,444	15,696,812
Relief to Primary Producers	2,449,597	327,000	262,166	2,014,713	2,509,266
Grand Total(d)	78,635,621	81,531,419	85,963,421	94,437,481	108,985,409
Per head of Population .. .. .	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Excess Receipts (e)	11 12 11	11 19 8	12 10 6	13 12 8	15 11 7
	3,567,720	1,276,558	3,494,733	627,309	2,928,375
Balance of Interest on States' Debts—payable by States	24,786,646	25,081,605	25,580,374	25,584,456	26,299,098

(a) For details see § 5.

(b) Excludes Defence and War (1939-40) Services paid from Loan Fund

(c) Excludes balance of interest payable on States' Debts (recoverable from States). (d) Excludes amounts expended from excess receipts of previous years (see page 845).

(e) Appropriated for payment of Invalid and Old-age Pensions in following year.

The items included under the general heads above are referred to in some detail later. Particulars for each department do not include the expenditure on new works which is given in (iii) (a) below.

(ii) *Cost of Departments.*—(a) *Governor-General.* Section 30 of the Constitution enacts that, until the Commonwealth Parliament otherwise provides, there shall be payable out of the Consolidated Revenue Fund for the salary of the Governor-General an annual sum of ten thousand pounds, and a proviso is made that the salary of the Governor-General shall not be altered during his continuance in office. The expenditure in connexion with the Governor-General and establishment for the five years 1935-36 to 1939-40 was as follows :—

EXPENDITURE : GOVERNOR-GENERAL AND ESTABLISHMENT.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Salary	9,882	10,000	10,000	10,000	10,000
Governor-General's Establishment	10,773	13,641	15,350	12,305	11,379
Contingencies (a)	3,266	5,913	5,003	5,381	4,746
Interest and Sinking Fund	4,319	4,691	4,714	5,079	4,662
Total	28,240	34,245	35,067	32,765	30,787

(a) Represents official services outside the Governor-General's personal interests, and carried out mainly at the instance of the Government.

(b) *Parliament.* Under this head have been grouped all the items of expenditure connected with the parliamentary government of the Commonwealth for the last five years. Although the administration of the Electoral Act and the conduct of elections come within the functions of the Department of the Interior, the expenditure in connexion therewith is fundamentally incurred on account of the parliamentary government system, and for that reason is included herein.

EXPENDITURE : COMMONWEALTH PARLIAMENT.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Salaries of Ministers	13,260	15,130	15,782	19,325	19,941
Allowances to Senators	29,549	32,617	33,877	36,171	36,200
Allowances to Members of House of Representatives	61,685	67,283	70,058	74,900	75,211
Officers, staff, contingencies, etc.	59,101	61,591	64,183	71,120	69,958
Rent, repairs, maintenance, etc.	10,962	12,601	12,873	14,679	18,560
Printing	23,075	19,000	22,217	22,000	22,815
Travelling expenses of Members and others	28,968	30,472	33,347	41,429	40,215
Electoral Office	79,375	81,357	86,102	85,143	86,164
Election expenses	611	100,042	101,628	3,232	978
Administration of Electoral Act	18,017	28,232	29,391	20,029	30,066
Interest and Sinking Fund	42,243	38,283	38,463	41,444	38,016
Miscellaneous	23,274	18,679	8,573	15,401	11,752
Total	390,120	505,287	516,494	444,873	449,876

In Section 66 of the Constitution provision is made for the payment from Consolidated Revenue of an annual sum for the salaries of Ministers, and Section 48 specifies the amount of the allowance to each Senator and each Member of the House of Representatives. These amounts, together with subsequent increases will be found on pp. 14 and 17 of this issue.

(c) *Prime Minister's Department.* This department was created during the financial year 1911-12. In addition to the services indicated below, this department administers the external Territories of New Guinea, Papua, Nauru and Norfolk Island. For convenience, particulars of expenditure on account of these Territories are shown hereinafter under that heading. The expenditure for the last five years is shown in the following table :—

EXPENDITURE : PRIME MINISTER'S DEPARTMENT.(a)

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Salaries, contingencies and miscellaneous	198,215	239,259	(b)472,322	236,221	224,840
Audit Office	38,061	36,587	38,046	38,434	35,697
Rent, repairs, etc.	9,373	7,981	6,568	8,120	10,789
Public Service Board's Office	42,185	49,825	52,807	50,688	50,972
High Commissioner's Office	54,523	59,217	57,945	81,369	90,482
Interest and Sinking Fund	790,516	679,279	630,018	613,696	518,133
Mail Service, Pacific Islands	40,000	40,700	40,346	49,077	41,159
Council for Scientific and Industrial Research	126,685	140,534	177,435	197,764	242,808
Pensions and Superannuation	7,856	9,828	9,772	10,473	10,702
North Australia Survey .. .. .	..	..	25,000	10,000	10,000
National Oil Pty. Ltd. Agreement .. .. .	..	..	..	60,000	274,000
Total	1,307,414	1,263,210	1,510,259	1,355,842	1,509,582

(a) Excluding Territories, see page 868. (b) Includes special appropriation of £250,000 for Science and Industry.

(d) *Department of External Affairs.* The Department of External Affairs was dissociated from the Prime Minister's Department in 1935-36. Its functions include, *inter alia*, communications with British diplomatic missions and consulates on political matters, foreign affairs, inter-Imperial and Dominion political relations, treaties and international agreements, and League of Nations matters, etc. During 1939-40 representatives of the Commonwealth were installed in Washington and Ottawa. Expenditure for the years 1935-36 to 1939-40 are given in the following table :—

EXPENDITURE : EXTERNAL AFFAIRS.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Salaries and General	7,827	12,417	14,215	20,129	19,964
Legation, Washington .. .. .	..	..	..	..	11,917
High Commissioner, Ottawa .. .. .	..	..	..	..	7,254
Contribution, League of Nations Secretariat	52,687	42,929	34,112	43,329	44,870
Miscellaneous	9,825	7,758	9,936	6,710	(a) 33,777
Total	70,339	63,104	58,263	70,168	117,782

(a) Includes Grants of £10,000 to the Finnish Government for Red Cross purposes, £10,000 to the Polish Government for relief of distress and £9,597 to the Turkish Government for relief of distress caused by earthquake.

(e) *Department of the Treasury.* The sub-departments under the control of the Commonwealth Treasurer are the Treasury, the Pensions Department, the Taxation Office, the Supply and Tender Board, the Superannuation Fund Management Board, and the Bureau of Census and Statistics which was transferred from the Department

of Home Affairs on 13th April, 1932. Details of the expenditure of this department for the last five years are given in the following table :—

EXPENDITURE : DEPARTMENT OF THE TREASURY.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Treasury	49,678	50,868	52,234	56,528	66,400
Taxation Office	547,751	579,629	595,238	618,537	631,692
Pensions and Maternity Allowance Office	123,089	125,084	133,864	138,634	140,775
Superannuation Board	6,286	6,847	7,987	8,623	7,691
Census and Statistics	30,022	37,021	47,696	60,939	62,589
Census	23,932	16,207	9,789	4,113	1,387
Rent, repairs, etc.	16,841	18,006	17,406	23,088	18,085
Interest and Sinking Fund Exchange	775,388	601,695	675,250	911,004	957,002
Loan Conversion expenses	637,998	445,197	579,668	514,240	482,427
Gold Tax Collection	8	..	126,522	1,588	..
Miscellaneous	66,654	77,531	(a)157,605	(b)245,068	182,491
Departmental Expenditure	2,277,647	1,958,085	2,403,259	2,582,362	2,663,351
Invalid and Old-age Pensions (c)	12,797,726	13,998,793	15,798,687	15,991,782	16,459,245
Maternity Allowances	335,552	370,150	400,004	436,614	416,964
Total	15,410,925	16,327,028	18,601,950	19,010,758	19,539,560

(a) Includes £96,602 Works and Services. (b) Includes £180,311 for administration and payments to approved societies in connexion with National Insurance. (c) Includes maintenance of pensioners in charitable institutions.

(f) *Attorney-General's Department.* Details for the five years 1935-36 to 1939-40 are furnished hereunder :—

EXPENDITURE : ATTORNEY-GENERAL'S DEPARTMENT.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Attorney-General's Office	20,179	22,985	19,307	19,699	20,438
Crown Solicitor's Office	24,322	26,712	24,869	27,642	28,219
Salaries of Justices of High Court	18,417	18,500	18,500	18,500	18,500
High Court expenses	14,540	14,308	16,639	15,615	15,248
Court of Conciliation and Arbitration	19,748	19,593	22,372	24,046	26,052
Public Service Arbitrator's Office	3,031	3,501	3,721	5,919	3,932
Rent, repairs, etc.	19,523	18,333	14,539	15,131	15,137
Patents, Trade Marks, etc.	53,285	59,346	67,686	71,126	63,635
Investigation Branch	11,537	11,817	13,336	16,219	19,098
Bankruptcy	36,281	37,838	42,249	44,551	44,126
Reporting Branch	10,965	10,653	11,115	13,922	13,371
Miscellaneous	7,874	8,572	8,986	9,127	8,801
Total	230,702	252,158	263,319	281,497	276,557

(g) *Department of the Interior.* In April 1932, the Departments of Home Affairs and Works were abolished, and the services under the control of these departments were assumed by a new department styled the Department of the Interior. The Bureau of Census and Statistics, formerly under the Department of Home Affairs, was, however, transferred to the Department of the Treasury. The Commonwealth Railways and the Northern and Australian Capital Territories, which are administered by the Department of the Interior, are for convenience respectively included under Railways (o) and Territories (p) hereinafter. The Electoral Office was previously attached to the Department of Home Affairs, but, as was the case in previous years, the expenditure of this branch is included under Parliament, in (b) above.

Particulars of the expenditure for the last five years on services under the control of this Department are as follows:—

EXPENDITURE: DEPARTMENT OF THE INTERIOR.(a)

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Salaries, Contingencies and Miscellaneous—	£	£	£	£	£
Administrative ..	155,956	175,048	204,553	380,550	462,441
Meteorological Bureau ..	38,413	44,455	60,675	80,107	43,938
Solar Observatory ..	5,354	5,600	6,587	6,816	8,793
Forestry Branch ..	5,670	6,922	8,009	10,436	10,545
Rent, Repairs and Maintenance ..	13,691	16,930	14,851	17,618	18,537
Pensions and Retiring Allowances (b) ..	18,725	19,069	19,985	20,567	21,033
Petroleum Prospecting ..	256,500	2,800	..	..	..
Interest ..	713,363	639,109	637,926	690,061	619,607
Sinking Fund ..	59,810	62,800	65,940	69,237	72,699
Total	1,267,482	972,733	1,018,526	1,275,392	1,257,593

(a) Excludes Territories, Railways and Electoral Office.

(b) Includes Superannuation.

(h) *Defence Services.* During the year 1938-39 the Munitions Supply Branch of the Department of Defence was created a separate department, under the name of Supply and Development. Similarly, the Civil Aviation Branch was created the Department of Civil Aviation. In 1939-40, however, the Departments of Defence Co-ordination, the Navy, the Army, Air, Supply and Development and Munitions were created. Although distinct departments, particulars of each for the last five years have been grouped under the general heading of Defence Services.

EXPENDITURE: DEFENCE SERVICES.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Defence Co-ordination—	£	£	£	£	£
Salaries and General ..	21,892	26,873	29,986	41,223	111,475
National Register ..	..	..	..	4,410	60,828
Man-power Committee ..	..	..	..	..	11,686
Rent, Repairs and Maintenance ..	2,999	4,631	2,764	3,885	2,807
Superannuation ..	..	..	..	..	3,749
Total	24,891	31,504	32,750	49,518	196,835
Navy—					
Salaries, General Expenses, Services, etc. ..	2,038,439	2,311,159	2,215,156	2,592,328	2,829,193
Audit (Proportion) ..	2,548	2,434	2,634	2,475	2,672
Pensions and Retiring Allowances (a) ..	4,053	4,302	4,309	4,578	4,643
Rent, Repairs, etc. ..	22,800	26,064	15,465	28,072	28,717
Interest and Sinking Fund ..	73,868	88,862	91,550	127,632	139,775
Exchange ..	113,091	146,983	168,669	(b)	(b)
Total	2,254,799	2,580,704	2,497,783	2,755,085	3,005,000
Army—					
Salaries, General Expenses, Services, etc. ..	1,254,014	1,556,194	1,670,933	2,941,264	3,177,246
Audit (Proportion) ..	5,946	5,678	7,610	6,110	12,145
Pensions and Retiring Allowances (a) ..	43,872	48,328	52,187	54,835	49,863
Rent, Repairs, etc. ..	42,590	61,845	46,652	65,117	117,545
Interest and Sinking Fund ..	172,694	167,750	170,661	207,806	214,270
Exchange ..	48,861	152,073	79,939	(b)	(b)
Miscellaneous ..	..	..	..	..	c) 2,600
Total	1,567,977	1,991,868	2,027,982	3,275,132	3,573,669

(a) Includes Superannuation. Services.

(b) Exchange charged to votes concerned.

(c) Meteorological

EXPENDITURE : DEFENCE SERVICES—*continued.*

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Air—					
Salaries, General Expenses, Services, etc.	£ 472,892	£ 677,073	£ 983,008	£ 1,303,577	£ 1,939,319
Audit					2,186
Rent, Repairs, etc.	24,757	22,736	11,772	11,777	13,433
Interest and Sinking Fund	23,697	24,745	28,297	64,119	75,295
Exchange	25,321	219,444	262,003	(b)	(b)
Superannuation	4,504	4,673	4,803	5,498	7,606
Miscellaneous					(c) 6,000
Total	551,171	948,671	1,289,973	1,384,971	2,043,839
Supply and Development—					
Salaries and General				35,698	137,085
Rent, Repairs, Maintenance				334	9,950
Total .. .. .	..	..	..	36,032	147,035
Munitions—					
Munitions Factories	360,729	375,133	459,477	477,695	512,883
Audit					2,429
Superannuation	235	282	484	393	1,221
Interest and Sinking Fund	53,718	61,527	63,589	82,513	84,847
Total	414,682	436,965	523,550	560,601	601,380
Grand Total, Defence Services	4,813,520	5,989,713	6,372,038	8,062,359	9,567,738

(a) Includes Superannuation. (b) Exchange charged to votes concerned. (c) Meteorological Services.

(i) *War (1939-40) Services.* In addition to the expenditure on Defence Services described above, a sum of £15,315,993 was expended from revenue on War Services. Particulars are as follows :—

EXPENDITURE : WAR (1939-40) SERVICES.

Details.	1939-40.
	£
Permanent Naval Forces—	
Salaries and General	700,000
Auxiliary Vessels for Local Defence	600,000
Other Naval	659,226
Military Forces—	
Pay and allowances	5,646,000
Camp expenses and general services	1,800,000
Arms, armament, ammunition, machinery, equipment, etc... .. .	4,000,000
Other Military	310,000
Munitions—	
Maintenance of factories, working credits for annexes, etc.	760,000
Other Munitions	53,644
Interest and Sinking Fund on Loans for war purposes	543,362
Miscellaneous	243,761
Total	15,315,993

(j) *Civil Aviation.* Particulars of expenditure on Civil Aviation for the years 1935-36 to 1939-40 are as follows :—

EXPENDITURE : DEPARTMENT OF CIVIL AVIATION.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Civil Aviation—					
Salaries and General	40,686	53,320	71,862	89,946	133,124
Development of Civil Aviation .. .	52,875	211,032	42,816	102,232	238,134
Meteorological Services .. .. .	..	..	..	..	58,000
Rent, Repairs and Maintenance	3,573	5,948	6,570	8,428	12,674
Interest and Sinking Fund	5,137	5,263	5,818	11,625	10,663
Other .. .. .	..	..	(a) 1,927	(a) 55,919	(a) 41,465
Total	102,271	275,563	129,043	328,150	494,060

(a) Empire Air Services.

(k) *Department of Trade and Customs.* Under this head have been included the expenditure of all the sub-departments under the control of the Minister for Trade and Customs, in addition to the amounts payable as bounties and the expenses in connexion therewith. Particulars for the five years 1935-36 to 1939-40 are given in the following table :—

EXPENDITURE : DEPARTMENT OF TRADE AND CUSTOMS.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40
	£	£	£	£	£
Chief Office(a)	64,745	79,706	88,755	88,016	96,744
Customs—States	520,036	553,310	589,475	621,425	629,955
Audit (Proportion)	11,610	11,086	12,000	11,786	11,400
Pensions and Superannuation	44,947	45,548	44,906	45,063	47,008
Rent, Repairs, etc.	11,722	11,539	11,096	7,373	7,075
Bounties	175,422	153,878	210,485	225,636	134,809
Interest and Sinking Fund	35,358	31,418	31,870	34,321	31,535
Miscellaneous	14,922	4,807	4,916	30,504	(b) 74,364
Total	878,762	891,292	993,503	1,064,124	1,032,890

(a) Includes Tariff Board and Film Censorship. (b) Includes £70,419 remission of duty on materials imported for ships constructed for the Commonwealth Government.

(l) *Department of Health.* This department came into existence in the financial year 1921-22. Details of expenditure for the last five years are as follows:—

EXPENDITURE : DEPARTMENT OF HEALTH.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Central Administration ..	33,227	37,073	40,308	42,456	43,134
States—Salaries, Contingen- cies, etc.	79,368	83,621	88,414	93,050	91,907
Interest and Sinking Fund ..	21,497	22,060	22,255	23,661	22,117
Rent and repairs	10,415	14,404	12,284	14,102	10,907
Pensions and Superannuation	2,634	2,673	2,664	2,870	3,015
Subsidy, Cattle Tick Con- trol	54,450	48,350	69,450	69,450	59,450
Medical Research	4,184	4,851	30,000	30,000	10,000
Aerial Medical Services sub- sidy .. ..	..	4,626	5,000	5,000	7,500
Miscellaneous	(a) 63,146	23,785	(b) 131,628	(c) 57,566	(d) 41,144
Total	268,921	241,443	402,003	338,155	289,174

(a) Includes grant, maternal and infant welfare, £50,000. (b) Includes National Health Campaign, £100,000. (c) Includes reserve of essential drugs and medical equipment, £39,430. (d) Includes reserve of drugs, etc., £13,445 and Commonwealth Council for National Fitness, £18,222.

Other items included in "Miscellaneous" are expenses in connexion with the Commonwealth X-ray and Radium Laboratory, maternal and infant hygiene, nutrition investigations, etc.

(m) *Department of Commerce.* The Department of Commerce was created in April, 1932, by the amalgamation of the Departments of Markets and of Transport. Commonwealth Railways, formerly administered by the Minister for Transport, were transferred to the control of the Minister for the Interior on the amalgamation in 1932. Some details relating to the creation of the Departments of Markets and Transport are given in Official Year Book No. 25, pp. 295-6. Particulars of the expenditure of the Department of Commerce for the last five years are given below:—

EXPENDITURE : DEPARTMENT OF COMMERCE.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Salaries, Contingencies and Miscellaneous—					
Administrative	41,918	45,042	49,916	58,218	51,683
Marine	206,199	206,199	206,966	208,129	211,506
Administration of Com- merce Act	127,039	141,313	168,216	174,876	190,274
Australian National Travel Association	10,000	15,000	20,000	20,000	15,000
Oversea Trade Publicity ..	25,000	37,500	37,500	47,016	17,000
Commercial Intelligence					
Abroad	34,351	32,814	38,795	47,248	49,827
Wool Publicity and Research	..	64,541	77,921	73,816	83,577
Assistance Marketing Pri- mary Produce	(a) 15,808	(a) 189	..	..	..
Fruit Bounties	74,300	124,566	65,900	10,462	4,057
Rent, Repairs, Maintenance, etc.	9,535	10,118	11,679	18,386	16,461
Pensions and Retiring					
Allowances	10,544	10,778	11,714	12,959	13,008
Interest	170,583	191,926	191,637	198,599	189,092
Sinking Fund	211,989	222,589	233,718	245,404	257,669
All Other	41,671	19,667	35,549	(b) 93,814	(c) 71,797
Total	978,937	1,122,242	1,149,511	1,208,927	1,170,951

(a) To citrus industry. (b) Includes representation New York World's Fair, £39,780, and San Francisco Exhibition, £21,335. (c) Includes representation New Zealand Centenary Exhibition £44,074, and New York World's Fair, £14,359.

(n) *Postmaster-General's Department.* Details of the expenditure of this department for the last five years are given in the table hereunder :—

EXPENDITURE : POSTMASTER-GENERAL'S DEPARTMENT.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Salaries, Stores and Materials, Mail Engineering Services, etc.	9,205,735	9,737,926	10,462,332	11,563,510	11,648,240
Public Works Staff—Salaries, etc.	34,150	60,000	60,000	60,000	60,000
Audit (proportion)	10,140	10,650	10,650	11,660	12,000
Pensions and retiring allowances	90,380	86,029	79,035	75,113	67,782
Superannuation	260,975	283,958	301,078	316,747	333,345
Rents, repairs, etc.	103,865	131,603	117,352	114,183	100,306
Interest	1,523,057	1,498,967	1,462,843	1,398,690	1,401,196
Sinking Fund	971,566	1,023,673	1,075,248	1,128,933	1,213,878
Exchange	324,010	370,370	395,935	359,397	448,962
Total	12,523,878	13,203,176	13,964,473	15,028,233	15,285,709

(o) *Railways.* In 1928-29 the Commonwealth Railways were transferred from the Department of Works and Railways to the Department of Markets and Transport. In April, 1932, the administration was placed under the Department of the Interior. The expenditure on railways for the last five years is shown below as distinct from the expenditure of the other services controlled by the latter department.

EXPENDITURE : COMMONWEALTH RAILWAYS.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Working Expenses—					
Trans-Australian	248,257	292,515	381,404	493,463	527,272
North Australian	40,908	39,518	40,281	55,186	91,404
Central Australian	138,234	132,859	161,251	214,374	216,728
Australian Capital Territory	5,885	5,809	5,754	7,365	8,486
Interest	427,094	434,916	385,195	392,194	395,323
Sinking Fund	71,494	76,450	71,648	75,230	78,991
Exchange	70,695	68,024	55,875	62,674	83,193
Contribution to South Australia (Port Augusta—Port Pirie Railway) . . . . .	..	..	20,000	20,000	20,000
Superannuation	11,100	11,775	12,977	13,467	13,982
Miscellaneous	3,241	14,211	5,930	17,088	37,142
Total	1,016,968	1,076,077	1,140,315	1,351,041	1,472,521

Additional details of the financial operations of the Commonwealth Railways are given in Chapter V. "Transport and Communication."

(p) *Territories.* The following table shows the expenditure on account of territorial services for the last five years. The internal territories are administered by the Department of the Interior, while the Prime Minister's Department controls the external territories. The expenditure has been grouped in one table for convenience. Information in greater detail will be found in the *Finance Bulletin* issued by this Bureau.

EXPENDITURE : TERRITORIES.

Details.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Internal—	£	£	£	£	£
Australian Capital (a) ..	566,289	585,869	615,401	637,228	656,078
Northern (a)	190,832	262,113	381,931	402,899	382,804
External—					
Papua	68,509	55,821	48,825	48,830	48,610
New Guinea	3,308	13,431	5,058	5,532	5,988
Norfolk Island	7,200	4,409	5,911	5,471	4,071
Total	836,138	921,643	1,057,126	1,099,960	1,097,551

(a) Exclusive of Railways.

(iii) *Miscellaneous.* (a) *New Works.* The expenditure on additions, new works, etc., during the last five years was as follows:—1935-36, £3,237,317; 1936-37, £4,319,562 (excluding £2,000,000 provided from excess receipts for Defence equipment); 1937-38, £3,551,776 (excluding £1,000,000 provided from excess receipts for Post Office works); 1938-39, £6,565,268 (excluding £3,494,733 provided from excess receipts for Defence equipment); and 1939-40, £3,036,445 (excluding £627,309 provided from excess receipts for Defence equipment, also expenditure on Defence and War (1939-40) works, etc., £30,831,460, provided from Loan and Trust Funds).

(b) *War Services.* Full details concerning the expenditure from Consolidated Revenue upon War and Repatriation (1914-19) will be found in § 5 and in respect of the present War on pp. 863-4.

Division IV.—Payments to or for the States.

1. *Introductory.*—In some previous issues of the Official Year Book particulars were given of the obligations imposed on the Commonwealth in the Constitution Act with reference to the payments to be made to the States, and the following statement briefly outlines the principal financial provisions of the Constitution in regard to the distribution of revenues received by the Commonwealth.

2. *Uniform Customs Duties.*—Prior to Federation, State revenues were largely derived from Customs and Excise duties and as the Commonwealth Constitution Act (Sections 86 and 90) transferred exclusively to the Commonwealth this source of revenue it was essential that the Constitution should provide adequate compensation for this loss to the States. Section 88 directed that uniform duties of customs must be imposed within two years after the establishment of the Commonwealth. This section was complied with on 8th October, 1901, by the introduction of the first Customs Tariff Bill.

3. *Special Western Australian Tariff.*—Section 95 of the Constitution authorized the Western Australian Government for a period of five years after the imposition of the uniform customs duties to impose customs duties on goods passing into that State and not originally imported from beyond the limits of the Commonwealth, such duties to be collected by the Commonwealth.

Provision was also contained in this section for the regulation of the rates of duty.

4. Distribution of Commonwealth Revenue.—Broadly, the requirements of the Commonwealth Constitution in regard to the financial relationship between the Commonwealth and the States may be divided into three phases covering definite periods.

(a) 1901 to 1910. This period was covered by Section 87 (known as the “ Braddon Clause ”) which provided that ;

“ 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 the debts of the several States taken over by the Commonwealth.”

The scheme outlined in the Constitution for determining the amount to be paid to the several States is contained in Sections 89 and 93, the former of which relates to the period prior to the imposition of uniform duties of customs (as provided in Section 88), the latter to the first five years after the imposition of such duties and thereafter until Parliament otherwise provides. The principle involved was that of crediting each State with the Commonwealth revenue collected in respect of that State, and of debiting it with the expenditure incurred on its behalf in connexion with transferred departments, as well as its share on a *per capita* basis of the “ new ” expenditure of the Commonwealth. On this account the method of allocation provided by the Constitution has become very generally known as the “ book-keeping system ”. As the imposition of uniform duties of customs and excise throughout the Commonwealth took place on 9th October, 1901, the five years provided for in Section 93 expired on 8th October, 1906, and consequently the “ book-keeping system ” could then be changed at any time by the Commonwealth Parliament.

Section 93 provided that the duties of customs chargeable on goods imported into and duties of excise paid on goods produced or manufactured in one State and consumed in another should be credited to the consuming State. The balance in favour of any State was paid monthly by the Commonwealth.

The Surplus Revenue Act 1908 continued the “ book-keeping system ” but provided that any excess of receipts over expenditure should be distributed monthly to each State in proportion to their respective populations. This act more clearly defined “ transferred ” and “ new ” expenditure.

(b) 1911 to 1927 (Surplus Revenue Acts.) The provisions of Section 87 of the Constitution were terminated by the passing of the Surplus Revenue Act 1910 which provided for the following scheme of payments to operate from 1st July, 1910 :—

- (i) The Commonwealth to pay by monthly instalments or apply to the payment of interest on debts of the States taken over by the Commonwealth an annual sum amounting to twenty-five shillings per head of the number of people of the State ;
- (ii) In addition to the payments above all surplus revenue (if any) to be paid to the States in proportion to the number of people.
- (iii) A special payment to be made to Western Australia in monthly instalments of an annual sum of £250,000 in the first year, thereafter progressively diminishing by £10,000 each year. One half of the payments so made to be debited to all of the States (including Western Australia) on a population basis and the amount so debited to be deducted from the amount otherwise payable to each State.

After 1920 and until 1927 the provisions of the several Surplus Revenue Acts continued to govern the payments by the Commonwealth to the States.

(c) 1928 to date (Financial Agreement Act). An Amendment to the Constitution embodied in Section 105A gave effect to the powers conferred on the Commonwealth in Section 105. This amendment included provisions for :—

- (i) taking over the debts of the several States by the Commonwealth ;
- (ii) the payment by the Commonwealth of a fixed annual sum in respect of the interest on such debts and for certain sinking fund contributions ;

- (iii) the indemnification of the Commonwealth by the States in respect of debts taken over from the States;
- (iv) the borrowing of money by the States or by the Commonwealth or by the Commonwealth for the States; and
- (v) certain other matters connected with the management, consolidation, renewal, conversion and redemption of such debts.

5. **Special Grants.**—The Constitution provides in Section 96 for the granting of special financial assistance to the States. Reference has already been made herein to the special grant to Western Australia in the Surplus Revenue Act 1910. This State has continued to receive financial assistance each year since 1910-11. In 1912, a grant under similar conditions was made to Tasmania; the amount payable in the first year, 1912-13, was £95,000 which was to be progressively reduced by £10,000 in each successive year. The Tasmania Grant Act 1913 provided for an addition to this grant bringing the amount payable to £85,000 per annum to the year 1921-22 after which annual grants of varying magnitude were made.

South Australia received £360,000 in 1929-30 and further grants in each successive year.

Other direct grants to the States from consolidated revenue include contributions towards the payment of interest and sinking fund on loans expended by Local Government authorities on public works, and for unemployment relief which covers *inter alia* metalliferous mining and forestry. Grants which have been made from time to time from loan fund are indicated in the statement of loan expenditure on page 873.

From the accumulated excess receipts since 1931-32, special assistance to the States was provided as follows:—

State.	1934-35.	1935-36.	1936-37.
	£	£	£
New South Wales	786,000	205,000	197,000
Victoria	550,000	140,000	137,000
Queensland	286,000	75,000	72,000
South Australia	176,000	45,000	44,000
Western Australia	133,000	35,000	33,000
Tasmania	69,000	..	17,000
Total	2,000,000	500,000	500,000

6. **Commonwealth Grants Commission.**—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 were received from South Australia, Western Australia and Tasmania during each year from 1933 and the recommendations of the Commission in respect of the years 1936-37 to 1940-41 were as follows:—

State.	Grant Recommended.				
	1936-37.	1937-38.	1938-39.	1939-40.	1940-41.
	£	£	£	£	£
South Australia	1,330,000	1,200,000	1,040,000	995,000	1,000,000
Western Australia	500,000	575,000	570,000	595,000	650,000
Tasmania	600,000	575,000	410,000	430,000	400,000

7. Grants for Road Construction.—(i) *Main Roads Development Acts.* Grants amounting in the aggregate to £1,750,000 were made to the States in 1922-23, 1924-25 and 1925-26 for the purpose of reconditioning certain main roads. £1,500,000 of this amount was on the basis of the expenditure by the States of an equivalent amount.

(ii) *Federal Aid Roads.* The Federal Aid Roads Act 1926 made provision for the construction and re-construction of roads in the several States out of moneys provided by the Commonwealth and States respectively. The original arrangement provided for a grant by the Commonwealth of £2,000,000 per annum for ten years from 1st July, 1926. The allocation to the States was based on three-fifths according to population and two-fifths according to area.

Expenditure was made in the proportion of 15s. by the States to £1 by the Commonwealth. The original agreement was varied in certain respects, the most important of which operated from 1st July, 1931, when in lieu of the £2,000,000 per annum, the Commonwealth agreed to contribute an amount equivalent to 2½d. per gallon customs duty, and 1½d. per gallon excise duty on petrol entered for home consumption during each year, and the States were not required to make any contribution as formerly agreed upon.

The 1926 agreement, which was originally intended to remain in operation for ten years, was continued until 30th June, 1937, when a new agreement was entered into. The latter provided for the continuation of the Federal Aid Roads Agreement for a further period of ten years from 1st July, 1937, increased the amount payable to the States to 3d. a gallon Customs duty and 2d. a gallon excise (except benzol, on which the excise is only 1½d.) on petroleum and shale products, and stipulated that the proceeds of the extra ½d. per gallon should be expended on the construction, reconstruction, maintenance or repair of roads, or other works connected with transport. At the request of the Commonwealth Government the States will, up to a limit of one-twelfth of this additional amount, attend to the maintenance or repair of roads of approach to or adjoining Commonwealth properties. A further variation was the reduction from 3 to 2½ per cent. of the sinking fund contribution of the States on loan moneys provided by them between 1926 and 1931.

8. Amounts Paid.—(i) 1901 to 1940. The table following shows particulars of the amounts paid to each of the States since Federation, divided into the three periods referred to herein with separate details for Special and Roads Grants. Special Commonwealth grants for the relief of primary producers are not included in this table. Details of these grants will be found in Chapter XIV. "Agricultural Production."

PAYMENTS(a) BY THE COMMONWEALTH TO OR FOR THE STATES TO
30th JUNE, 1940.

Particulars.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1900-01 to 1909-10 (b) ..	27,606	19,815	8,895	6,148	8,727	2,602	73,793
1910-11 to 1926-27 (c) ..	41,634	31,341	15,184	9,925	6,899	4,367	109,350
1927-28 to 1939-40 (d) ..	44,339	30,946	16,436	11,123	7,868	3,906	114,618
Special Grants (e) ..	..	..	..	12,145	9,690	6,586	28,421
Non-recurring Grants ..	679	740	300	225	255	112	2,311
Grants for Road Construction, 1922-23 to 1939-40 (f)	10,787	6,928	7,342	4,390	7,459	1,942	38,848
Total	125,045	89,770	48,157	43,956	10,898	19,515	367,341
Special Assistance 1934-35 to 1936-37 (g)	1,188	827	433	265	201	86	3,000
Grand Total	126,233	90,597	48,590	44,221	11,099	19,601	370,341

(a) Includes non-recurring grants from excess receipts, but excludes amounts provided for relief of wheat-growers and other primary producers and other payments for medical research, etc. (b) Under Section 87 of the Commonwealth Constitution. (c) Under the several Surplus Revenue Acts. (d) Under Financial Agreement Act 1928. (e) Under various State Grants Acts. (f) Under Federal Aid Roads and Main Roads Development Acts. (g) Unemployment Relief, Metalliferous Mining, Forestry and Local Public Works—provided from excess receipts of the previous years from 1931-32.

(ii) 1939-40. For the year ended 30th June, 1940, the payments made to or for each State are given below:—

PAYMENTS BY THE COMMONWEALTH TO OR FOR THE STATES, 1939-40.(a)

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
Interest on States' Debts ..	2,917,411	2,127,159	1,096,235	703,816	473,432	266,859	7,584,912
Sinking Fund on States'							
Debts (b)	634,442	300,216	203,998	180,231	174,766	42,402	1,536,055
Special Grants				995,000	595,000	430,000	2,020,000
Federal Aid Roads (c)	1,252,093	779,773	851,066	494,599	855,522	222,792	4,455,845
Local Public Works	39,400	27,102	14,450	8,700	6,650	3,400	100,000
Contribution—Port Augusta —Port Pirie Railway Agreement				20,000			20,000
Total	4,843,346	3,234,548	2,165,749	2,402,346	2,105,370	965,453	15,716,812

(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.

§ 3. Trust Funds.

The Trust Fund balances on 30th June, 1940, amounted to £32,256,171, as compared with £24,226,362 for the corresponding date in the year 1939.

§ 4. Commonwealth Loan Funds and Public Debt.

1. **General.**—Although it was not until 1915 that the Commonwealth Government came into the loan market as a borrower, there had previously existed a Commonwealth Public Debt which included several items, such as the balance of the debt taken over from South Australia and the amount owing to the States for transferred properties. In view of the large expansion of the Public Debt, and its present importance in Commonwealth public finance, the different items are treated *seriatim* in the following paragraphs.

2. **Loans taken over from South Australia.**—The first portions of the debt were contracted at the beginning of 1911, when the Commonwealth assumed responsibility for the payment of interest on transferred properties (further dealt with in par. 4 below) and for the administration and the liabilities of the Northern Territory and the Port Augusta—Oodnadatta Railway. At 30th June, 1911, the debt on account of the former was £3,657,836, and on account of the latter, £2,274,486—a total of £5,932,322. As the securities fall due they are redeemed by the Commonwealth Government, the money required being provided from the National Debt Sinking Fund. At 30th June, 1940, the debt outstanding amounted to £33,235, of which £27,216 was on account of the Northern Territory, and £6,019 on account of the railway.

3. **Loan Fund for Public Works, etc.**—Up to the year 1911 the Commonwealth Government had met its public works expenditure out of revenue. In that year, however, in view of the heavy prospective cost of the Trans-Australian Railway and the Australian Capital Territory, a Loan Fund similar to those of the States was instituted. The initiation of this fund was greatly assisted by the fact that the Treasury at that time held a large quantity of gold, principally on behalf of the Australian Notes Account. Up to 30th June, 1914, the money required for loan expenditure was obtained mainly from this source at 3½ per cent., and inscribed stock of an equivalent value was created. Since then the money required for the Loan Fund has been mainly obtained by the issue of Treasury Bills and other securities issued in London and New York as well as in Australia. Yearly expenditure on works, etc., up to 1919-20 did not exceed £3,000,000. From 1920-21 it rose to nearly £9,500,000 in 1926-27, and it declined to about £2,000,000 in 1930-31. For the years 1931-32 to 1938-39 expenditure fluctuated between £520,000 and £4,550,000. In 1939-40, however, because of expenditure of £28,814,046 on Defence and War (1939-40) Services, it rose to £31,354,789.

COMMONWEALTH EXPENDITURE FROM LOAN FUND.

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.	Total to 30th June, 1940.
	£	£	£	£	£	£
Defence and War (1939-40)						
Services—						
General Services, Pay, Maintenance—						
Army .. .. .	..	..	..	..	3,064,388	3,064,388
Navy .. .. .	..	..	..	..	2,412,811	2,412,811
Air .. .. .	..	..	..	..	1,643,555	1,643,555
Supply and Development .. .. .	..	..	..	..	150,961	150,961
Works—						
Army .. .. .	..	..	..	..	7,528,521	7,528,521
Navy .. .. .	..	..	..	..	3,432,106	3,432,106
Air .. .. .	..	..	..	..	7,258,178	7,258,178
Supply and Development .. .. .	..	..	..	..	3,323,526	3,323,526
Total Defence and War (1939-40) Services .. .. .	..	..	..	..	28,814,046	28,814,046
Other Works, etc.—						
Ships, Yards and Docks	Cr. 120,138	..	..	Cr. 305,351	Cr. 14,016	7,865,887
A.C.T. Works, Services and Acquisition of Land	152,837	100,583	Cr. 5,514	Cr. 6,768	Cr. 10,752	8,490,800
Northern Territory	32,025	19,127	Cr. 61	..	Cr. 31	169,881
Drill Halls, Stores, Barracks, etc.	15,426	Cr. 2,877	339,316	97,788	..	1,118,989
Arms, Armament and Ammunition .. .. .	..	..	100,180	530,342	..	954,822
Naval Bases, Depots, etc.	2,833	Cr. 12,308	106,970	82,248	..	1,763,834
Fleet Construction	116,881	..	451,350	521,556	..	1,608,303
Air Services—						
R.A.A.F.	1,710	..	673,026	436,356	..	1,578,461
Civil Aviation	20,273	65	112,550	..	..	214,291
Buildings and Works, Munitions Production	11,211	8,530	273,945	243,994	..	1,729,539
Lighthouses and Lighthouse Services	600	Cr. 3,010	Cr. 1,000	Cr. 1,000	Cr. 1,000	638,490
River Murray Waters Act .. .. .	..	..	..	..	..	2,105,625
Telegraph and Telephone Construction	207,815	300,000	..	..	1,733,113	33,428,311
Post Office Buildings and Land Radio	16,440	2,193	Cr. 451	Cr. 1,290	120,050	3,613,921
Health Services	8,467	460	..	..	29,509	85,745
Repatriation Services	33,478	1,434	..	..	..	103,113
Railways—						
Trans-Australian	105,836	358,241	Cr. 938	Cr. 339	Cr. 102	7,126,193
North Australian .. .. .	..	..	..	..	Cr. 184	1,597,375
Central Australian	2,639	..	..	..	..	2,480,596
Australian Capital Territory .. .. .	..	..	..	..	..	28,755
Grafton—South Brisbane	Cr. 1,500	..	..	..	..	2,446,005
Other Expenditure .. .. .	..	..	..	..	..	200,000
Papua	4,773	..	..	..	..	76,329
War Service Homes (a)	10,614	..	..	..	..	7,329,523
London Offices .. .. .	..	..	..	..	..	880,190
Acquisition of Properties not elsewhere included	2,728	6,645	Cr. 263	..	..	137,648
Assistance to States for—						
Roads .. .. .	..	..	..	..	..	249,686
Forestry	223,000	35,000	..	..	..	322,000
Mining	144,750	64,000	..	..	..	283,750
Unemployment Relief	363,728	332,880	Cr. 8,895	Cr. 3,822	Cr. 65,844	2,500,661
Miscellaneous	18,923	..	..	..	..	21,505
Total Other Works, etc.	1,375,349	1,210,963	2,049,215	1,593,714	1,790,743	91,137,254
Other purposes—						
Loans for Works to Papua and New Guinea .. .. .	..	..	..	..	..	93,916
Immigration (b) .. .. .	..	..	..	..	..	1,680,834
Subscription to Capital of Commonwealth Oil Refinery .. .. .	..	..	..	..	..	343,751
Subscription to Capital of Amalgamated Wireless Ltd. .. .. .	..	..	..	..	..	300,000
Advances for Wire and Wire Netting .. .. .	..	..	..	..	..	610,838
Wheat Bounty	43	..	..	..	..	3,429,571
Farmers' Debt Adjustment	317,000	1,500,000	2,500,000	2,000,000	750,000	7,067,000
Total Loan Expenditure	1,692,302	2,710,963	4,549,215	3,593,714	31,354,789	133,177,210

(a) Prior to 1923-24, expenditure amounting to £13,045,408 was made from War Loan Fund. The total loan expenditure to 30th June, 1940, was £20,374,931. (b) Exclusive of Loans to States for Immigration purposes.

4. **Properties Transferred from States.**—At the time of Federation, when the Commonwealth took over the control of several departments previously administered by the States, a large amount of property was handed over to the Commonwealth Government, which paid interest to the States at the rate of $3\frac{1}{2}$ per cent. on the value of the properties so transferred. (Particulars of the valuation of the properties are given in Official Year Book No. 14, p. 694). The temporary provisions of the Financial Agreement between the Commonwealth Government and the Governments of the several States provided *inter alia* that the Commonwealth Government would for the period of two years from 1st July, 1927 pay to each State interest at the rate of 5 per cent. per annum on the agreed value of transferred properties as follows:—New South Wales, £4,788,005; Victoria, £2,302,862; Queensland, £1,560,639; South Australia, £1,035,631; Western Australia, £736,432; and Tasmania, £500,754; a total of £10,924,323.

From 1st July, 1929, the Commonwealth Government assumed all liability for so much of the Public Debt of the States maturing in London bearing interest at the rate of 5 per cent. per annum as is equivalent to the agreed value of the transferred properties shown above. The Commonwealth Government received the freehold or equivalent title to the transferred properties consisting of land or interests in land, and all liability of the Commonwealth to the State in respect of transferred properties was extinguished from that date.

5. **War (1914–19) Loan from the British Government.**—On the outbreak of the War of 1914–19, the Commonwealth Government obtained a loan from the British Government for the purpose of financing the prospective large military expenditure. At first, the arrangement was that the British Government should advance the sum of £18,000,000. Subsequently further loans amounting to £31,500,000 were negotiated. In addition to this capital indebtedness of £49,500,000, a further sum of £42,696,500 was due to the British Government for the maintenance of Australian troops.

Early in 1921 an arrangement was concluded with the British Government, by which almost the entire debt (upwards of £92,000,000) was consolidated. The Commonwealth Government undertook to extinguish the debt in about 35 years by annual payments representing 6 per cent. on the original debt, providing for interest at approximately £4 18s. 4d. per cent., and a sinking fund of approximately £1 1s. 8d. per cent. By a later arrangement with the British Government, however, principal and interest repayments have been suspended for 1931–32 and subsequent years. The principal outstanding on 30th June, 1940, was £79,724,221.

6. **Flotation of War (1914–19) Loans in Australia.**—In addition to the advances from the British Government, the Commonwealth Government raised large amounts of money in Australia. Full details of the seven War Loans are given in Official Year Book No. 14.

7. **Flotation of War (1939–40) Loans.**—The amounts liable in respect of portions of several loans raised, prior to the outbreak of the present War, for defence purposes, have now been reclassified as War (1939–40) Debt. These liabilities amounted to £12,396,016 at 30th June, 1940. Since the outbreak of War loans of £12,000,000, £18,000,000, £20,000,000 and £28,000,000 have been floated. From the proceeds of these loans £2,000,000, £7,675,740, £20,582,490 and £20,499,131 respectively have been devoted to war purposes. For further details of these loans see table on page 876

In addition to the above amounts, nearly £13,250,000 has been raised by War Savings Certificates (Seven Years' Series), and over £5,000,000 by Citizens' National Emergency (Interest Free) Loans.

An advance of £12,000,000 has also been made by the British Government for war purposes.

8. **London Conversion Loans.**—Loans aggregating £22 millions were due for redemption in London in 1932–33, and in addition the Government had optional rights of redemption over a further £88 millions, all of which were carrying an interest burden of 5 per cent. or greater. These obligations, particularly the accumulation of loans with optional rights of redemption, presented some difficulty to the Government and led to the appointment of a Resident Minister in London, who, in conjunction with the Australian Loan Council, arranged for the conversion of Commonwealth and State

securities amounting to £109,849,000 between October, 1932, and February, 1934. Particulars of these and subsequent conversions to June, 1940, are shown in the following table:—

DETAILS OF LOANS CONVERTED IN LONDON, 1932 to 1940.

When Converted.	Commonwealth or State.	Amount.	Old Loan.		New Loan.				Annual Saving.	
			Interest Rate (nominal).	Yield to Investor.	Interest Rate (nominal).	Price of Issue.	Yield to Investor. (a)	Year of Maturity.	Interest. (b)	Exchange. (c)
		£'000.	%	£ s. d.	%	£	£ s. d.		£'000.	£'000.
1932— October ..	N.S.W.	12,361	5½	5 15 0	3½	97½	4 1 2	1936-37	222	56
1933— February ..	N.S.W.	9,622	4	3 19 8	4	100	4 0 0	1955-70	..	..
May ..	N.S.W.	6,427	6½	6 10 0	3½	99	3 14 10	1937-38	180	45
	S.A. ..	2,983							83	21
July ..	Tas. ..	2,000	6	6 8 4	4	99	4 1 10	1943-48	56	14
	N.S.W.	9,527							204	52
	Qld. ..	2,000							40	10
	S.A. ..	2,978							65	16
September	W.A. ..	2,716	6	6 10 11	3½	98	3 17 11	1948-53	60	15
	C'wealth.	15,000							360	92
	N.S.W.	4,901							97	25
December	W.A. ..	1,050	5½	5 19 3	3½	99	3 16 9	1946-49	21	5
	N.S.W.	2,981							53	14
	Vic. ..	2,980							119	30
	S.A. ..	3,907							73	19
	Tas. ..	5,633							15	4
1934— February ..	N.S.W.	3,979	5	5 3 7	3½	97	3 13 8	1954-59	61	15
Vic. ..	13,876	206							52	
Qld. ..	3,782	97							25	
November	C'wealth.	83	3½	3 19 6	3½	99	3 5 11	1964-74	1	..
	S.A. ..	574							4	1
	W.A. ..	789							3	9
	Tas. ..	3,078							4	4
	N.S.W.	2,235							3	23
	Vic. ..	463							3½	6
	S.A. ..	2,497							3½	1
1935— January ..	C'wealth.	17,355	4	4 5 0	3	99	3 18 10	1964-74	72	18
Vic. ..	807	1							..	
Qld. ..	1,328	1							..	
S.A. ..	799	1							..	
W.A. ..	1,895	1							..	
July ..	Tas. ..	200	5	5 6 9	3½	99	3 16 9	1946-49	6	2
	N.S.W.	12,420							72	18
1936— January ..	Vic. ..	1,050	3	4 5 0	3	100	3 0 0	1939-41	1	..
June ..	N.S.W.	21,657							3	21	5
June ..	C'wealth.	372	5	5 2 8	3½	100	3 5 0	1956-61	421	107
	N.S.W.	10,955							2	..
	S.A. ..	1,996							14	4
	W.A. ..	2,631							34	9
1937— June ..	Tas. ..	200	3	3 4 0	3	100	3 0 0	1939-41	4	1
	N.S.W.	12,420							8	2
November ..	Vic. ..	1,050	5	5 0 0	3	100	3 0 0	1939-41	21	5
	N.S.W.	6,427							3	4
1936— January ..	N.S.W.	21,657	3½	3 12 10	3	95½	3 5 9	1955-58	421	107
	C'wealth.	372							2	..
	N.S.W.	10,955							208	53
	S.A. ..	1,996							13	3
June ..	S.A. ..	1,996	3½	3 12 10	2½	99	2 18 6	1941-43	49	13
	W.A. ..	2,631							1	..
1937— June ..	Tas. ..	200	3	3 1 7	3	99	3 15 1	1951-54	1	..
	N.S.W.	12,361							37	9
November ..	N.S.W.	6,427	3½	4 1 5	3½	96½	3 16 2	1950-52	3	1
	S.A. ..	2,983							1	1
1938— December	Tas. ..	2,000	3½	3 14 10	3½	97	3 15 1	1951-54	1	..
	C'wealth.	160							—1	..
1939— December	S.A. ..	1,158	3½	3 10 0	4	100	4 0 0	1955-70	—6	—2
	W.A. ..	1,200							—5	—1
	Tas. ..	448							—3	—1
1939— December	N.S.W.	4,157	3	3 0 0	3½	99	3 15 5	1942-44	—11	—2
	Tas. ..	4,157							—11	—2
Total (e)	..	229,407	4.87	5 1 2	..	98.3	3 11 11	..	3,273	831

(a) If redeemed at latest date of maturity. (b) Interest savings have been calculated on the yield to the investor worked on the issue prices of the old and new loans respectively. (c) Calculated at 25½ per cent. (d) Nominal. (e) Averages approximate.

Particulars to June, 1940, of the total amounts converted and the total savings on account of interest and exchange in respect of the Commonwealth and of each State are as follows :—

Commonwealth or State.	Amount Converted.	Total Savings.		
		Interest.	Exchange.	Total.
	£	£	£	£
Commonwealth	33,542,925	682,186	173,104	855,290
New South Wales	113,618,171	1,493,065	379,124	1,872,189
Victoria	22,620,392	360,979	91,598	452,577
Queensland	7,109,469	161,157	40,894	202,051
South Australia	23,597,110	265,772	67,560	333,332
Western Australia	17,830,181	240,308	60,978	301,286
Tasmania	11,088,550	69,110	17,617	86,727
Total	229,406,798	3,272,577	830,875	4,103,452

9. Loan Raisings, 1938-39 and 1939-40.—Particulars of Loan raisings during 1938-39 and 1939-40 are given in the following table :—

LOAN RAISINGS, 1938-39 AND 1939-40.

Service.	Where Raised.	For—	Rate of Interest.	Year of Maturity.	Price.	Amount.
			%			£
1938-39—						
Defence	Australia	Commonwealth States ..	3½	1952-54	100	4,089,131
Conversion .. ..							Commonwealth States ..	3½	1952-54	100	64,847,010
Redemption	London	States ..	4	1955-70	100	90,589
Conversion .. ..							Commonwealth States ..	4	1955-70	100	2,517,800
Works	Australia	Commonwealth States ..	3½	1953-55	100	1,339,260
Works	Australia	Commonwealth States ..	3½	1953-55	99	7,186,450
Defence	London	Commonwealth States ..	4	1961-64	98½	680,400
Works	Australia	Commonwealth States ..	3½	1943-44	100	4,071,000
Works, Redemptions, etc. (a)	Australia	States ..	(b)	(b)	(b)	6,000,000
						1,667,165
1939-40—						
Defence, Works, etc. ..	Australia	Commonwealth States ..	3½	1943-45	100	3,340,000
Conversion	London	States ..	3½	1942-44	99	8,660,000
Defence, Works, etc. ..	Australia	Commonwealth States ..	3½	1945-46	100	4,604,800
War	Australia	Commonwealth States ..	3½ (d)	1951-57	100	9,085,740
Works, Redemptions, etc. (a)	Australia	Commonwealth States ..	2½	1945-46	100	9,079,000
			3½	1951-57	100	6,770,890
			(b)	(b)	(b)	13,811,600
			(b)	(b)	(b)	1,063,365

(a) "Over the Counter Sales" and Conversion at State Treasuries. (b) Various. (c) £4,000,000 in each of years 1942-43 to 1944-45. (d) £8,957,640 at 3½ per cent., maturing 1945-46, and £9,207,100 at 3½ per cent., maturing 1951-57.

Some detailed particulars of conversion loans in London are given in the preceding paragraph.

10. Public Debt for Commonwealth Purposes.—(i) *Total Debt.* Reference has already been made to the development of the Commonwealth Public Debt and the table appended shows the debt of the Commonwealth (excluding that of the States) at 30th June, 1940:—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES AT 30th JUNE, 1940.

Particulars.	Maturing in—			Total. (a)
	London.	New York.	Australia.	
	£ Stg.	£ (b)	£ Aust.	£
War (1914-19) Debt—				
Stock, Bonds, etc.	11,020,160	..	173,028,896	184,049,056
Indebtedness to United Kingdom Government	79,724,221	..	..	79,724,221
Total	90,744,381	..	173,028,896	263,773,277
War (1939-40) Debt—				
Stock and Bonds	5,810,000	..	36,844,246	42,654,246
Citizens' National Emergency Loans .. .. .	..	..	3,864,626	3,864,626
War Savings Certificates .. .. .	..	..	6,099,887	6,099,887
Total	5,810,000	..	46,808,759	52,618,759
Works and other Purposes—				
Stock and Bonds	61,809,236	15,876,718	26,553,547	104,239,501
Treasury Bills and Debentures	3,970,160	..	..	3,970,160
Treasury Bills, Internal .. .. .	..	..	10,692,248	10,692,248
Balance of Loans taken over from South Australia—				
Northern Territory .. .. .	..	..	27,216	27,216
Port Augusta Railway .. .. .	..	..	6,019	6,019
Total, Works and other Purposes	65,779,396	15,876,718	37,279,030	118,935,144
Total, Commonwealth Purposes	162,333,777	15,876,718	257,116,685	435,327,180

PER HEAD OF POPULATION. (c)

	(Stg.)	(b)	(Aust.)	£ s. d.
	£ s. d.	£ s. d.	£ s. d.	
War (1914-19) Debt	12 18 2	..	24 12 4	37 10 6
War (1939-40) Debt	0 16 7	..	6 13 2	7 9 9
Works and other Purposes	9 7 2	2 5 2	5 6 1	16 18 5
Total Commonwealth Purposes	23 1 11	2 5 2	36 11 7	61 18 8

(a) The total "face" or "book" value of the public debt without adjustment on account of currency changes since the loans were floated. (b) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1. (c) Based on population at 30th June, 1940.

(ii) *Place of Flotation.* Since 1931-32 few new loans have been raised overseas. None have been raised in New York since 1927-28. Those raised in London have been almost exclusively conversion loans, but in the last three years there have been new raisings for Defence purposes.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES: PLACE OF FLOTATION.

Place of Flotation, etc.	At 30th June—				
	1936.	1937.	1938.	1939.	1940.
War (1914-19) Debt—					
London £ Stg.	90,744,381	90,744,381	90,744,381	90,744,381	90,744,381
Total Overseas .. £ Stg.	90,744,381	90,744,381	90,744,381	90,744,381	90,744,381
Australia £ Aust.	186,361,597	183,063,205	179,058,853	175,193,890	173,028,896
Total War (1914-19) Debt & a	277,105,978	273,807,586	269,803,234	265,938,271	263,773,277
War (1939-40) Debt—					
London £ Stg.	..	..	..	..	5,810,000
Total Overseas .. £ Stg.	..	..	..	..	5,810,000
Australia £ Aust.	..	..	..	..	46,808,759
Total War (1939-40) Debt £	..	..	..	..	52,618,759
Works and other Purposes—					
London £ Stg.	65,540,946	65,034,246	67,619,246	72,096,566	65,779,396
New York £ (b)	16,351,176	16,201,952	16,080,972	15,913,501	15,876,718
Total Overseas .. £ (a)	81,892,122	81,236,198	83,700,218	88,010,067	81,656,114
Australia £ Aust.	31,930,376	31,755,432	37,341,609	43,302,593	37,279,030
Total Debt for Works, etc. £ a	113,822,498	112,991,630	121,041,827	131,312,660	118,935,144
Total Debt—					
London £ Stg.	156,285,327	155,778,627	158,363,627	162,840,947	162,333,777
New York £ (b)	16,351,176	16,201,952	16,080,972	15,913,501	15,876,718
Total Overseas .. £ (a)	172,636,503	171,980,579	174,444,599	178,754,448	178,210,495
Australia £ Aust.	218,291,973	214,818,637	216,400,462	218,496,483	257,116,685
Grand Total .. £ (a)	390,928,476	386,799,216	390,845,061	397,250,931	435,327,180

(a) The figures given represent the total "face" or "book" value of the public debt without any adjustment on account of currency changes since the loans were floated. (b) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1.

(iii) *Amount of Debt at Various Rates of Interest.*—The first debt taken over from South Australia consisted mainly of securities bearing interest varying from 3 per cent. to 4 per cent., the average rate of interest for the first year being £3 12s. 4d. For the first three years the increase in the debt was due almost entirely to the expansion of the 3½ per cent. stock of the Loan Fund, consequently the average rate of interest fell steadily, until on 30th June, 1914, it stood at £3 11s. 10d. With the loans raised for war and repatriation purposes interest rates rose until the National Debt Conversion Loan (July-August, 1931) reduced interest rates on internal loans by 2½ per cent. Conversion loans in London referred to on p. 874 have reduced the average rate of interest on debt maturing in London by nearly one per cent. from £4 18s. 11d. per cent. in 1931 to

£4 2s. in 1940. The average rate of interest on internal loans at 30th June, 1940, was £3 14s. 5d. per cent. as compared with £5 9s. 10d. per cent. at 30th June, 1931. The average rate of interest payable on the total debt decreased from £5 4s. 11d. per cent. in 1931 to £3 17s. 3d. per cent. at 30th June, 1940.

The accompanying table gives particulars of rates of interest on the debt for Commonwealth purposes at 30th June, 1940:—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES: AMOUNTS AT EACH RATE OF INTEREST.

Rates of Interest.	At 30th June, 1940—Debt Maturing in—			
	London.	New York.	Australia.	Total.
Per cent.	£ (Stg.)	£ (a)	£ (Aust.)	£ (b)
5.0	29,128,495	12,295,662 (c)	4,976	41,429,133
4.91667	(d)79,724,221	..	..	79,724,221
4.75	5,989,400	..	..	5,989,400
4.5 .. .. .	..	3,581,056	..	3,581,056
4.45625 .. .. .	..	..	84,650	84,650
4.2625 .. .. .	..	..	946,278	946,278
4.25 .. .. .	..	..	84,711	84,711
4.06875 .. .. .	..	..	2,679,010	2,679,010
4.0	5,810,000	..	137,999,101	143,809,101
3.875 .. .. .	..	..	46,510,228	46,510,228
3.75	20,776,100	..	8,289,670	29,065,770
3.675 .. .. .	..	..	66,510	66,510
3.625 .. .. .	..	..	4,417,700	4,417,700
3.5 .. .. .	..	..	4,430,140	4,430,140
3.375 .. .. .	..	..	4,932,400	4,932,400
3.25	16,563,595	..	13,838,060	30,401,655
3.0 .. .. .	..	..	5,317,725	5,317,725
2.75	371,806	..	6,770,890	7,142,696
2.25	2,970,160	..	..	2,970,160
2.0	1,000,000	..	..	1,000,000
1.5 .. .. .	..	..	10,692,248	10,692,248
War (1939-40) Savings Certificates (f) .. .. .	..	..	6,099,887	6,099,887
Citizens' National Emergency Loans (Interest Free) .. .. .	..	..	3,864,626	3,864,626
Overdue .. .. .	..	..	(g) 73,604	73,604
War (1914-19) Savings Stamps .. .. .	..	..	14,271	14,271
Total	162,333,777	15,876,718	257,116,685	435,327,180
Average rate per cent.	4 2 0	4 17 9	3 14 5	3 17 3

(a) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$1.8665 to £1. (b) The total "face" or "book" value of the public debt without adjustment on account of currency changes since the loans were floated. (c) War (1914-19) Savings Certificates. (d) War Debt due to Government of the United Kingdom (see par. 5, page 874). (e) Includes unconverted securities. £6,310. (f) Compounded at 3½ per cent. (g) Includes War Gratuity Bonds, £12,845.

(iv) *Amount of Interest Payable.* The next table shows the interest payable in Australia and overseas on the Commonwealth Public Debt (excluding amounts raised on behalf of the several States and debts of the States taken over) at 30th June in the years 1936 to 1940 inclusive:—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES: INTEREST PAYABLE.

Interest on and where payable.	At 30th June—				
	1936.	1937.	1938.	1939.	1940.
War (1914-19) Debt—					
London £ Stg. (a)	426,008	426,008	426,008	426,008	426,008
Australia £ Aust.	7,443,363	7,310,325	7,149,993	6,949,706	6,868,976
Total War (1914-19) Debt £ (b)	7,869,371	7,736,333	7,576,001	7,375,714	7,294,984
Average Rate %	£3 19s. 9d.	£3 19s. 9d.	£3 19s. 9d.	£3 19s. 3d.	£3 19s. 3d.
War (1939-40) Debt—					
London £ Stg.	..	..	..	..	232,400
Australia £ Aust.	..	..	..	..	1,416,569
Total War (1939-40) Debt.. £	..	..	..	..	1,648,969
Average Rate .. .. %	..	..	..	..	£3 7s. 8d.
Works and other Purposes—					
London £ Stg.	2,651,593	2,614,254	2,775,291	2,977,546	2,729,388
New York £ (c)	797,954	790,935	785,240	777,586	775,930
Total Overseas £ (b)	3,449,547	3,405,189	3,560,531	3,755,132	3,505,318
Australia £ Aust.	919,692	935,572	1,151,759	1,394,921	1,135,095
Total Debt for Works, etc. £ (b)	4,369,239	4,340,761	4,712,290	5,150,053	4,640,413
Average Rate %	£3 16s. 9d.	£3 16s. 10d.	£3 17s. 10d.	£3 18s. 5d.	£3 18s. 0d.
Total Debt—					
London £ Stg. (a)	3,077,601	3,040,262	3,201,290	3,403,554	3,387,796
New York £ (c)	797,954	790,935	785,240	777,586	775,930
Total Overseas £ (b)	3,875,555	3,831,197	3,986,539	4,181,140	4,163,726
Australia £ Aust.	8,353,055	8,245,897	8,301,752	8,344,627	9,420,640
Grand Total £ (b)	12,238,610	12,077,094	12,288,291	12,525,767	13,584,366
Average Rate %	£3 18s. 8d.	£3 18s. 8d.	£3 19s. 0d.	£3 18s. 11d.	£3 17s. 3d.

(a) Excludes suspended interest on War Debt owing to British Government. (b) The totals shown represent the nominal amount of interest, taking no account of exchange. (c) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$1.8665 to £1.

(v) *Dates of Maturity.* The dates of maturity of the several portions of the Commonwealth debt are shown hereunder according to financial years. Prior to 1937-38 the Public Debt was shown classified according to the latest date of maturity only, but the particulars now include tables showing both the earliest and latest dates of maturity. The Commonwealth Government has refrained from issuing interminable stock, but, in respect of a small proportion of the debt, no definite date of maturity had been assigned on 30th June, 1940.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES, AT 30th JUNE, 1940.
(CLASSIFIED ACCORDING TO LATEST DATE OF MATURITY.)

Due Dates (year ended 30th June).		Maturing in—			Total.
		London.	New York.	Australia.	
		£ (Stg.)	£ (a)	£ (Aust.)	£ (b)
1941	.. .. .	3,970,160	..	11,594,518	15,564,678
1942	.. .. .	..	..	29,850,290	29,850,290
1943	.. .. .	371,806	..	5,116,550	5,488,356
1944	.. .. .	..	..	2,204,140	2,204,140
1945	.. .. .	..	..	24,760,722	24,760,722
1946	.. .. .	..	..	11,175,670	11,175,670
1948	.. .. .	..	..	21,494,667	21,494,667
1949	.. .. .	..	..	4,399,280	4,399,280
1950	.. .. .	..	..	32,430	32,430
1951	.. .. .	..	..	13,346,341	13,346,341
1952	.. .. .	..	..	1,704,060	1,704,060
1954	.. .. .	13,780,100	..	12,655,830	26,435,930
1955	.. .. .	..	..	40,929,150	40,929,150
1956	.. .. .	..	13,548,199	14,346,948	27,895,147
1957	.. .. .	6,996,000	..	18,229,300	25,225,300
1958	.. .. .	..	2,328,519	11,933,586	14,262,105
1960	.. .. .	..	..	11,843,682	11,843,682
1961	.. .. .	22,223,217	..	..	22,223,217
1962	.. .. .	..	..	11,043,785	11,043,785
1964	.. .. .	5,810,000	..	..	5,810,000
1975	.. .. .	329,778	..	..	329,778
1976	.. .. .	29,128,495	..	..	29,128,495
War (1939-40) Savings Certificates	.. .. .	..	..	6,099,887	6,099,887
Citizens' National Emergency Loans	.. .. .	..	..	3,864,626	3,864,626
War (1914-19) Savings Stamps	.. .. .	..	..	14,271	14,271
Unconverted	.. .. .	..	..	6,310	6,310
Overdue	.. .. .	..	..	(c) 73,604	73,604
Indefinite	.. .. .	..	..	(d) 180,139	180,139
Annual repayments	.. .. .	(e) 79,724,221	..	..	79,724,221
Half-yearly	.. .. .	..	..	216,899	216,899
Total	.. .. .	162,333,777	15,876,718	257,116,685	435,327,180

(a) See note (b) to table on page 877. (b) See note (a) to table on page 877. (c) Includes War Gratuity Bonds, £12,845. (d) Includes War (1914-19) Savings Certificates and Peace Savings Certificates. (e) Repayments suspended by arrangement with British Government.

PUBLIC DEBT FOR COMMONWEALTH PURPOSES, AT 30th JUNE, 1940.
(CLASSIFIED ACCORDING TO EARLIEST DATE OF MATURITY.)

Due Dates (year ended 30th June).	Maturing in—			Total
	London.	New York.	Australia.	
	£ (Stg.)	£ (a)	£ (Aust.)	£ (b)
1941	10,331,366	..	11,594,518	21,925,884
1942 .. .. .	..	..	29,850,290	29,850,290
1943 .. .. .	..	..	5,116,550	5,116,550
1944 .. .. .	..	..	2,204,140	2,204,140
1945 .. .. .	..	..	24,760,722	24,760,722
1946	29,128,495	..	11,175,670	40,304,165
1948 .. .. .	..	2,328,519	21,494,667	23,823,186
1949	13,780,100	..	4,399,280	18,179,380
1950 .. .. .	..	..	32,430	32,430
1951 .. .. .	..	..	31,575,641	31,575,641
1952 .. .. .	..	..	1,704,060	1,704,060
1953	6,996,000	9,967,143	40,929,150	57,892,293
1954 .. .. .	..	..	14,554,010	14,554,010
1955 .. .. .	..	..	..	..
1956	16,233,817	3,581,056	12,448,768	32,263,641
1958 .. .. .	..	..	11,933,586	11,933,586
1960 .. .. .	..	..	11,843,682	11,843,682
1961	5,810,000	..	..	5,810,000
1962 .. .. .	..	..	11,043,785	11,043,785
1965	329,778	..	..	329,778
War (1939-40) Savings Certificates .. .. .	..	..	6,099,887	6,099,887
Citizens' National Emergency Loans .. .. .	..	..	3,864,626	3,864,626
War (1914-19) Savings Stamps .. .. .	..	..	14,271	14,271
Unconverted .. .. .	..	..	6,310	6,310
Overdue .. .. .	..	..	(c) 73,604	73,604
Indefinite .. .. .	..	..	(d) 180,139	180,139
Annual repayments	(e) 79,724,221	..	..	79,724,221
Half-yearly .. .. .	..	..	216,899	216,899
Total	162,333,777	15,876,718	257,116,685	435,327,180

(a) See note (b) to table to page 877. (b) See note (a) to table on page 877. (c) Includes War Gratuity Bonds, £12,845. (d) Includes War (1914-19) Savings Certificates and Peace Savings Certificates. (e) Repayments suspended by arrangement with British Government.

11. **Sinking Funds.**—Particulars relating to the creation of sinking funds are included in previous issues.

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 from the year 1935-36 are as follows :—

PUBLIC DEBT FOR COMMONWEALTH PURPOSES : SINKING FUND.

Items.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.	Total 1923-24 to 1939-40.
	£	£	£	£	£	£
Cr. Brought forward ..	1,571,603	1,780,186	1,937,295	1,252,784	1,131,163	..
Balance transferred to Fund on 11th August, 1923 ..	..	..	..	..	..	2,262,983
From Consolidated Revenue	3,244,970	3,434,219	3,681,741	3,917,825	4,269,096	47,357,188
Repayments of Sundry Loans	13,954	14,758	15,610	16,510	21,385	1,308,922
Purchase-money and Re- payments under War Service Homes Act ..	515,896	550,158	607,435	628,950	636,102	10,555,701
Half Net Profit Common- wealth Bank	373,770	354,050	318,752	321,448	363,719	5,262,396
Reparation Moneys ..	623	154	147	148	126	5,574,230
Interest on Investments ..	29,202	38,797	40,478	32,381	25,183	820,522
Other Contributions ..	13,453	13,453	13,453	13,453	13,453	181,439
Total	5,763,471	6,185,815	6,614,911	6,183,499	6,460,227	73,323,381
Dr. Redemptions	3,983,285	4,248,520	5,362,127	5,052,336	4,934,443	71,797,597
Carried forward ..	1,780,186	1,937,295	1,252,784	1,131,163	1,525,784	1,525,784
Total	5,763,471	6,185,815	6,614,911	6,183,499	6,460,227	73,323,381

The British Government loan comes in a different category from the other as described on page 874.

Information regarding the transactions of the States' Account of the National Debt Sinking Fund is published in the State Finance section of this issue, and, in greater detail, in the *Finance Bulletin* issued by this Bureau.

§ 5. Cost of War (1914-19) and Repatriation.

In view of the importance of the subject, a further reference is here made to the cost of the War of 1914-19. The general policy of the Commonwealth Government has been to pay from Consolidated Revenue all charges for interest, sinking fund, pensions and other recurring charges consequent upon the War, and part of the expense of repatriation. On the other hand, the whole direct cost of the War and the larger proportion of the cost of repatriation have been paid from loans. Detailed particulars

relating to Repatriation, War and Service Pensions appear in Chapter X. "Repatriation" of this issue. The total cost from both sources to 30th June, 1940, is set out in the following table:—

COMMONWEALTH WAR (1914-19) EXPENDITURE.

Year.	From Consolidated Revenue Fund.			War Loan Expenditure.(b)
	War and Repatriation Services, including War Pensions.	Interest and Sinking Fund. (a)	Total.	
	£	£	£	£
1914-15	796,190	115,145	911,335	14,100,000
1915-16	1,718,887	2,059,491	3,778,378	37,423,568
1916-17	2,439,271	5,988,058	8,427,329	53,114,237
1917-18	4,049,955	7,813,296	11,863,251	55,028,180
1918-19	6,536,927	14,718,174	21,255,101	59,547,080
1919-20	8,976,793	15,774,938	24,751,731	43,194,764
1920-21	13,672,345	19,613,888	33,286,233	24,148,501
1921-22	10,261,471	21,075,693	31,337,164	7,576,977
1922-23	9,114,925	20,801,912	29,916,837	1,762,694
1923-24	7,906,994	20,555,063	28,462,057	691,247
1924-25	8,228,628	20,155,426	28,384,054	Cr. 32,051
1925-26	8,473,659	20,539,123	29,012,782	Cr. 7,613
1926-27	8,770,295	20,300,101	29,070,396	23,938
1927-28	8,788,030	20,005,972	28,794,002	Cr. 23,741
1928-29	9,026,381	20,771,652	29,798,033	Cr. 12,972
1929-30	9,517,259	20,213,586	29,730,845	Cr. 2,669
1930-31	10,468,748	18,672,080	29,140,828	Cr. 2,206
1931-32	8,764,848	12,198,565	20,963,413	..
1932-33	7,928,817	11,193,150	19,121,967	..
1933-34	8,064,137	10,966,411	19,030,548	..
1934-35	8,433,372	10,584,489	19,017,861	..
1935-36	8,657,732	9,580,972	18,238,704	..
1936-37	9,101,353	9,622,600	18,723,953	..
1937-38	9,342,462	9,605,838	18,948,300	..
1938-39	9,512,882	9,556,818	19,069,700	..
1939-40	9,339,739	9,491,965	18,831,704	..
Discounts and Flotation Expenses on Loans, including Redemption and Conversion Loans	804,989	..	804,989	5,999,094
Indebtedness to the Government of the United Kingdom for payments made, services rendered, and goods supplied during the War(c) .. .. .	..	..	..	43,398,098
War Gratuities paid in cash	452,295	..	452,295	27,061,394
Total to 30th June, 1940	209,149,384	361,974,406	571,123,790	372,988,520

NOTE.—For particulars of expenditure relating to the present War see pages 863, 864 and 873.

(a) Excludes interest on amounts raised for the States for Soldier Land Settlement since 1934-35. (b) Excluding expenditure on War Service Homes from 1923-24. (See page 873.) (c) The total indebtedness to the Government of the United Kingdom involved in the Funding Arrangements Act 1921 was £92,480,157. At 30th June, 1940, the amount outstanding had been reduced to £79,724,221.

§ 6. Old-age and Invalid Pensions.

1. **General.**—In previous issues of the Official Year Book an account is given of the introduction of the old-age pension system in Australia, together with a detailed description of the Commonwealth Invalid and Old-age Pensions Act 1908, which became operative on 1st July, 1909. Invalid pensions were first paid from 15th December, 1910. (See Official Year Books, Nos. 3 to 8.) The following statement shows the rates of pension under the original Act and the rates as they have been varied from time to time :—

RATES OF PENSION PAYABLE.

Date from which Operative.	Pension Payable (Annual Rate.)	Pensioner's Annual Income including pension not to exceed—
	£ s. d.	£ s. d.
1st July, 1909	26 0 0	52 0 0
12th October, 1916	32 10 0	58 10 0
1st January, 1920	39 0 0	65 0 0
13th September, 1923	45 10 0	78 0 0
8th October, 1925	52 0 0	84 10 0
23rd July, 1931	45 10 0	78 0 0
13th October, 1932	45 10 0	71 10 0
26th October, 1933	45 10 0	78 0 0
4th July, 1935	46 16 0	79 6 0
24th September, 1936	49 8 0	81 18 0
9th September, 1937	52 0 0	84 10 0
17th December, 1940	54 12 0	87 2 0

Subject to the conditions of the Act, every person who has attained the age of sixty-five years (in the case of females, sixty years), or who, being permanently incapacitated for work, has attained the age of sixty years, is, while in Australia, qualified to receive an old-age pension.

Asiatics, generally, are not eligible to receive an invalid or old-age pension, unless born in Australia, but, by an amending Act which came into operation from 7th October, 1926, pension rights were extended to Indians who were born in British India.

Invalid pensions were granted from 15th December, 1910. Subject to the conditions of the Act, every person above the age of sixteen years who is permanently incapacitated for work, and every permanently blind person above the age of sixteen years, provided that, in each case, an old-age pension is not being received, is, while in Australia, qualified to receive an invalid pension. An applicant for an invalid pension must satisfy the Department that his or her disability is both total and permanent and became so in Australia. In 1920 special provision was made for a permanently blind person, by which the annual pension was at such a rate (not exceeding that shown in the table above) as would make his income plus that of his wife together with the pension equal to an amount not exceeding £221 per annum, or such other amount as is declared to be the basic wage of the State in which the pensioner resides. The maximum pension now payable to a blind person is £54 12s. per annum and the limit of income is £230 2s. per annum.

In December, 1940, the maximum pension rate was increased to £54 12s. per annum, and provision was made for future adjustments in accordance with the variations of the "C" Series Retail Prices Index-number for the Six Capital Cities. The maximum rate will be reviewed by the Commissioner for Pensions each quarter, commencing with that ending 31st March, 1941, in order to determine the rate for the next succeeding quarter. If the price index-number for the quarter immediately preceding that in which the rate is reviewed exceeds 981, the maximum rate per annum shall be £54 12s.

plus £1 6s. for every 23 units, or portion thereof, by which the index-number exceeds 981. If the index-number subsequently falls, the maximum rate shall, where necessary, be reduced to accord with the maximum rate determined as above, provided that it shall not, in any event, be reduced to less than £54 12s.

Pensions to inmates of institutions have also been increased from 6s. to 6s. 6d. per week, and provision made for their future adjustment in accordance with the variations of the price index-number, the adjustments not to exceed a one hundred and fourth part of the amount by which the maximum rate per annum is adjusted.

During 1939-40 all invalid pensions in force were specially reviewed, and at 30th June, 1940, all those pensioners who had become qualified for old-age pensions by age and residence were transferred to the old-age pension list.

Further explanation of pension rates and other matters incorporated in the act above referred to are given in the *Invalid and Old-age Pensions Handbook* issued by the Commissioner of Pensions.

2. **Old-age Pensions.**—(i) *Number in force.* At 30th June, 1939, there were 232,836 old-age pensions in force. During 1939-40, 26,875 pensions claims were granted, and 32,351 pensioners were transferred from the invalid pension list, while 19,166 pensions expired through cancellations and deaths. The net increase for the year, excluding the number transferred, was 7,709 and the total in existence at 30th June, 1940, 272,896.

(ii) *Sexes of Pensioners.* Of the pensioners at 30th June, 1940, 109,744 (or 40 per cent.) were males, and 163,152 (or 60 per cent.) were females. Details for the several States are as follows:—

OLD-AGE PENSIONS : SEXES OF PENSIONERS AT 30th JUNE, 1940.

State.	Males.	Females.	Total.	Masculinity.(a)
New South Wales	43,325	64,840	108,165	66.82
Victoria	28,802	47,279	76,081	60.92
Queensland	15,057	19,102	34,159	78.82
South Australia	9,633	15,220	24,853	63.29
Western Australia	8,477	10,547	19,024	80.37
Tasmania	4,450	6,164	10,614	72.19
Total	109,744	163,152	272,896	67.26

(a) Number of males to each 100 females.

(iii) *Ages and Conjugal Condition of Pensioners.* The recorded ages of the 26,875 persons (12,310 males and 14,565 females) to whom pensions were granted during the year 1939-40 varied considerably, ranging from 5,116 at age 60 to 2 at age 94. The conjugal condition of these new pensioners was as follows:—Males—single, 2,330; married, 7,819; and widowed, 2,161. Females—single, 1,919; married, 7,813; and widowed, 4,833.

3. **Invalid Pensions.**—(i) *Number in force, 1939-40.* The number of invalid pensioners decreased from 88,812 in 1938-39 to 58,696 in 1939-40, a decrease of 30,116. This decrease was caused by the transfer of 32,351 pensioners to the old-age pension list. Total pensions granted during the year were 10,636, while 8,401 pensions became inoperative through cancellations or deaths. Excluding the numbers transferred, there was therefore an increase of 2,235

(ii) *Sexes of Pensioners.* Of the 58,696 persons in receipt of invalid pensions on 30th June, 1940, 26,484, or 45 per cent. were males, and 32,212, or 55 per cent. were females. Details for the several States are as follows:—

INVALID PENSIONS: SEXES OF PENSIONERS AT 30th JUNE, 1940.

State.	Males.	Females.	Total.	Masculinity.(a)
New South Wales	11,731	14,875	26,606	78.86
Victoria	5,903	6,836	12,739	86.35
Queensland	4,191	4,486	8,677	93.42
South Australia	1,894	2,774	4,668	68.28
Western Australia	1,585	1,869	3,454	84.80
Tasmania	1,180	1,372	2,552	86.01
Total	26,484	32,212	58,696	82.22

(a) Number of males to each 100 females.

(iii) *Ages and Conjugal Conditions of Pensioners, 1939-40.* Whilst recorded ages of the 10,636 persons (5,424 males and 5,212 females) to whom invalid pensions were granted during 1939-40 varied from 16 to 85, 5,644 or 53.1 per cent. were in the 45-59 years age-group.

The conjugal condition of persons to whom invalid pensions were granted during the year was as follows:—Males—single, 2,207; married, 2,904; and widowed, 313. Females—single, 2,069; married, 2,075; and widowed, 1,068.

4. *Cost of Administration.*—Under State control the cost of administration differed considerably in the several States, and for 1908-9 represented in New South Wales 4.17 per cent. of the amount actually paid in pensions. In Victoria for the same year the corresponding percentage was 0.70. The total cost to the Commonwealth of administering the Old-age and Invalid Pensions Department in 1939-40 was approximately £130,000, or about 0.79 per cent. of the amount paid to pensioners and to Benevolent Asylums and Hospitals. The corresponding cost in 1938-39 was approximately £128,000 or about 0.80 per cent. of the total payments.

The actual sum disbursed in old-age and invalid pensions in the financial year 1939-40, apart from the cost of administration and inclusive of the amount paid to asylums and hospitals for the maintenance of pensioners, was £16,459,245 (47s. 1d. per head of mean population) and in 1938-39, £15,991,782 (46s. 2d. per head).

5. *Summary.*—The following table gives details concerning the working of the Act for the last six years:—

OLD-AGE AND INVALID PENSIONS: SUMMARY, AUSTRALIA.

Year ended 30th June	Number of Pensioners.				Amount Paid in Pensions.	Total Payment to Pensioners and Institutions.	Cost of Administration (approximate.)	Cost of Administration per £100 paid to Pensioners and Institutions (approximate).	Average Fortnightly Pension as at 30th June.
	Old-age.		Invalid.	Total.					
	No.	Est. No. per 1,000 of persons eligible on age qualification. (a)							
			No.	No.	£	£	£	s. d.	s. d.
1935	197,126	344	76,852	273,978	11,624,769	11,762,030	107,268	18 3	33 7
1936	206,748	352	80,487	287,235	12,634,706	12,797,726	115,257	18 0	34 8
1937	215,690	361	83,396	299,086	13,827,636	13,998,793	118,851	17 0	36 8
1938	224,154	372	86,096	310,250	15,615,428	15,798,687	124,000	15 8	38 6
1939	232,836	376	88,812	321,648	15,798,038	15,991,782	128,000	16 0	38 5
1940e	272,896	432	58,696	331,592	16,250,064	16,459,245	130,000	15 10	38 6

(a) Based on an estimate of the aggregate of males aged 65 and over and females aged 60 and over at 30th June of each year. (b) A general increase of 1s. per fortnight occurred in July, 1935. (c) A general increase of 2s. per fortnight occurred in September, 1936. (d) A general increase of 2s. per fortnight occurred in September, 1937. (e) See pars. 2 and 3 above.

Separate particulars of the payments to invalid and to old-age pensioners are not available but the annual liability at 30th June, 1940, together with the total payments in 1939-40 are given hereunder:—

INVALID AND OLD-AGE PENSIONS: PAYMENTS AND ANNUAL LIABILITY.

State.	Payments Old-age and Invalid Pensions, 1939-40.(a)	Annual Liability at 30th June, 1940.		
		Old-age Pensions.	Invalid Pensions.	Total.
		£	£	£
New South Wales(b)	6,627,718	5,417,022	1,350,934	6,767,956
Victoria	4,470,057	3,804,684	641,576	4,446,260
Queensland	2,138,230	1,708,668	437,398	2,146,066
South Australia(c)	1,453,840	1,214,564	233,402	1,447,966
Western Australia	1,112,580	943,150	174,070	1,117,220
Tasmania	656,820	527,644	127,946	655,590
Total	16,459,245	13,615,732	2,965,326	16,581,058

(a) Including amounts paid to Benevolent Asylums and Hospitals for the maintenance of pensioners.
 (b) Includes Australian Capital Territory. (c) Includes Northern Territory.

§ 7. Maternity Allowance.

1. **General.**—During the session of 1912 the Commonwealth Parliament passed an Act providing for the payment of maternity allowances. The scope and main provisions of the Act are given in Official Year Book No. 14, p. 1047. The most important conditions in the original Act were that the sum of five pounds was payable in the case of each confinement resulting in the birth of a viable child whether such child was born alive or dead. The mother must be a native of Australia or intend to settle permanently therein. No payment is made in the case of an aboriginal or an alien. The Financial Emergency Act 1931 reduced the allowance payable to £4 and limited the application of the original Act to those cases where the combined income of husband and wife did not exceed £260 (reduced to £208 by the Financial Emergency Act 1932) in the previous 12 months.

From 1st August, 1934, the limit of income was increased by £13 per annum in respect of each previous child of the claimant under the age of 14 years living at the date of the birth, with a maximum income limit of £299. The amount of the allowance was also increased from £4 by 5s. in respect of each such child up to a maximum of £5.

On 21st September, 1936, the limit of income was increased from £208 to £221 with an allowance of £13 per annum in respect of each previous surviving child under 14 years of age up to a maximum income of £312. The amount of maternity allowance was also increased to £4 10s. in cases where there was no previous surviving issue under 14 years of age and £5 where there was any such issue. In respect of births occurring on and after 1st January, 1938, the income limit is £247, with an additional £13 in respect of each previous living child under 14, the maximum being £338. The amount of the allowance is £4 10s. where there is no previous living child under 14, £5 where there are one or two previous living children under 14 and £7 10s. where there are three or more such children.

The following table gives a summary in connexion with the working of the Maternity Allowance Act for the years 1935-36 to 1939-40 :—

MATERNITY ALLOWANCE : SUMMARY.

Year.	Claims Paid.	Claims Rejected.	Amount Paid.	Cost of Administration (approximate).	Cost per £100 of allowance paid (approximate).
	No.	No.	£	£	£ s. d.
1935-36 ..	76,953	5,459	335,552	12,200	3 12 9
1936-37 ..	79,254	5,843	370,150	12,150	3 5 8
1937-38 ..	79,000	5,931	400,004	15,671	3 18 4
1938-39 ..	80,916	6,272	436,614	16,959	3 17 8
1939-40 ..	77,352	6,779	416,964	17,181	4 2 5
Aggregate—					
1912-13 to					
1939-40 ..	3,193,894	67,607	15,667,821	389,886	2 9 9

2. Claims paid in each State.—The following table shows the number of maternity allowance claims paid in each State during the last five years :—

MATERNITY ALLOWANCE : CLAIMS PAID IN EACH STATE.

Year ended 30th June—	N.S.W. (a)	Vic.	Q'land.	S.A.	W.A.	Tas.	N.T.	Total.
	No.	No.	No.	No.	No.	No.	No.	No.
1936	30,463	19,672	11,640	6,613	4,850	3,689	26	76,953
1937	31,086	20,350	12,170	6,854	4,731	4,018	45	79,254
1938	30,440	20,160	12,660	6,656	5,026	4,029	29	79,000
1939	30,860	20,819	12,880	7,162	5,213	3,940	42	80,916
1940	29,700	19,660	12,290	7,009	4,774	3,883	36	77,352
Total, 1912-13 to 1939-40 ..	1,268,946	833,944	473,142	277,929	202,605	136,264	1,064	3,193,894

(a) Includes Australian Capital Territory.

§ 8. Commonwealth Public Service Superannuation Fund.

This Fund, which was inaugurated on 20th November, 1922, is maintained by contributions of officers of Parliament, of employees of the Commonwealth Public Service and the Defence Departments, and by payments from Consolidated Revenue, the latter being made when the officers retire on pension. Full particulars as to the benefits, etc., will be found in Official Year Book No. 18, p. 383. In September, 1937, legislation was passed extending superannuation rights to approximately 1,600 employees of the Repatriation Commission, the War Service Homes, the High Commissioner's Office, London, and the Council for Scientific and Industrial Research. During the same year a new feature, in the form of the Provident Account, was introduced. This provides for compulsory contributions in respect of those, who, through physical disabilities or failure to pass the required medical examination, are ineligible to contribute to the Superannuation Fund. Any other, whose contribution to the Superannuation Fund for the first two units of pension is in excess of the rate for age 45 years and above 5 per cent. of his salary, may elect to transfer to the Provident Account.

The number of contributors to the fund at 30th June, 1939, was 40,249, (35,745 males and 4,504 females) and the average pension contributed for was 4.691 units or £121 19s. 4d. per annum.

During 1938-39 the receipts of the fund amounted to £1,424,748 of which officers' contributions represented £536,059, interest on investments, £290,092, investments matured, £451,818, and advances by the Treasury, £138,800. The payments from the fund for the year were £1,466,738 of which £140,244 represented pension payments and £1,289,332 investments. At 30th June, 1939 the total funds invested amounted to £7,461,298 (at cost). The average rate of interest on investments at 30th June, 1939, was £4 5s. 9d. per cent.

Pensions in force on 30th June, 1939, including contributory and non-contributory, but excluding commuted pensions, numbered 6,665, with a net annual liability of £604,843, of which £460,498 represented the share payable from the Consolidated Revenue Fund.

§ 9. Currency and Coinage.

1. **Australian Mints.**—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 into the respective State Treasuries, and it might be said until recently that, apart from expenditure on buildings, new machinery, etc., the amounts paid into the Treasuries fairly balanced the mint subsidies. Early in 1923, however, it was announced that owing to losses incurred in the operations of recent years, the British Treasury in consultation with the New South Wales Government had decided to close the Sydney branch at the end of 1923. This decision was, however, not carried out until the end of 1926.

2. **Standard Weight and Fineness of Coinage.**—In addition to coins minted at Melbourne and Perth mints, Imperial silver coins legally current in England and which were minted prior to 31st March, 1920, when the fineness was reduced from .925 to .500, are also legal tender in Australia where the fineness of silver coin is .925. The circulation of Imperial silver currency in Australia has practically ceased, as the ruling exchange rate has made it profitable to transfer to London all coins legally current there. Sovereigns coined at the Royal Mint, London, or at any of its branches throughout the Empire are legal tender in Australia. The provisions as to legal tender are—gold coins, legal tender to any amount, silver for an amount not exceeding forty shillings, and bronze up to one shilling. The standard weights of the sovereign and half-sovereign are respectively 123.27447 grains and 61.63723 grains, but these coins will pass current if they do not fall below 122.5 grains and 61.125 grains respectively. Gold coins have ceased to circulate in Australia and Commonwealth Bank Notes are legal tender to any amount.

3. **Gold Receipts and Issues.**—(i) *Receipts.* The receipts of gold during 1939 and the aggregate at each mint to the end of 1939 were as follows :—

AUSTRALIAN MINTS: RECEIPTS OF GOLD, 1939, AND TOTAL.

Mint.	Deposits during 1939.	Total to end of 1939.		
		Quantity.		Value.
		Gross.	Fine.	
	Oz.	Oz.	Oz.	£
Sydney(a) ..	..	42,082,928	36,907,045	156,771,141
Melbourne ..	411,356	44,879,027	40,463,374	171,877,373
Perth ..	1,506,823	42,181,064	34,169,936	145,144,568
Total ..	1,918,219	129,143,019	111,540,355	473,793,082

(a) To end of 1926.

In cases of deposits containing over a certain minimum of silver, the excess is paid for at the rate fixed from time to time by the Deputy-Master of the branch mint concerned.

(ii) *Issues.* The Australian mints issue gold bullion partly for the use of local manufacturers (jewellers and dentists), and partly for export. Since September, 1931, when the United Kingdom departed from the gold standard, the minting 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 in 10-oz. bars to India. During recent years the export was subject to regulation by the

Commonwealth Government. The issues during 1939, and the total to the end of that year, are shown in the table below:—

AUSTRALIAN MINTS: ISSUES OF GOLD.

Mint.	Coin.			Bullion.	Total.
	Sovereigns.	Half-sovereigns.	Total.		
1939—	£	£	£	£	£
Melbourne ..	..	..	..	1,252,626	1,252,626
Perth ..	..	..	..	4,696,712	4,696,712
Total, 1939	..	..	..	5,949,338	5,949,338
Aggregate—					
Sydney ..	144,435,550	4,781,000	149,216,550	7,574,408	156,790,958
Melbourne ..	147,283,131	946,780	148,229,911	23,652,337	171,882,248
Perth ..	106,384,197	367,338	106,751,535	38,401,917	145,153,452
Total to end of 1939 ..	398,102,878	6,095,118	404,197,996	69,628,662	473,826,658

(iii) *Withdrawals of Worn Coin.* The mints receive light and worn coin for recoinage. The total withdrawals of worn gold coin to the end of 1939 were as follows:—Sydney (to 1926), £1,110,867; Melbourne, £882,304 (since and including 1890); and Perth, £1,401.

4. *Price of Gold.*—In consequence of Great Britain's departure from the gold standard on 21st September, 1931, the market value of gold immediately rose by about 17½ per cent. from £4 4s. 11d. to £4 19s. 7d. per fine ounce. Considerable fluctuations have since taken place, but over the last few years the price has been steadily rising. At the outbreak of the present War the price in London was fixed at the high level of £stg. 8.4 per fine ounce. In previous issues the Australian prices shown were calculated from the London price but in view of this fixation the prices shown in the following table represent the Commonwealth Bank's buying price for gold lodged at the mints in Australia.

The table shows the prices in London and Australia for 1932–33 and following years, and for each month from July, 1937 to December, 1940. Particulars are also shown for the value of the sovereign.

PRICE OF GOLD: LONDON AND AUSTRALIA, 1932–33 to 1940–41.

Period.	London.		Australia.(a)		
	Average price per fine oz.	Average value of Sovereign.	Average price per fine oz.	Average value of Sovereign.	Equivalent to a premium of—
Average for Year—	£s s. d.	£s s. d.	£A s. d.	£A s. d.	%
1932–33 ..	6 1 4	1 8 7	7 9 9	1 15 3	76.2
1933–34 ..	6 11 8	1 11 0	8 2 0	1 18 1	90.6
1934–35 ..	7 1 6	1 13 4	8 14 10	2 1 2	105.7
1935–36 ..	7 0 9	1 13 2	8 14 0	2 1 0	105.0
1936–37 ..	7 0 10	1 13 2	8 15 3	2 1 3	106.2
1937–38 ..	7 0 0	1 13 0	8 13 10	2 0 11	104.6
1938–39 ..	7 6 9	1 14 7	9 2 9	2 3 0	115.0
1939–40 ..	8 4 10	1 18 8	10 8 4	2 9 1	145.4

NOTE.—“£s” represents £'s sterling while Australian £'s are indicated by “£A.”

(a) Based on the Commonwealth Bank's buying price for gold lodged with the mints. Particulars in previous issues calculated from the London price. The average value of sovereigns from September, 1939 onwards is the direct quotation of the Commonwealth Bank. In respect of earlier figures the value has been calculated from the gold price, one sovereign being estimated at .23452 fine ounces in weight.

PRICE OF GOLD: LONDON AND AUSTRALIA, 1932-33 to 1940-41—*continued.*

Period.	London.		Australia.(a)		Equivalent to a premium of—
	Average price per fine oz.	Average value of Sovereign.	Average price per fine oz.	Average value of Sovereign.	
Average for	£s s. d.	£s s. d.	£A s. d.	£A s. d.	%
Month—					
1937-38—					
July ..	7 0 0	1 13 0	8 14 5	2 1 1	105.4
August ..	6 19 6	1 12 10	8 13 10	2 0 11	104.6
September ..	7 0 4	1 13 1	8 14 7	2 1 1	105.4
October ..	7 0 6	1 13 1	8 14 7	2 1 1	105.4
November ..	7 0 2	1 13 0	8 13 6	2 0 10	104.2
December ..	6 19 9	1 12 11	8 13 2	2 0 9	103.8
January ..	6 19 8	1 12 10	8 12 11	2 0 8	103.3
February ..	6 19 9	1 12 11	8 13 1	2 0 9	103.8
March ..	6 19 11	1 12 11	8 13 8	2 0 11	104.6
April ..	6 19 9	1 12 11	8 13 7	2 0 10	104.2
May ..	7 0 1	1 13 0	8 14 2	2 1 0	105.0
June ..	7 0 9	1 13 2	8 14 6	2 1 1	105.4
1938-39—					
July ..	7 1 3	1 13 3	8 15 5	2 1 4	106.5
August ..	7 2 6	1 13 6	8 17 4	2 1 9	108.7
September ..	7 4 5	1 14 0	9 0 2	2 2 5	112.1
October ..	7 5 9	1 14 4	9 1 8	2 2 9	113.8
November ..	7 7 8	1 14 9	9 3 9	2 3 3	116.3
December ..	7 7 11	1 15 1	9 5 3	2 3 7	118.1
January ..	7 8 11	1 15 1	9 5 6	2 3 8	118.3
February ..	7 8 4	1 14 11	9 4 8	2 3 6	117.6
March ..	7 8 5	1 14 11	9 5 2	2 3 7	117.9
April ..	7 8 6	1 15 0	9 5 1	2 3 7	117.9
May ..	7 8 6	1 14 11	9 4 11	2 3 6	117.6
June ..	7 8 6	1 14 11	9 4 10	2 3 6	117.6
1939-40—					
July ..	7 8 6	1 15 0	9 4 11	2 3 6	117.6
August ..	7 10 6	1 15 5	9 10 5	2 4 10	124.1
September ..	8 7 7	1 19 5	10 11 0	2 8 2	140.8
October ..	8 8 0	1 19 7	10 11 0	2 8 2	140.8
November ..	8 8 0	1 19 7	10 11 11	2 8 7	142.9
December ..	8 8 0	1 19 7	10 12 6	2 8 11	144.6
January ..	8 8 0	1 19 7	10 12 9	2 8 11	144.6
February ..	8 8 0	1 19 7	10 13 2	2 9 0	145.0
March ..	8 8 0	1 19 7	10 13 3	2 9 0	145.0
April ..	8 8 0	1 19 7	10 13 3	2 9 0	145.0
May ..	8 8 0	1 19 7	10 13 3	2 9 0	145.0
June ..	8 8 0	1 19 7	10 13 0	2 9 0	145.0
1940-41—					
July ..	8 8 0	1 19 7	10 11 0	2 8 6	142.5
August ..	8 8 0	1 19 7	10 12 6	2 8 11	144.6
September ..	8 8 0	1 19 7	10 13 3	2 9 0	145.0
October ..	8 8 0	1 19 7	10 14 0	2 9 3	146.3
November ..	8 8 0	1 19 7	10 14 0	2 9 3	146.3
December ..	8 8 0	1 19 7	10 14 0	2 9 3	146.3

NOTE.—“£s” represents £'s sterling while Australian £'s are indicated by “£A.”

(a) Based on the Commonwealth Bank's buying price for gold lodged with the mints. Particulars in previous issues calculated from the London price. The average value of sovereigns from September, 1939 onwards is the direct quotation of the Commonwealth Bank. In respect of earlier figures the value has been calculated from the gold price, one sovereign being estimated at .23452 fine ounces in weight.

5. *Silver and Bronze Coinage.*—(i) *Prices of Silver.* Particulars for recent years are shown in p. 293 of Chapter XII. "Mineral Industry."

(ii) *Profits on Coinage of Silver.* As sixty-six shillings are coined out of one pound troy of standard silver (.925 fine), the silver required to produce £3 6s. of coin costs, at the average 1939 London market price of 1s. 8. 6d. per ounce, approximately 20s. 7d. The difference nearly represents, therefore, the gross profit or seigniorage made on the coinage of every £3 6s. Negotiations between the Imperial authorities and the Governments of New South Wales and Victoria for the coinage of silver and bronze coin in Australia extended over a number of years but no decision was arrived at. As Section 51 of the Commonwealth Constitution makes legislation concerning "currency, coinage, and legal tender" a Commonwealth matter, the question remained in abeyance until 1907, when the matter was discussed at the Colonial Conference, London, with the result that in the latter part of 1908 the Commonwealth Treasurer announced his intention of initiating the coinage. Since 1916 silver and bronze coins have been minted in Australia on behalf of the Commonwealth Treasury. An issue of crowns was made in 1936-37 when coins of this denomination to the value of £200,000 were put into circulation. Further issues to the value of £50,000 in 1937-38, £25,000 in 1938-39, and £600 in 1939-40 have been minted. These coins have now practically disappeared from circulation.

(iii) *Silver and Bronze Issues.* The total issues of silver and bronze coinage on account of the Commonwealth since 1910, as obtained from returns furnished by the Treasury, are set out in the following table:—

AUSTRALIAN MINTS: SILVER AND BRONZE ISSUES BY TREASURY.

Year.	Silver.						Bronze.			
	5s.	2s.	1s.	6d.	3d.	Total.	1d.	½d.	Total.	
	£	£	£	£	£	£	£	£	£	
1910 to 1932	..	3,904,600	1,837,300	861,500	823,100	7,426,500	333,163	117,985	451,148	
1932-33	..	23,400	9,200	5,200	6,600	44,400	13,470	8,140	21,610	
1933-34	..	81,400	29,200	23,800	24,200	158,600	21,890	7,500	29,390	
1934-35	..	140,400	24,200	24,000	29,800	218,400	17,390	6,770	24,160	
1935-36	..	167,500	34,400	46,800	49,400	298,100	23,920	8,050	31,970	
1936-37	..	200,000	208,600	13,000	47,000	39,200	507,800	17,180	6,190	23,370
1937-38	..	50,000	365,000	93,600	59,700	65,200	633,500	26,770	7,130	33,900
1938-39	..	25,000	77,400	39,000	47,800	39,400	219,600	30,660	11,140	41,800
1939-40	..	600	176,800	36,800	41,600	50,600	306,400	20,770	5,280	26,050
Total	275,600	5,145,100	2,107,700	1,157,400	1,127,500	9,813,300	505,213	178,135	683,398	

(iv) *Withdrawals of Worn Silver Coin.* An examination of the wear on silver coins made by the London Mint Authorities in 1909 revealed that the average life of silver coins (then .925 fine) was:—2s. pieces, 45 years; 1s., 41 years; 6d., 28 years; and 3d., 32 years. No worn silver coins were received during 1939. The total withdrawals of worn silver coin to 1939 were:—Melbourne, £1,747,409; Perth, £129,738; Sydney (to 1926), £1,248,672.

6. *Australian Note Issue.*—(i) *General.* Information in some detail regarding Australian Notes has been given in earlier issues of the Official Year Book. In December, 1920, the assets and liabilities of the Treasurer under the Australian Notes Act 1910-1914 were transferred to the Note Issue Department of the Commonwealth Bank and control of the Australian Note Issue was placed under the Board of Directors of this Department. Under the Commonwealth Bank Act 1924 control of the Note Issue passed to the Board of Directors of the Commonwealth Bank.

(ii) *Reserve against Note Issue.* Prior to 19th June, 1931, the reserve held in gold against the note issue was fixed at 25 per cent. of the total notes in circulation. To permit further shipments of gold to meet short-term obligations in London, an Amending

Act reduced the statutory gold reserve to 15 per cent. with provision for the restoration by graduations to 25 per cent. within a period not exceeding five years. A further Amending Act provided that portion of the note issue reserve may be held in British sterling, which was defined as follows:—(a) Balances standing to the credit of the Bank at the Bank of England or at any other of its Bankers in London; (b) Bills of Exchange or advances secured thereby which will mature in not more than three months and which are payable in the United Kingdom in currency which is legal tender therein; and (c) Treasury Bills or other securities of the United Kingdom which will mature in not more than three months.

(iii) *Notes in Circulation.* Particulars of the average notes in circulation and of the gold reserve for the years 1914 and 1935 to 1939 are given in the following table:—

AUSTRALIAN NOTE ISSUE: PARTICULARS.

Particulars.	Average of monthly statements for year—					
	1914.	1935.	1936.	1937.	1938.	1939.
Notes held by—	£	£	£	£	£	£
Banks ..	(a) 20,119,208	20,119,208	18,465,121	17,194,775	16,700,228	14,403,326
Public ..	(a) 27,449,147	27,449,147	28,972,667	31,008,466	32,706,922	35,186,843
Total ..	11,944,848	47,568,355	47,437,788	48,203,241	49,407,150	49,590,169
Gold Reserve(b)	5,368,822	15,922,404	16,001,182	16,009,963	16,008,892	16,029,758
Percentage of Reserve on Total Issue ..	44.9	33.5	33.7	33.2	32.4	32.4

(a) Not available. (b) Includes English sterling in 1935 and following years. (c) Average of published figures including values expressed in £'s gold, £'s sterling and £'s Australian. (d) £'s Australian.

Details of the average value of each of the several denominations of Australian Notes outstanding in 1914 and from 1935 to 1939 are given in *Finance Bulletin* No. 31 issued by this Bureau.

(iv) *Note Issue Department—Australian Notes Account at 30th June, 1940.* The following statement shows particulars of liabilities and assets of the Note Issue Department of the Commonwealth Bank as at 30th June, 1940.

AUSTRALIAN NOTES ACCOUNT: 30th JUNE, 1940.

Liabilities.		Assets.	
	£		£
Notes in circulation ..	61,619,444	Gold and English sterling ..	16,081,528
Reserve for Notes not presented	33,983	Debentures and other Securities	54,311,235
Special Reserve premium on gold	7,752,901	Other Assets (Commonwealth Government)	455,253
Other Liabilities	1,441,688		
Total Liabilities	70,848,016	Total Assets	70,848,016

7. **Legal Tender Extant.**—Accurate information regarding the amount of token money in circulation is not available, but the following table gives an estimate of the amount of legal tender extant about the middle of the years 1936 to 1940.

ESTIMATED LEGAL TENDER EXTANT: AUSTRALIA.

Particulars.	1936.	1937.	1938.	1939.	1940.
Australian Note Issue(a)—	£'000.	£'000.	£'000.	£'000.	£'000.
Held by Banks	18,253	17,537	17,630	14,829	13,937
Held by Public	28,792	29,502	31,404	32,701	46,938
Notes of Trading Banks outstanding(b)	167	167	167	167	167
Coin—Gold—Held by Banks(c) ..	51	62	48	79	75
Held by Public .. .. .	..	..	..	..	..
Silver—Held by Banks(c) ..	2,099	2,325	2,601	2,508	1,925
Held by Public	5,943	6,160	6,515	6,861	7,616
Bronze—Held by Banks(c) ..	113	118	117	132	125
Held by Public	441	460	499	535	569
Total	55,859	56,331	58,981	57,812	71,352

(a) Last Monday in June.

(b) Average for June quarter.

(c) At 30th June.

The figures given above for silver coin represent the total issues of Australian silver coin less the excess of exports of Australian coins to New Zealand and the Pacific Islands over the reimports of Australian coins. The amount of English coin in circulation in Australia is negligible, and as it is not possible to ascertain accurately its volume, no allowance has been made therefor. The figures given for bronze coins refer to the total issues of Australian coin, the small amount of British coin in circulation being disregarded.

C.—STATE FINANCE.

§ 1. General.

1. **Functions of State Governments.**—In comparing the financial returns of the States, allowance 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 instituting comparisons, and the particulars contained in this Chapter should be read with those contained in Chapter XXII, "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 in rendering public services, such for instance 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 taxation items paid into special funds) collected by the State is placed to the credit of 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 relating to New South Wales represent the transactions of the Consolidated Revenue Fund, the Unemployment Relief Fund, the Social Services Fund and the Business Undertakings included in the Annual Budget Papers. These latter are as follows :— Railways, Tramways and Omnibuses, Sydney Harbour Trust Section of the Maritime Services Board, and Road Transport and Traffic Fund. Particulars for all other States relate to the transactions of the Consolidated Revenue Fund.

On 16th December, 1938, it was enacted that, in order to provide for the co-ordination, regulation, control and improvement of the means of and facilities for transport in Tasmania, a Transport Commission, consisting of a Commissioner and two Associate Commissioners, should be constituted. This Commission was given control of all means of transport by road, rail or air within the State, other than those operated by private owners or by local Government authorities. Revenue was provided for by allotting to the Commission receipts from the operations of the various forms of Government transport, registration and licence-fees in respect of motor vehicles, etc., motor taxation collections, etc. In addition, the State Treasurer was required to pay to the Commission all moneys made available by the Commonwealth from the proceeds of petrol taxation, and all land tax collections. This Act became effective on 1st July, 1939. The separation of the Commission's financial transactions from the Consolidated Revenue Fund has therefore occasioned considerable decreases in the figures for 1939-40 as compared with those for the previous years.

The Trust Fund comprises all moneys held in trust by the Government, and includes such items as savings banks funds, sinking 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.**—In regard to the inter-relation of Commonwealth and State Finances, a statement in some detail, covering 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 379-80. On page 869 of this issue details are given in regard to the constitutional and other requirements in the matter of the distribution of Commonwealth revenues.

§ 2. Consolidated Revenue Funds.

Division 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 and Special Grants Acts; (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 contributor being the Government Railways and Tramways. Next in magnitude comes Taxation, followed in order by the Commonwealth Payments and Interest Receipts.

The Queensland Income (Unemployment Relief) Tax Act, 1930-1935, which provided that taxes collected for unemployment relief should be paid into a special fund, was repealed by the Income (State Development) Tax Act of 1938, which came into operation on 1st January, 1939. Under the conditions of the new Act, taxes collected are paid into Consolidated Revenue Fund. The inclusion of these taxes is largely responsible for the increase of Queensland 1938-39 revenue figures over those for 1937-38. The expenditure of the amounts so collected is responsible for a similar increase in the expenditure figures.

2. **Revenue Received.**—The following table furnishes particulars of the total amounts and the amounts per head, of consolidated revenue received by the several States during the last five years. The figures for New South Wales have been revised since the last issue, principally by the exclusion from railway revenue of £800,000 contribution from

Consolidated Revenue Fund on account of developmental country lines. This item has previously been duplicated in the combined accounts.

STATE CONSOLIDATED REVENUE.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
TOTAL COLLECTIONS.							
	£	£	£	£	£	£	£
1935-36	45,718,823	26,038,340	15,488,991	11,409,325	10,033,721	3,117,602	111,806,802
1936-37	49,159,077	27,221,267	16,535,038	11,739,306	10,185,433	3,488,524	118,328,645
1937-38	53,545,720	27,614,982	17,339,731	12,460,936	10,819,042	3,639,755	125,420,166
1938-39	51,709,735	26,985,548	19,330,369	12,303,597	10,949,660	3,614,764	124,893,673
1939-40	54,754,626	28,102,735	20,755,504	12,755,648	11,119,943	3,055,310	130,543,766
PER HEAD OF POPULATION.(c)							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1935-36	17 4 2	14 2 7	15 18 8	19 9 3	22 8 1	13 9 8	16 11 11
1936-37	18 6 9	14 13 11	16 16 0	19 19 1	22 10 10	15 0 6	17 8 7
1937-38	19 15 4	14 16 9	17 8 5	21 1 11	23 13 3	15 9 8	18 6 3
1938-39	18 18 3	14 7 10	19 4 0	20 14 0	23 13 4	15 5 2	18 1 6
1939-40	19 15 11	14 17 5	20 7 9	21 7 4	23 16 9	12 15 8a	18 14 3

(a) See § 1 par. 2 above. (b) See § 2 par. 1 above. (c) Based on mean population of each financial year.

3. Sources of Revenue.—(i) *General.* Classifying the revenue of the several States in the manner indicated in par. 1 above, particulars for the year 1939-40 are as follows:—

STATE CONSOLIDATED REVENUE : SOURCES, 1939-40.

Source of Revenue.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania. (a)	Total.
TOTAL REVENUE.							
	£	£	£	£	£	£	£
Taxation(b) ..	19,820,785	10,699,409	7,769,496	4,563,353	3,020,051	1,613,713	47,496,807
Business Under-takings ..	26,232,271	12,246,913	7,920,976	4,937,167	5,597,365	13,367	56,948,059
Territorial ..	1,627,974	415,661	1,550,629	235,729	316,205	68,110	4,214,308
Interest ..	454,554	1,503,900	1,250,188	926,905	475,839	448,336	5,059,722
Commonwealth payments(e) ..	2,967,593	2,127,159	1,096,235	1,578,816	1,068,432	696,859	9,535,094
Miscellaneous ..	3,651,449	1,109,693	1,167,980	513,678	632,051	214,925	7,289,776
Total ..	54,754,626	28,102,735	20,755,504	12,755,648	11,119,943	3,055,310	130,543,766
PER HEAD OF POPULATION.(f)							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Taxation(b) ..	7 3 4	5 13 3	7 12 8	7 12 10	6 9 11	6 15 1	6 16 2
Business Under-takings ..	9 9 8	6 9 7	7 15 7	8 5 5	12 0 0	0 1 1	8 3 3
Territorial ..	0 11 9	0 4 5	1 10 6	0 7 11	0 13 6	0 5 8	0 12 1
Interest ..	0 3 3	0 15 11	1 4 7	1 11 1	1 0 5	1 17 6	0 14 6
Commonwealth payments(e) ..	1 1 6	1 2 6	1 1 6	2 12 11	2 5 10	2 18 4	1 7 4
Miscellaneous ..	1 6 5	0 11 9	1 2 11	0 17 2	1 7 1	0 18 0	1 0 11
Total ..	19 15 11	14 17 5	20 7 9	21 7 4	23 16 9	12 15 8	18 14 3

(a) See § 1 par. 2 above. (b) In all States certain taxation collections are not paid into Consolidated Revenue Fund. For total collections see next page. (c) Excludes £800,000, formerly included, contributed from Consolidated Revenue Fund in respect of losses on country developmental railways. (d) Including £120,000 of Disabilities Grant credited direct to Railway Revenue. (e) Including special grants. (f) Based on mean population of the financial year.

In connexion with the item Business Undertakings, it should be borne in mind that services performed by the Government in one State may, in another, be carried out by a Board or Trust. For instance, in New South Wales and Western Australia the tramway systems are controlled by the Government, while in the other States ownership is largely vested in Trusts or private companies. Harbour and river services and water supply and sewerage are also controlled in some cases by the State and in others by Trusts. As stated in § 1 par. 2 above, all the Tasmanian transport facilities are now controlled by a Commission.

The magnitude of the revenue per head from Business Undertakings in the case of Western Australia is mainly due to railways, the mileage of which is greater per head of population than in other States. In New South Wales and Western Australia the revenue from tramways is also included.

(ii) *Revenue from Taxation.*—(a) *General.* The following table shows for the year 1939-40 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 are different from those stated in the tables relating to the Consolidated Revenue Funds, but 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 Taxation" instead of under "Stamp Duties" and "Licences" respectively:—

STATE REVENUE FROM TAXATION : TOTAL COLLECTIONS, 1939-40.

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL COLLECTIONS.							
	£	£	£	£	£	£	£
Probate and Succession Duties	2,201,268	1,456,752	658,298	563,505	122,442	135,107	5,137,372
Other Stamp Duties	1,422,851	978,992	605,490	236,427	250,728	85,626	3,580,114
Land	2,169	490,255	408,640	320,316	99,348	83,769	1,404,497
Income and Dividend	7,031,961	4,737,696	3,452,653	2,358,733	1,001,906	452,072	19,035,021
Other taxes on Income—							
Unemployment Relief	65,888,696	1,999,902	..	..	..	..	7,888,598
Social Services	62,363,625	..	..	..	..	..	2,363,625
Financial Emergency	..	..	..	..	1,251,259	..	1,251,259
Other	(c) 955	..	22,255,197	..	(e) 270,782	385,666	2,912,600
Liquor	320,620	261,797	88,058	34,358	82,975	27,555	815,363
Lotteries	..	..	85,125	..	..	3364,658	449,783
Racing and other Entertainment	516,655	681,471	94,029	382,408	160,874	74,893	1,910,330
Motor	2,861,342	1,981,500	1,023,247	687,644	451,937	214,189	7,223,968
Licences, N.E.I.	71,985	100,609	140,711	29,251	16,696	4,367	414,285
Other	..	21,679	..	7,476	21,511	..	..
Total	22,682,127	12,710,662	8,816,448	4,620,118	3,729,558	1,827,902	54,386,815

(a) Includes Gold Mining Profits Tax, £150,242 (6s. 5d. per head). (b) Social Services and the Unemployment Relief taxes have replaced during 1939-40 the former Special Income and Wages taxes. (c) Family Endowment. (d) State Development Tax. (e) Hospital Tax. (f) Special Income and Wages Tax. (g) Includes Income Tax on Lottery Prizes, £239,063 (£1. per head).

The table hereunder shows the percentages of collections under individual taxes on the total taxation revenue for the year 1939-40 :—

STATE REVENUE FROM TAXATION: PERCENTAGES ON TOTAL, 1939-40.

Tax.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	%	%	%	%	%	%	%
Probate and Succession Duties	9.71	11.46	7.47	12.20	3.28	7.39	9.45
Other Stamp Duties	6.27	7.70	6.87	5.12	6.72	4.69	6.58
Land	0.01	3.86	4.63	6.93	2.67	4.58	2.58
Income and Dividend	31.00	37.27	39.16	51.05	26.87	24.73	35.00
Other taxes on Income—							
Unemployment Relief	25.96	15.74	..	..	..	..	14.51
Social Services	10.43	..	..	..	..	..	4.31
Financial Emergency	..	..	..	..	33.55	..	2.30
Other	..	..	25.58	..	7.26	21.10	5.36
Liquor	1.41	2.06	1.00	0.74	2.22	1.51	1.50
Lotteries	..	..	0.97	..	..	19.95	0.83
Racing and other Entertainment	2.28	5.36	1.07	8.28	4.32	4.09	3.51
Motor	12.61	15.59	11.66	14.88	12.09	11.72	13.28
Licences, N.E.I.	0.32	0.79	1.59	0.61	0.45	6.24	..
Other	..	0.17	..	0.16	0.57	..	0.76
Total	100.00	100.00	100.00	100.00	100.00	100.00	100.00

Prior to Federation duties of Customs and Excise constituted the principal source of revenue from taxation. At present the most productive State taxes are the various Income Taxes, which include Unemployment Relief, Social Services, State Development Wages and Financial Emergency. Motor taxation, Probate and Succession and other Stamp duties rank next in importance. In addition to these, a State land tax and licence fees of various kinds are collected in all the States, and a dividend tax is levied in Western Australia and Tasmania.

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 five years ended 1939-40 are given in the following table :—

STATE REVENUE FROM TAXATION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
TOTAL COLLECTIONS.							
	£	£	£	£	£	£	£
1935-36	16,289,722	9,920,693	7,323,028	3,267,389	2,752,625	1,418,256	40,971,713
1936-37	18,726,370	10,818,800	7,730,782	3,610,431	3,077,910	1,484,808	45,449,101
1937-38	20,504,582	11,646,645	8,539,471	3,998,132	3,288,776	1,697,159	49,674,765
1938-39	20,262,919	12,023,240	8,646,453	4,199,064	3,596,603	1,778,718	50,506,997
1939-40	22,682,127	12,710,662	8,816,448	4,620,118	3,729,558	1,827,902	54,386,215
PER HEAD OF POPULATION.(a)							
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1935-36	6 2 8	5 7 8	7 10 8	5 11 6	6 2 11	6 3 2	6 1 8
1936-37	6 19 8	5 16 10	7 17 1	6 2 9	6 16 3	6 7 11	6 13 11
1937-38	7 11 5	6 5 2	8 11 7	6 15 4	7 3 10	7 4 5	7 5 1
1938-39	7 8 3	6 8 3	8 11 9	7 1 3	7 15 6	7 10 2	7 6 2
1939-40	8 4 c	6 14 6	8 13 3	7 14 10	7 19 11	7 13 0	7 15 11

(a) Based on mean population of each financial year.

(b) *Probate and Succession Duties.* Probate duties have been levied for many years in all the States, but the provisions of the Acts governing the payment of duty differ widely both in regard to the ordinary rates and those which apply to special beneficiaries. A table showing the values of the estates in which probates and letters of administration were granted is given earlier. (See Chapter XXV. "Private Finance", Section F.)

The duties collected for the last five financial years are as follows:—

STATE PROBATE AND SUCCESSION DUTIES: NET COLLECTIONS.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales	1,673,805	2,081,548	2,233,144	2,364,124	2,201,268
Victoria	1,340,701	1,509,693	1,431,057	1,374,355	1,456,752
Queensland	528,412	583,741	636,207	677,037	658,298
South Australia	233,742	299,775	244,512	366,526	563,505
Western Australia	112,657	93,320	101,631	123,798	122,442
Tasmania	111,872	73,165	107,687	94,669	135,107
Total	4,001,189	4,641,242	4,754,238	5,000,509	5,137,372

(c) *Other Stamp Duties.* The revenue derived from Stamp duties (exclusive of probate and succession duties and stamp duties on betting tickets) for the last five years is shown in the accompanying table:—

OTHER STATE STAMP DUTIES: NET COLLECTIONS.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales	1,141,305	1,264,646	1,368,919	1,286,124	1,422,851
Victoria	858,731	917,255	952,470	959,727	978,992
Queensland	545,167	548,732	632,329	610,110	605,490
South Australia	225,499	243,372	277,843	249,729	236,427
Western Australia	252,062	263,630	281,417	274,995	250,728
Tasmania	74,342	74,189	79,193	84,832	85,626
Total	3,097,106	3,311,824	3,592,171	3,465,517	3,580,114

(d) *Land Tax.* All the States impose a land tax, Queensland, the last State to fall into line, collecting its first levy in 1915-16. In the other States the impost is of long standing. In New South Wales the State land tax is levied on the unincorporated portion of the western division of the State only.

The following table shows the amounts collected by means of such taxes during the financial years 1935-36 to 1939-40:—

STATE LAND TAX: NET COLLECTIONS.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales	2,034	2,221	2,237	2,154	2,169
Victoria	494,293	492,143	498,232	482,336	490,255
Queensland	411,598	402,308	405,070	401,682	408,640
South Australia	293,842	301,660	325,499	321,482	320,316
Western Australia	(a) 117,682	116,894	122,856	114,623	99,348
Tasmania	89,494	89,927	84,380	85,069	83,769
Total	1,408,943	1,405,153	1,438,274	1,407,346	1,404,497

(a) Refunds not deducted. Particulars not available.

(e) *Income Tax.* A tax on the incomes of persons, whether derived from personal exertion or from property, is also imposed in all the States. As might be expected, the rates, exemptions, etc., differ widely, but the general principles of the several Acts are similar.

The following table shows the total amounts collected in the several States during the years 1935-36 to 1939-40. In the cases of Western Australia and Tasmania the amounts of dividend duty collected are included. The tax levied on prizes in lotteries although coming within the Income Tax class has been excluded from the amounts given below.

STATE INCOME AND DIVIDEND TAXES: NET COLLECTIONS.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales	4,088,164	5,186,972	6,367,046	6,339,215	7,031,961
Victoria	2,759,324	3,299,440	3,976,958	4,370,656	4,737,696
Queensland	2,295,004	2,565,278	2,868,864	3,157,249	3,452,653
South Australia	1,495,210	1,676,728	2,032,784	2,102,928	2,358,733
Western Australia (a)	(b) 634,351	708,261	756,826	870,812	1,001,906
Tasmania	235,714	269,524	388,437	429,623	452,072
Total	11,507,767	13,706,203	16,390,915	17,270,483	19,035,021

(a) Includes Gold Mining Profits Tax.

(b) Refunds not deducted. Particulars not available.

(f) *Other taxes on Income.* During 1930-31 a special unemployment relief tax was levied in New South Wales, Victoria and Queensland, but, in the case of New South Wales, this was discontinued and replaced by Special Income and Wages taxes, which were in turn replaced in 1939-40 by the Unemployment Relief and Social Services taxes. In Queensland the State Development Tax replaced the Unemployment Relief Tax in 1938-39 (see C. State Finance, § 2, par. 1 above). In South Australia portion of the moneys for expenditure on unemployment relief was raised by an increment in the rate of income tax. In Western Australia Financial Emergency and Hospital taxes are levied and in Tasmania Special Income and Wages taxes provide the funds necessary for the relief of unemployment. Further references to unemployment relief taxation appear in the *Labour Report*, Nos. 22 to 29.

(g) *Motor Taxation.* Motor taxation comprises tax and registration fees on motor vehicles, and licences of motor dealers, motor drivers and motor cycle riders, and public vehicles except when controlled by local government authorities. The following table shows the collections for the last five years :—

MOTOR TAXATION: NET COLLECTIONS.

State.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
New South Wales	2,164,068	2,354,549	2,586,811	2,762,678	2,861,342
Victoria	1,592,880	1,682,561	1,825,152	1,913,689	1,981,509
Queensland	724,119	761,147	818,665	939,757	1,028,247
South Australia	608,036	639,874	672,635	715,944	687,644
Western Australia	342,163	410,378	429,030	453,053	451,037
Tasmania	123,584	133,003	147,864	175,591	214,189
Total	5,554,850	5,981,512	6,480,157	6,960,712	7,223,968

The proceeds of motor tax and motor registration fees are now paid into special funds and the amounts do not appear in the Consolidated Revenue Funds, except for South Australia. In Tasmania, prior to 1939-40, motor taxation collections were paid into the Consolidated Revenue Fund, but they have been paid to the Transport Commission, since the institution of that body.

(iii) *Business Undertakings.* (a) 1939-40. A very large proportion of State gross revenues is made up of receipts from business undertakings under the control of the Governments. The principal of these are railways and tramways, harbour works, water supply and sewerage and electricity supply, while, in addition, State batteries for the treatment of auriferous ores are included for Western Australia, and various minor revenue-producing services are rendered by the Governments of all States. In this connexion see C. State Finance, § 1, par. 2 above. For the year 1939-40 the revenue from these sources was £56,948,059 or 44 per cent. of the revenue from all sources. Details of revenue are as follows :—

STATE REVENUE FROM BUSINESS UNDERTAKINGS, 1939-40.

Source.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Total.
	£	£	£	£	£	£	£
Railways	619,954,851	69,855,781	7,918,487	43,145,442	3,497,529	5,770	44,377,860
Tramways and Omnibuses	4,467,909	(e) 106,346	..	..	304,856	..	4,879,111
Harbour Services	1,203,227	(f) 211,553	..	624,758	288,500	..	2,328,038
Water Supply, Sewerage, Irrigation and Drainage .. .. .	..	(g) 731,422	..	1,097,802	873,250	..	2,702,474
Electricity Supply .. .. .	..	878,473	..	..	425,715	5,744	1,309,932
Other	(h) 606,284	463,338	2,489	69,165	207,515	1,853	1,350,644
Total	26,232,271	12,246,913	7,920,976	4,937,167	5,597,365	13,367	56,948,059

(a) Tasmanian transport services now under separate control of Transport Commission.
 (b) Excludes £800,000 contribution from Consolidated Revenue Fund in respect of losses on country developmental railways.
 (c) Includes electric tramways operated by the Railways Department.
 (d) Includes £120,000, portion of Commonwealth Grant paid direct to Railways.
 (e) Tramway contribution to Consolidated Revenue.
 (f) Includes Harbour Trust Fund contribution £139,717.
 (g) Country Water Supply and Sewerage only.
 (h) Road Transport and Traffic Fund.

(b) 1935-36 to 1939-40. Particulars of the revenue from Business Undertakings for the last five years are given below:—

STATE REVENUE FROM BUSINESS UNDERTAKINGS.(a)

Source.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
	£	£	£	£	£
Railways, Tramways and Omnibuses	44,242,657	46,252,795	48,639,567	48,154,340	49,256,971
Harbour Services.. ..	2,063,860	2,082,743	2,290,372	2,356,905	2,328,938
Water Supply, Sewerage, Irrigation and Drainage..	2,607,665	2,750,233	2,857,242	2,543,046	2,702,474
Other	2,509,845	2,474,013	2,594,231	2,625,234	2,660,576
Total	51,424,027	53,559,784	56,381,412	55,679,525	56,948,059

(a) See notes to previous table.

(iv) *Territorial.* 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. Where the rentals received are for lands held for pastoral or residential purposes such application of the revenue would appear justifiable. On the other hand, where the rentals are for mineral and timber lands, and in all cases of sales of lands, the proceeding is essentially a disposal of capital to defray current expenses, and is, therefore, open to criticism. The following table gives the revenue from sales and rentals of Crown lands for the year 1939-40:—

STATE TERRITORIAL REVENUE, 1939-40.

Source.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Sales ..	100,795	82,240	..	30,466	5,241	1,467	220,209
Conditional Purchases	595,479	..	..	17,929	85,590	5,643	704,641
Rentals ..	764,941	135,615	1,095,955	187,325	67,613	24,870	2,276,319
Forestry ..	112,416	186,832	397,652	..	143,585	33,241	873,726
Other ..	54,343	10,974	57,022	9	14,176	2,889	139,413
Total ..	1,627,974	415,661	1,550,629	235,720	316,205	68,110	4,214,308

(v) *Commonwealth Payments.* The payments to the States (inclusive of special grants but excluding the contributions in respect of sinking fund on States' Debts and Federal Aid Roads grants which are paid by the Commonwealth into the National Debt Sinking Fund and Federal Aid Roads Trust Fund respectively and certain other grants paid into trust or special accounts) represent in each instance a considerable proportion of the States' revenue, and for the year 1939-40 aggregated £9,655,094 (including £120,000 credited direct to Railway Revenue in South Australia) or 7.4 per cent. of the total revenue of the States.

(vi) *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. In 1939-40 interest, mainly from loans to local governing bodies and on public account balances, was responsible for £5,059,722, whilst "Miscellaneous" revenue which includes fines of the courts and fees for services amounted to £7,289,776.

Division II.—Expenditure.

1. **General.**—The principal heads of State expenditure from Consolidated Revenue Funds are :—

- (a) Interest and sinking funds in connexion with public debt; (b) Working expenses of railways, tramways and other business and industrial undertakings; (c) Justice; (d) Police; (e) Penal establishments; (f) Education; (g) Health and charitable expenditure; and (h) All other expenditure, under which heading is 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 in Governmental expenditure, but in recent years Public Debt charges represent the heaviest item, notwithstanding the reduction in interest as a result of the 1931 internal conversion loan and the more recent conversion operations in London. In the year 1939-40 the percentage represented by Railways and Tramways was 29, as compared with 31 per cent. for Public Debt Charges; next in importance were Charitable, Public Health and Hospitals, 13 per cent; Education, 10 per cent.; and Law, Order and Public Safety, 5 per cent.

2. **Total Expenditure.**—The total expenditure from Consolidated Revenue Funds in the several States and the expenditure per head of population during each of the last five years are given in the table hereunder. The figures for New South Wales have been revised since the last issue, principally by the exclusion from miscellaneous expenditure of £800,000 contribution to Railway Revenue. This item has previously been duplicated in the combined accounts.

STATE EXPENDITURE : CONSOLIDATED REVENUE FUNDS.

Year.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
TOTAL.							
	£	£	£	£	£	£	£
1935-36	47,409,604	26,154,801	16,230,806	11,260,360	9,945,343	3,247,288	114,248,202
1936-37	49,081,953	27,192,344	16,815,228	11,600,138	10,556,638	3,443,618	118,689,919
1937-38	53,495,881	27,584,037	17,568,223	12,334,391	10,829,735	3,632,903	125,445,170
1938-39	54,163,064	27,772,790	19,316,323	12,700,921	11,170,102	3,640,748	128,763,948
1939-40	57,049,577	28,096,474	20,739,749	12,918,376	11,266,768	3,052,909	133,123,853

PER HEAD OF POPULATION.(c)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1935-36	17 16 11	14 3 10	16 13 11	19 4 2	22 4 2	14 1 11	16 19 2
1936-37	18 6 2	14 13 8	17 1 9	19 14 4	23 7 3	14 16 7	17 9 8
1937-38	19 15 0	14 16 6	17 13 2	20 17 5	23 13 11	15 9 2	18 6 4
1938-39	19 16 2	14 16 4	19 3 8	21 7 4	24 2 10	15 7 4	18 12 8
1939-40	20 12 6	14 17 4	20 7 6	21 12 9	24 3 0	12 15 6	19 1 8

(a) See § 1, par. 2 above.
each financial year.

(b) See § 2 (Div. I), par. 1 above.

(c) Based on mean population of

3. Details of Expenditure, 1939-40.—The following table shows the total expenditure and expenditure per head under each of the principal items:—

STATE EXPENDITURE : DETAILS, 1939-40.

Particulars.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania. (a)	Total.
TOTAL.							
	£	£	£	£	£	£	£
Public debt (interest, sinking fund, exchange, etc.) ..	15,173,580	8,459,677	6,839,579	5,281,926	4,490,926	1,276,590	41,521,378
Railways, Tramways and Omnibuses (working expenses)	18,373,403	7,684,667	6,204,833	2,693,495	3,054,120	17,844	38,028,362
Water Supply, Sewerage, Irrigation and Drainage ..	..	481,910	..	359,549	300,288	..	1,141,747
Education ..	5,443,227	3,198,968	1,815,110	1,095,355	876,491	401,163	12,830,614
Health and charitable Justice ..	9,564,619	3,769,694	1,843,475	1,146,938	(b)544,055	457,885	17,326,666
Police ..	620,406	275,756	220,378	94,156	93,232	43,902	1,348,330
Penal establishments	1,484,669	831,977	611,291	316,458	261,704	121,890	3,627,989
All other expenditure	376,803	131,566	42,483	50,817	32,170	22,608	656,447
	6,012,870	3,262,259	3,162,100	1,879,682	1,614,682	710,727	16,642,320
Total ..	57,949,577	28,096,474	20,739,749	12,918,376	11,266,768	3,052,909	133,123,853

PER HEAD OF POPULATION.(c)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Public debt (interest, sinking fund, exchange, etc.) ..	5 9 8	4 9 6	6 14 5	8 16 11	9 12 6	5 6 10	5 19 0
Railways, Tramways and Omnibuses (working expenses)	6 12 10	4 1 4	6 1 11	4 10 3	6 10 11	0 1 6	5 9 0
Water Supply, Sewerage, Irrigation and Drainage ..	..	0 5 1	..	0 12 1	0 12 10	..	0 3 3
Education ..	1 19 4	1 13 10	1 15 8	1 16 5	1 17 7	1 13 7	1 16 10
Health and charitable Justice ..	3 9 2	1 19 11	1 16 3	1 13 5	1 3 4	1 18 4	2 9 8
Police ..	0 4 6	0 2 11	0 4 4	0 3 2	0 4 0	0 3 8	0 3 10
Penal establishments	0 10 9	0 3 10	0 12 0	0 10 7	0 11 2	0 10 2	0 10 5
All other expenditure	0 2 9	0 1 5	0 0 10	0 1 8	0 1 5	0 1 11	0 1 11
	2 3 6	1 14 6	3 2 1	3 3 0	3 9 3	2 19 6	2 7 9
Total ..	20 12 6	14 17 4	20 7 6	21 12 9	24 3 0	12 15 6	19 1 8

(a) See § 1, par. 2 above. (b) In addition £313,299 was expended from Hospital Fund. (c) Based on mean population of financial year.

Division III.—Surplus Revenue.

The following table shows for each of the years 1935-36 to 1939-40 the amount and amount per head of the surplus or deficit of each State:—

STATE SURPLUS REVENUE.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1935-36..	-1,690,781	-116,461	-741,815	148,965	88,378	-129,686	-2,441,400
1936-37..	77,124	28,923	-280,190	139,168	-371,205	44,906	-361,274
1937-38..	49,839	30,945	-228,492	126,545	-10,693	6,852	-25,004
1938-39..	-2,453,329	-787,242	14,046	-397,324	-220,442	-25,984	-3,870,275
1939-40..	-2,294,951	6,261	15,755	-162,728	-146,825	2,401	-2,580,087

PER HEAD OF POPULATION.(a)

Year.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	1935-36..	-0 12 9	-0 1 3	-0 15 3	0 5 1	0 3 11	-0 11 3	-0 7 3
1936-37..	0 0 7	0 0 4	-0 5 9	0 4 9	-0 16 5	0 3 10	-0 1 1
1937-38..	0 0 4	0 0 4	-0 4 7	0 4 3	-0 0 6	0 0 7	-0 0 1
1938-39..	-0 17 11	-0 8 5	0 0 3	-0 13 4	-0 9 6	-0 2 2	-0 11 2
1939-40..	-0 16 7	0 0 1	0 0 3	-0 5 5	-0 6 3	0 0 2	-0 7 5

NOTE.—Minus sign (—) indicates deficit.

(a) Based on mean population of each financial year.

§ 3. State Trust Funds.

1. **Nature.**—In addition to the moneys received as revenue and paid to the credit of Consolidated Revenue Funds, considerable sums are held by the State Governments in trust for various purposes. Municipal sinking funds placed in the hands of the Governments are paid to the credit of the appropriate Trust Fund. In all the States except New South Wales, where the practice is confined to those companies transacting workers' compensation insurance, life assurance companies operating are required to deposit a substantial sum in cash or approved securities with the Government, and these deposits help to swell the trust funds. Various other deposit accounts, superannuation funds, suspense accounts, etc., also find a place.

2. **Extent.**—The amounts of trust funds held on 30th June, 1940, were as follows:—

STATE TRUST FUNDS, 30th JUNE, 1940.

Particulars.	N.S.W. (a)	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Amount of trust funds	16,086,273	8,973,642	3,336,282	1,485,184	4,334,403	597,566	34,813,350

(a) Includes Colonial Treasurer's Supreme Court Accounts.

§ 4. State Loan Funds.**Division I.—Loan Expenditure.**

1. **General.**—As far back as 1842 revenue collections were supplemented with borrowed moneys, the earliest loan being 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. Australian 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 control of the railway systems, but loan moneys have 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 purposes of defence, or in the prosecution of war. As shown above, 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 Loan Expenditure are given below for both "gross" and "net" expenditure. The gross expenditure represents the amounts disbursed during each year whereas the net expenditure represents the gross expenditure less any credits to the Loan Fund during the year on account of repayments of advances to local governing bodies, settlers, etc. It might be mentioned that such moneys are credited to the Loan Fund in the year of repayment irrespective of when the advance was made.

2. Loan Expenditure, 1939-40.—(a) *Gross Loan Expenditure, 1939-40.* Particulars of the gross loan expenditure on Works, Services, etc. for the year 1939-40 are given in the following table:—

STATE GROSS LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1939-40.

Heads of Expenditure.	N.S.W.(a)	Victoria. (b)	Q'land.	S. Aust.	W. Aust. (a)	Tasmania.	Total.
	£	£	£	£	£	£	£
Public Works and Services—							
Railways ..	1,802,328	865,500	521,347	195,550 (c)50,000	23,232 125	56,373	3,638,288
Tramways and Omnibuses ..	123,833	..					
Roads ..	550,055	6,362	369,756	93,000	..	93,416	1,870,746
Bridges ..							
Harbours and Rivers ..	552,367	..	37,238	156,542	12,010	..	1,772,033
Lights and Lighthouses ..	..	..	..	
Water Supply ..	417,673	426,825	442,000	287,020	30,730	..	..
Sewerage ..							
Electricity Supply ..	291,054	..	..	67,723	100,062	..	722,904
Public Buildings ..	1,019,185	268,195	493,296	91,433	366,022	196,943	2,435,672
Loans and Grants to Local Bodies ..	349,143	..	1,027,941	..	5,000	..	1,382,084
Unemployment Relief Works ..	838,674	1,560,346	..	..	1,205,503	31,479	3,636,002
Advances for Housing ..	682	270,000	307,935	290,709	20,000	102,331	991,657
Other Public Works, etc.	..	2,621	..	44,674	3,356	360,413	411,064
Primary Production—							
Soldier Settlement ..	(c)155,892	1,140	3,224	13,298	417	380,114	768,584
Land for Settlement ..							
Advances to Settlers ..	..	100,842	17,455	255,468	885	127,134	501,784
Water Conservation ..	786,019	..	20,862	49,915	6,807	..	895,477
Irrigation and Drainage ..							
Rabbit-proof Fencing ..	..	12,325	6,753	191	..	..	19,269
Agriculture ..	58,466	..	..	..	13,466	..	71,932
Agricultural Bank ..	..	..	209,498	..	..	..	209,498
Forestry ..	..	116,341	160,718	222,915	..	..	499,974
Mines and Mineral Resources ..	..	23,910	23,260	..	59,676	..	106,846
Other ..	..	300,000	48,944	384	16,434	..	365,762
Other Purposes ..	..	8,240	..	200,000	48,984	..	257,224
Total Public Works, Services, &c., Expenditure	6,945,371	3,962,647	3,862,021	2,032,415	1,939,549	1,814,197	20,556,200
Per Head of Population	£2 10 3	£2 1 11	£3 15 10	£3 8 1	£4 3 2	£7 11 10	£2 18 11

(a) Includes expenditure from Loan Suspense Account. (b) Expenditure from Loan and on account of Loan: includes expenditure from Public Account Advances Account, from Treasurer's Advance Account, and from State Loans Repayment Fund. (c) Loans to Metropolitan Tramways Trust. (d) Country towns. (e) Includes Rabbit-proof Fencing advances.

(b) *Net Loan Expenditure, 1939-40.* For the year ended 30th June, 1940, State net loan expenditure on Works, Services, etc., was as follows:—

STATE NET LOAN EXPENDITURE ON WORKS, SERVICES, ETC., 1939-40.

Heads of Expenditure.	N.S.W.(a)	Victoria.(b)	Q'land.	S. Aust.(c)	W. Aust.(a)	Tasmania.	Total.
	£	£	£	£	£	£	£
Public Works and Services—							
Railways	1,546,461	858,623	500,995	176,084	20,260	29,866	3,154,003
Tramways and Omnibuses	8,323			(d) 13,464	Cr. 73		
Roads	450,574	Cr. 22,466	321,636	71,000	Cr. 472		1,588,161
Bridges							
Harbours and Rivers	527,718	Cr. 2,343	37,117	120,164	11,841	76,392	
Lights and Lighthouses							
Water Supply	270,814	£404,952	442,000	258,334	22,864		1,508,690
Sewerage	79,012	Cr. 1,188		45,228	65,686		
Electricity Supply	279,556	268,195	481,601	90,666	366,017	194,971	606,780
Public Buildings							2,386,006
Loans and Grants to Local Bodies	344,311	Cr. 3,712	609,518	Cr. 11,217	4,223	Cr. 73,169	860,954
Unemployment Relief							
Works	661,563	1,400,505			1,205,503	Cr. 5,180	3,262,391
Advances for Housing	519	270,000	Cr. 51,217	73,782	17,192	57,782	368,058
Other Public Works, etc.	Cr. 16,687	1,964		Cr. 15,590	3,356	326,534	299,577
Primary Production—							
Soldier Settlement		Cr.	Cr. 38,127	Cr. 60,528	Cr. 61,837	Cr. 14,102	Cr. 394,702
Land for Settlement	(f) 88,968	439,176	146,972	Cr. 24,699	4,325	3,502	
Advances to Settlers		Cr. 4,012	7,203	Cr. 87,944	859	Cr. 20,356	Cr. 104,250
Water Conservation				47,303	6,673		
Irrigation and Drainage	681,819		Cr. 454	3,033	21,177		759,551
Rabbit-proof Fencing		Cr. 15,742	Cr. 13,622	Cr. 35,398			Cr. 64,762
Agriculture	58,315		Cr. 14,122		12,294		56,487
Agricultural Bank			35,682				35,682
Forestry		110,972	157,750	112,018	Cr. 16		380,724
Mines and Mineral Resources		14,395	19,074		49,630		83,099
Other		296,504	Cr. 33,163	Cr. 2,623	16,376		277,094
Other Purposes		7,240	Cr. 116	177,089	45,104		229,317
Total Public Works, Services, &c., Expenditure	5,886,266	3,141,711	2,608,727	950,166	1,812,079	902,911	15,301,860
Per Head of Population	£2 2 7	£1 13 3	£2 11 3	£1 11 10	£3 17 8	£3 15 7	£2 3 10

(a) Includes expenditure from Loan Suspense Account. (b) Expenditure from Loan and on account of Loan; includes expenditure from Public Account Advances Account, from Treasurer's Advance Account, and from State Loans Repayment Fund. (c) Credits arising from the cancellation of securities redeemed from Sinking Fund not allowed for. (d) Loans to Metropolitan Tramways Trust. (e) Country towns. (f) Includes Rabbit-proof Fencing advances.

3. Net Loan Expenditure on Works, Services, etc. 1935-36 to 1939-40.—The following table gives the works net loan expenditure during each of the years 1935-36 to 1939-40:—

STATE NET LOAN EXPENDITURE ON WORKS, SERVICES, ETC.

Year.	N.S.W.(a)	Victoria.(b)	Q'land.(c)	S. Aust.(d)	W. Aust.(a)	Tasmania.	Total.
	£	£	£	£	£	£	£
TOTAL.							
1935-36	6,978,820	3,115,982	3,006,370	1,632,400	2,451,707	660,876	18,846,155
1936-37	6,336,078	2,616,660	2,573,593	1,245,222	2,032,224	814,951	15,618,728
1937-38	5,100,865	2,345,460	2,224,934	1,133,054	2,160,480	850,305	13,815,098
1938-39	5,407,856	2,289,535	2,041,588	1,226,096	1,636,184	739,627	13,340,886
1939-40	5,886,266	3,141,711	2,608,727	950,166	1,812,079	902,911	15,301,860
	PER HEAD OF POPULATION.						
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1935-36	3 0 1	1 13 10	3 1 10	2 15 8	5 9 6	2 17 4	2 15 11
1936-37	2 7 3	1 8 3	2 12 4	2 2 4	4 9 11	3 10 2	2 6 0
1937-38	1 17 8	1 5 3	2 4 9	1 18 4	4 14 7	3 12 4	2 0 4
1938-39	1 19 7	1 4 5	2 0 7	2 1 3	3 10 9	3 2 5	1 18 7
1939-40	2 2 7	1 13 3	2 11 3	1 11 10	3 17 8	3 15 7	2 3 10

(a) Includes expenditure from Loan Suspense Account. (b) Expenditure from Loan and on account of Loan. See Note (b) to previous table. (c) Figures for each year are exclusive of £100,000 portion of repayments transferred to Consolidated Revenue and applied to Sinking Fund contributions. (d) Credits arising from the cancellation of securities redeemed from Sinking Fund not allowed for. (e) Credits on account of amounts written off indebtedness in respect of Soldier Land Settlement advances (£934,722) and transfers from Special Deposits account (£321,661) not allowed for.

The loan expenditure per head of population, which varies in the different States and in different years was at its highest point for the five years under review in 1935-36 with £2 15s. 11d. per head, and at its lowest in 1938-39 with £1 18s. 7d. per head.

4. Total Net Loan Expenditure to 30th June, 1940.—The total net loan expenditure inclusive of revenue deficits, etc., of the States from the initiation of borrowing to 30th June, 1940, amounted to £1,012,416,749. The purposes for which this sum was expended are shown in the following table:—

TOTAL STATE NET LOAN EXPENDITURE TO 30th JUNE, 1940.

Heads of Expenditure.	N.S.W.	Victoria.(a)	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
Public Works and Services—							
Railways ..	152,622,716	75,853,937					
Tramways and Omnibuses ..	9,143,666	..					
Roads and Bridges	20,256,535	12,449,163	4,627,950				
Harbours, Rivers, Lighthouses ..	21,880,486	1,404,535	2,797,541	8,426,999	7,387,350		
Water Supply ..			1,632,741	15,461,896	10,186,220		
Sewerage ..	40,805,616	(c) 217,784	..	3,491,973	4,040,339		
Electricity Supply ..	2,065,115	17,839,227	..	..	1,841,854	6,128,099	
Public Buildings ..	16,472,659	7,154,378	6,461,525	4,080,406	2,568,916	2,610,811	
Loans and Grants to Local Bodies ..	1,475,116	1,827,664	18,097,828	23,632	93,637	611,270	
Unemployment Relief Works ..	16,615,163	12,428,747	..	..	(d)	379,753	
Advances—Housing	1,932,142	949,000	3,893,070	5,793,325	809,380	366,232	
Commonwealth Services ..	3,965,937	149,323	524,388	1,283,387	332,293	500,754	
Other Public Works and Services(e) ..	3,759,712	766,457	2,773,123	789,000	1,842,181	2,178,078	
Primary Production—							
Closer Settlement ..	8,464,836	..	..	..	..	..
Land for Settlement	(f)	41,570,680	3,162,714	1,567,449	8,529,765	437,902	
Soldier Settlement ..	3,852,926	..	1,210,278	8,471,475	6,975,119	2,492,686	
Advances to Settlers	..	2,482,089	392,384	2,275,389	2,062,551	344,157	
Water Conservation	..	..	..	4,295,911	1,314,782	..	
Irrigation and Drainage ..	18,284,202	..	2,108,481	4,896,568	2,935,494	..	
Rabbit Proof Fencing ..	..	..	..	..	..	..
Agriculture ..	(g) 7,199,208	873,572	320,185	188,000	341,765	..	
Agricultural Bank ..	..	150,682	59,348	..	3,686,475	..	
Forestry ..	..	..	1,710,467	..	5,878,695	..	
Mines and Mineral Resources ..	..	898,152	1,177,705	1,236,858	909,091	..	
Other ..	580,687	544,331	2,062,635	..	2,841,074	..	
Other Purposes ..	..	(h) 2,062,262	(i) 3,769,495	776,142	85,918	..	
	..	140,780	778,538	(j) 4,044,900	3,355,128	101,063	
Total Public Works, Services, &c., Expenditure ..	329,376,722	211,577,771	122,488,247	109,531,681	97,411,296	30,646,341	901,032,058
Other than Works, &c.—							
Discounts and Flotation Expenses ..	17,668,579	5,755,246	5,535,165	1,208,716	4,079,656	(k)	
Revenue and General Cash Deficits ..	40,531,543	4,863,682	5,826,271	9,005,916	12,117,399	835,366	
Treasury Bills Retired ..	..	..	2,857,150	..	..	..
Other ..	..	..	(l) 1,100,000	..	..	..
Grand Total ..	387,576,844	222,196,701	137,806,833	119,746,313	113,608,351	31,481,707	1,012,416,749

(a) Aggregate Gross Loan Expenditure. (b) Loans to Metropolitan Tramways Trust. (c) Country sewerage. (d) Not available separately. (e) Distributed under various particular headings. (f) Includes Industrial Undertakings and Immigration. (g) Includes Advances for Rabbit-proof Fencing. (h) Includes Grain Elevators. (i) Includes £1,000,000 Bulk Handling of Wheat. (j) Includes £836,639 Prickly Pear Land Act. (k) Includes £3,076,874 State Bank. (l) Included with Other Public Works. (m) Contribution to Sinking Fund.

The figures in the foregoing table show the amounts actually spent, and differ from those given later in the statements relating to the public debt, which represent the amount of loans still unpaid. The statement above includes all expenditure, whether the loans have been repaid or are still in existence. As in the earlier tables on net loan expenditure, allowance has been made, however, for credits on account of repayments of advances to local governing bodies, settlers, etc. In the public debt statement, on the other hand, loans repaid are not included, and in the case of loans still outstanding, each is shown according to the amount repayable at maturity, and not according to the amount originally available for expenditure.

5. Total Loan Expenditure, 1935-36 to 1939-40.—The following table gives particulars, in summary form, of the total loan expenditure in each State during each of the years 1935-36 to 1939-40 :—

STATE LOAN EXPENDITURE, SUMMARY, 1935-36 TO 1939-40.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1935-36.							
Works and Services—							
Gross Expenditure (a) ..	9,491,108	3,841,452	4,228,148	2,698,638	2,559,614	1,519,369	24,338,329
Net Expenditure (b) ..	7,978,820	3,115,982	3,006,370	1,632,400	2,451,707	660,876	18,846,155
Repayments (b) ..	1,512,288	725,470	1,221,778	1,066,238	107,907	858,493	5,492,174
Other than Works—(c)							
Gross Expenditure ..	4,445,750	109,619	882,540	36,133	31,357	339,094	5,844,493
Net Expenditure ..	4,445,750	109,619	882,540	29,195	Cr. 57,021	339,094	5,749,177
Repayments ..	..	..	..	6,938	88,378	..	95,316
Total Loan Expenditure—							
Gross ..	13,936,858	3,951,071	5,110,688	2,734,771	2,590,971	1,858,463	30,182,822
Net ..	12,424,570	3,225,601	3,888,910	1,661,595	2,394,686	999,970	24,595,332
Repayments ..	1,512,288	725,470	1,221,778	1,073,176	196,285	858,493	5,587,490
1936-37.							
Works and Services—							
Gross Expenditure (a) ..	7,182,523	3,303,501	3,760,113	2,966,499	2,155,199	1,997,930	21,365,765
Net Expenditure (b) ..	6,336,078	2,616,660	2,573,593	1,245,222	2,032,224	814,951	15,618,728
Repayments (b) ..	846,445	686,841	1,186,520	1,721,277	122,975	1,182,979	5,747,037
Other than Works—(c)							
Gross Expenditure ..	2,160,868	66,350	446,320	48,935	522,757	..	2,245,230
Net Expenditure ..	2,115,868	66,350	446,320	39,595	522,757	..	2,190,890
Repayments ..	45,000	..	..	9,340	..	..	54,340
Total Loan Expenditure—							
Gross ..	8,343,391	3,369,851	4,206,433	3,015,434	2,677,956	1,997,930	23,610,995
Net ..	7,451,946	2,683,010	3,019,913	1,284,817	2,554,981	814,951	17,809,618
Repayments ..	891,445	686,841	1,186,520	1,730,617	122,975	1,182,979	5,801,377
1937-38.							
Works and Services—							
Gross Expenditure (a) ..	8,110,740	3,230,451	3,521,487	2,839,184	2,294,942	1,892,279	21,889,083
Net Expenditure (b) ..	5,100,865	2,345,460	2,224,934	1,133,054	2,160,480	850,305	13,815,098
Repayments (b) ..	3,009,875	884,991	1,296,553	1,706,130	134,462	1,041,974	8,073,985
Other than Works—(c)							
Gross Expenditure ..	1,279,698	30,836	349,346	127,250	32,234	..	1,819,364
Net Expenditure ..	1,279,698	30,836	349,346	126,306	32,234	..	1,818,420
Repayments ..	..	..	..	944	..	..	944
Total Loan Expenditure—							
Gross ..	9,390,438	3,261,287	3,870,833	2,966,434	2,327,176	1,892,279	23,708,447
Net ..	6,380,563	2,376,296	2,574,280	1,259,360	2,192,714	850,305	15,633,518
Repayments ..	3,009,875	884,991	1,296,553	1,707,074	134,462	1,041,974	8,074,929

STATE LOAN EXPENDITURE, SUMMARY, 1935-36 TO 1939-40—continued.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
	£	£	£	£	£	£	£
1938-39.							
Works and Services—							
Gross Expenditure(a) ..	8,788,604	3,218,531	3,392,641	2,529,562	1,783,224	1,849,647	21,562,209
Net Expenditure(b) ..	5,407,856	2,289,535	2,041,588	1,226,096	1,636,184	739,627	13,340,886
Repayments(b) ..	3,380,748	928,996	1,351,053	1,303,466	147,040	1,110,020	8,221,323
Other than Works—(c)							
Gross Expenditure ..	(f)3,893,053	852,362	155,442	70,594	253,748	..	5,225,199
Net Expenditure ..	(f)3,893,053	852,362	155,442	70,594	253,748	..	5,225,199
Repayments ..	..	..	..	..	..	..	..
Total Loan Expenditure—							
Gross ..	12,681,657	4,070,893	3,548,083	2,600,156	2,036,972	1,849,647	26,787,408
Net ..	9,300,909	3,141,897	2,197,030	1,296,690	1,889,932	739,627	18,566,085
Repayments ..	3,380,748	928,996	1,351,053	1,303,466	147,040	1,110,020	8,221,323
1939-40.							
Works and Services—							
Gross Expenditure(a) ..	6,945,371	3,062,647	3,862,021	2,032,415	1,939,549	1,814,197	20,556,200
Net Expenditure(b) ..	5,886,266	3,141,711	2,668,727	950,166	1,812,079	902,911	15,301,860
Repayments(b) ..	1,059,105	820,936	1,253,294	1,082,249	127,470	911,286	5,254,340
Other than Works—(c)							
Gross Expenditure—							
Discounts and Flotation Expenses ..	91,100	19,667	8,754	12,250	15,417	..	147,188
Revenue and General Cash Deficits ..	(g)1,170,254	..	..	397,324	146,825	..	2,014,403
Other ..	..	..	(h)100,000	..	..	..	100,000
Total ..	1,561,354	19,667	108,754	409,574	162,242	..	2,261,591
Net Expenditure—							
Discounts and Flotation Expenses ..	91,100	19,667	8,754	12,250	15,417	..	147,188
Revenue and General Cash Deficits ..	Cr. 329,746	..	..	397,324	146,825	..	214,403
Other ..	..	..	(h) 100,000	..	..	..	100,000
Total ..	Cr. 238,646	19,667	108,754	409,574	162,242	..	461,591
Repayments ..	1,800,000	..	..	..	..	..	1,800,000
Total Loan Expenditure—							
Gross ..	8,506,725	3,982,314	3,970,775	2,441,989	2,101,791	1,814,197	22,817,791
Net ..	5,647,620	3,161,378	2,717,481	1,350,740	1,974,321	902,911	15,763,451
Repayments ..	2,859,105	820,936	1,253,294	1,082,249	127,470	911,286	7,054,340

(a) See Notes to previous tables on Gross Expenditure. (b) See Notes to previous tables on Net Expenditure. (c) Includes exchange, discounts and flotation expenses, revenue and general cash deficits. (d) Includes £570,482 available towards funding deficits—Revenue Deficits Loans (Funding) Account. (e) Includes £703,481 as in note (d). (f) Includes £1,110,000 short-term loans for general cash deficit and £1,691,000 available towards funding deficits. (g) Total amount as in note (d). (h) Contribution to Sinking Fund.

Division II.—State Public Debts.

1. **General.**—The first government loan raised in Australia was obtained by New South Wales in 1842. This and nine other loans prior to 1855 were all procured locally. In the last-mentioned year New South Wales approached the London market for the first instalment of a 5 per cent. loan for £683,300. Victoria first appeared as a borrower in 1854, and made its first appearance on the London market in 1859. The first public loans were raised by the other States in the following years :—Queensland 1861, South Australia 1856, Western Australia 1845, and Tasmania 1867.

2. **State Debts, 1936 to 1940.**—The table hereunder shows the State public debts and the amounts owing per head of population at 30th June in each year from 1936 to 1940 inclusive.

As provided in the Financial Agreement (particulars of which are given on page 926), the Commonwealth Government on 1st July, 1929, assumed the liabilities of the States to bondholders in respect of the debts of the States existing at 1st July, 1929, and taken over by the Commonwealth. Reference is made in Chap. IV. "Land Tenure and Settlement" to certain remissions which the Commonwealth Government made to the States on account of losses sustained by the States in connexion with soldier land settlement; the States' debts were so reduced by £5,000,000 as from 1st October, 1925, and by a further £2,597,783 as from 30th June, 1927. The following figures represent the total "face" or "book" values of the debts of the States leaving out of account currency changes since the loans were floated :—

STATE PUBLIC DEBTS.

Date.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
TOTAL.							
	£	£	£	£	£	£	£
30th June, 1936	346,576,294	175,058,285	122,647,234	105,698,481	90,344,055	24,418,156	866,742,505
" 1937	350,291,499	176,597,010	124,898,475	106,594,164	92,332,855	25,247,540	875,961,543
" 1938	354,267,254	177,228,496	125,781,564	107,450,639	93,711,942	25,840,807	884,180,702
" 1939	359,843,990	179,698,118	127,503,251	108,887,092	95,472,600	26,366,990	897,772,041
" 1940	363,325,338	180,549,968	129,033,227	109,344,040	96,230,399	27,243,892	905,727,064

PER HEAD OF POPULATION.(a)

	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
30th June, 1936	130 0 6	94 15 11	125 0 10	179 19 6	200 13 2	106 5 10	127 18 4
" 1937	130 1 10	95 3 9	125 17 11	181 1 6	203 5 5	108 10 0	128 10 5
" 1938	130 5 3	94 18 6	125 7 8	181 8 3	203 13 0	110 6 11	128 11 11
" 1939	131 0 0	95 10 3	125 8 8	182 15 4	205 2 7	111 8 4	129 6 3
" 1940	130 12 5	95 1 0	126 6 4	182 13 11	205 12 5	113 10 4	129 4 6

(a) Based on population at 30th June in each year.

The public debt of the whole of the States increased during the period under review by nearly £41 million or at the average rate of over £10 million per annum. The debt per head of population increased during the period by £1 6s. 2d. to £129 4s. 6d. per head or about one per cent. In some States certain public functions such as Tramways, Water Supply and Sewerage, and 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 Governments. Comparisons of the debts of the States are therefore difficult, but on page 926 figures showing the aggregate debts of the States including these local and semi-governmental bodies are given for the years 1937-38 and 1938-39.

3. **Place of Flotation of Loans.**—Early loans usually for comparatively small amounts, were raised locally, but, with the increasing demand for loan funds and the more favourable terms offering in the London market, the practice of raising loans in London came into vogue, and for many years local flotations, except for short terms or small amounts, were comparatively infrequent. In more recent years, however, the accumulating stocks of money in Australia seeking investment have led to the placing of various redemption and other loans locally, with very satisfactory results. Moreover, loans have been placed in New York on account of all States. The following table gives particulars of loans outstanding on 30th June, 1940, which had been floated abroad and in Australia respectively :—

STATE PUBLIC DEBTS, 30th JUNE, 1940 : PLACE OF FLOTATION OF LOANS.

State.	Maturing Overseas.			Maturing in Australia.	Grand Total.
	London.	New York.	Total Overseas.		
	£ Stg.	£(a)	£(b)	£ Aust.	£(b)
New South Wales	158,697,020	12,539,608	171,236,628	192,088,910	363,325,538
Victoria ..	62,464,855	4,498,878	66,963,733	113,586,235	180,549,968
Queensland ..	62,788,171	6,902,815	69,690,986	59,342,241	129,033,227
South Australia ..	42,898,156	1,733,468	44,631,624	64,712,416	109,344,040
Western Australia	43,953,693	2,015,436	45,969,129	50,261,270	96,230,399
Tasmania ..	13,360,487	227,796	13,588,283	13,655,609	27,243,892
Total ..	384,162,382	27,918,001	412,080,383	493,646,681	905,727,064

PER HEAD OF POPULATION.

	£ s. d. (Stg.)	£ s. d. (a)	£ s. d. (b)	£ s. d. (Aust.)	£ s. d. (b)
New South Wales	57 1 1	4 10 2	61 11 3	69 1 2	130 12 5
Victoria ..	32 17 8	2 7 5	35 5 1	59 15 11	95 1 0
Queensland ..	61 9 4	6 15 2	68 4 6	58 1 10	126 6 4
South Australia ..	71 13 6	2 17 11	74 11 5	108 2 6	182 13 11
Western Australia	93 18 4	4 6 2	98 4 6	107 7 11	205 12 5
Tasmania ..	55 13 4	0 19 0	56 12 4	56 18 0	113 10 4
Total ..	54 16 3	3 19 8	58 15 11	70 8 7	129 4 6

(a) Payable in terms of dollars. For the purposes of these tables dollars have been arbitrarily converted to £ Stg. at the rate of \$4.8665 to £1. (b) Total "face" or "book" value of the debt of each State without adjustment on account of currency changes since the loans were floated.

Particulars of the aggregate debts of the States for the last five years showing the amounts which will mature overseas and in Australia respectively will be found on page 920.

4. **Rates of Interest.**—(i) *At 30th June, 1940.* The highest rate of interest paid for the earliest State loans was 5½d. per £100 per diem, or, approximately, 8 per cent per annum. At present the rates vary from 7 per cent. to 1½ per cent., thirty-six separate rates being involved. The average rate payable on the aggregate indebtedness is £3 15s. per cent. For the separate States the average varies, being lowest for New South Wales and highest for Queensland. The following table gives particulars of the amount of debt at each rate of interest payable, together with the amount and the average rate of interest payable at 30th June, 1940, with separate information for London, New York and Australian maturities. The units of currency in this table are—for debts maturing and interest payable—

in Australia ..	£ Australian.
in London ..	£ Sterling.
in New York ..	Payable in terms of dollars. See note (a) above.

The totals given represent the total "face" or "book" values of the debts of the States without adjustment on account of currency changes since the loans were floated, and the nominal amount (and average rate) of interest payable, taking no account of exchange :—

STATE PUBLIC DEBTS : AMOUNTS AT EACH RATE OF INTEREST PAYABLE AT 30th JUNE, 1940.

Rate of Interest.	Place of Maturity.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
%		£	£	£	£	£	£	£
7.0 ..	New York	..	..	1,631,871	..	..	..	1,631,871
6.0 ..	New York	..	..	2,054,865	..	..	..	2,054,865
5.25 ..	London	17,870,500	..	..	..	..	..	17,870,500
5.0375	Australia	3,035	..	..	8,000	250,000	261,240	522,275
5.0 ..	London	17,013,816	14,433,131	37,806,688	13,888,787	12,076,462	1,228,987	97,347,871
4.75 ..	New York	8,616,075	3,738,042	2,190,973	1,733,468	2,015,430	227,796	18,552,669
4.65 ..	London	..	5,913,200	..	..	..	..	5,913,200
4.75 ..	Australia	432,910	..	..	1,200	755,000	200,000	1,389,110
4.5 ..	New York	3,892,633	760,836	1,025,106	..	..	..	5,678,575
4.2625	Australia	2,124,066	93,200	..	166,140	62,797	..	2,449,197
4.06875	Australia	10,784,960	6,570	..	495,000	..	..	11,286,530
4.0 ..	London	57,019,328	44,381,647	12,673,300	31,243,401	14,466,757	5,899,030	165,593,463
3.96667	Australia	29,083,932	2,902,116	7,948,850	8,201,110	7,582,885	2,798,000	58,516,843
3.95833	Australia	..	5,685,910	..	..	..	..	5,685,910
3.95417	Australia	..	4,001,000	..	..	..	..	4,061,000
3.89167	Australia	..	1,875,750	..	..	..	..	1,875,750
3.875	Australia	23,111,700	19,507,716	7,076,302	1,035,000	..	..	1,035,000
3.8125	Australia	..	..	..	12,748,725	7,442,525	2,561,120	72,748,688
3.79167	Australia	..	6,370,000	..	200,000	..	..	200,000
3.75 ..	Australia	29,295,850	10,823,405	12,509,461	6,315,040	9,493,344	2,013,470	70,450,630
3.72917	London	7,607,632	6,852,149	1,958,300	5,413,300	1,780,601	1,076,000	24,688,482
3.625	Australia	..	..	..	350,000	..	..	350,000
3.5 ..	Australia	1,931,000	915,000	568,000	999,000	753,930	262,200	5,429,130
3.4875	Australia	9,948,150	4,457,690	2,651,823	2,873,470	2,907,797	552,850	23,391,780
3.42083	London	33,477,901	19,009,345	9,580,200	2,737,500	4,818,352	0,511,558	76,734,848
3.425	Australia	45,700	500	6,059,323	73,400	356,868	133,719	6,669,510
3.375	Australia	..	1,130,950	..	..	..	..	1,130,950
3.375	Australia	9,162,430	3,783,840	1,303,740	2,086,080	2,357,450	385,290	19,078,830
3.25 ..	Australia	3,599,190	2,499,435	1,219,680	825,000	1,219,681	128,130	9,673,916
3.125	London	..	650,075	1,237,770	4,414,899	10,568,718	1,254,950	18,123,412
3.1 ..	Australia	2,000	1,000	70,000	100,230	..	..	1,772,230
3.0 ..	Australia	477,211	332,549	5,111,763	1,566,000	173,698	..	7,661,221
2.96625	Australia	12,724,222	3,540,085	6,923,674	1,289,279	2,850,721	1,014,862	28,342,843
2.75	London	32,721,013	6,220,014	4,255,913	2,433,499	..	..	45,630,439
2.725	Australia	..	220,000	..	5,100	..	..	225,100
2.625	London	10,954,600	..	..	1,996,335	3,228,661	..	16,179,596
2.5 ..	Australia	291,421	446,845	352,915	373,451	..	..	1,091,181
2.325	Australia	645,653	778,083	54,750	2,815,726	2,998,014	..	1,851,937
2.25 ..	London	9,965,276	5,884,825	..	1,000,000	..	..	21,665,841
2.0 ..	London	..	..	..	1,000,000	..	..	1,491,000
1.5(b)	Australia	30,580,000	2,675,000	2,163,000	3,530,000	5,805,000	160,000	44,913,000
Overdue and unconverted	Australia	90	..	10	..	..	..	100
	London	2,350	..	..	..	..	..	2,350
Total Debt	Australia	192,088,910	113,586,235	59,342,241	64,712,416	50,261,270	13,655,609	493,646,681
	London	158,607,020	62,464,855	62,788,171	42,898,156	43,953,693	13,360,487	384,162,382
	New York	12,530,608	4,498,878	6,902,813	1,733,468	2,015,430	227,796	27,918,001
	Total ..	363,325,538	183,549,968	129,033,227	109,344,040	96,230,399	27,243,892	905,727,064
Total Interest Payable	Australia	6,545,837	4,273,400	2,093,640	2,409,207	1,752,601	518,486	17,593,171
	London(c)	5,916,363	2,402,036	2,784,954	1,675,940	1,687,280	492,229	14,958,802
	New York	607,517	221,140	393,202	86,674	100,771	11,390	1,420,604
	Total ..	13,069,717	6,896,576	5,271,796	4,171,821	3,540,652	1,022,105	33,972,667
Average Rates of Interest Payable	Australia	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	London	3 8 2	3 15 3	3 10 7	3 14 5	3 9 9	3 15 11	3 11 3
	New York	3 14 7	3 16 11	4 8 9	3 18 2	3 16 9	3 13 8	3 17 11
	Total ..	4 16 11	4 18 4	5 13 11	5 0 0	5 0 0	5 0 0	5 1 9
	Total ..	3 11 11	3 16 5	4 1 9	3 16 4	3 13 7	3 15 0	3 15 0

(a) Includes £220 unconverted securities. (b) Includes Treasury Bills at 1½ per cent. converted to 1½ per cent. on renewal. (c) Includes contributions payable by Commonwealth and British Governments towards interest on Migration Loans.

The average rate for debt maturing in Australia has been reduced from £5 4s. 11d. per cent. in 1931 to £3 11s. 3d. per cent. in 1940. For debt maturing in London the average rate increased from £4 12s. 7d. per cent. in 1931 to £4 13s. 3d. in 1932, but, as a result of the conversions effected in London, fell to £3 17s. 11d. in 1940, while for New York loans it decreased from £5 2s. 6d. per cent. in 1931 to £5 1s. 9d. in 1940.

(ii) *Variations from 1901 to 1940.*—The variations in the rates of interest payable on the public debts of the States are shown in the following table which gives the percentages of the total debts in various interest groups during the years specified, and the average rate of interest in each year :—

STATE PUBLIC DEBTS : PERCENTAGES, ETC., IN VARIOUS INTEREST GROUPS.

Interest Rates.	Percentage of Total Debt at 30th June—						
	1901.	1911.	1921.	1931.	1938.	1939.	1940.
	%	%	%	%	%	%	%
Not exceeding 3 per cent. ..	18.0	17.9	10.2	5.3	19.6	19.1	17.8
Exceeding 3 per cent. but not exceeding 4 per cent. ..	78.5	81.9	45.4	17.2	61.3	62.4	64.0
Exceeding 4 per cent. but not exceeding 5 per cent. ..	3.1	0.1	15.6	36.8	16.6	16.0	15.7
Exceeding 5 per cent. but not exceeding 6 per cent. ..	0.4	0.1	23.5	38.4	2.3	2.3	2.3
Exceeding 6 per cent. ..	..	..	5.3	2.3	0.2	0.2	0.2
Total	100.0	100.0	100.0	100.0	100.0	100.0	100.0
Average Rate of Interest Payable	3.7	3.6	4.4	4.9	3.8	3.7	3.8

5. *Dates of Maturity.*—Securities like the British Consols are interminable, but Australian debts have in most cases a fixed date for repayment, there being a few exceptions which are included in the following table under the headings "interminable," "Treasurer's option," and "indefinite." These terminable at "Treasurer's option" include amounts which are payable by the respective Governments after giving a specified notice, and those "indefinite" consist of certain amounts owing to the Commonwealth Government. Generally, renewal is effected at date of maturity in respect of the greater portion of the loan. In order to avoid application to the market at an unfavourable time, the practice has been adopted of specifying a period prior to the date of maturity within which the Government, on giving twelve, or in some cases six months' notice, has the option of redeeming the loan. The Government can, therefore, take advantage of opportunities that may offer during the period for favourable renewals. Particulars concerning the due dates of latest maturity of the State loans outstanding on 30th June, 1940, are given in the following table, the various maturities being grouped according to years ending 30th June.

STATE PUBLIC DEBTS, 30th JUNE, 1940: LATEST DATES OF MATURITY.

Year of Maturity.	Place of Maturity.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
		£ (a)	£ (a)	£ (a)	£ (a)	£ (a)	£ (a)	£ (a)
1940-41	Australia	31,841,845	6,287,200	4,798,932	4,522,100	6,404,888	361,830	54,216,795
	London	9,965,276	5,884,825	..	3,815,726	2,998,014	491,000	23,154,841
1941-42	Australia	30,085,590	19,857,617	2,565,330	10,412,624	4,273,249	1,113,205	68,307,615
	London	12,420,113	1,049,868	..	..	..	..	13,469,981
1942-43	New York	..	..	1,631,871	..	..	..	1,631,871
	Australia	15,957,270	4,901,045	2,255,220	5,324,815	3,688,377	591,890	32,718,617
1943-44	London	10,954,600	..	1,996,335	3,228,661	..	..	16,179,596
	Australia	7,372,650	11,383,040	908,840	2,548,570	2,874,926	285,850	25,373,870
1944-45	London	..	..	..	..	..	4,604,800	4,604,800
	Australia	7,818,482	10,631,517	5,771,612	5,586,887	1,965,994	921,931	32,689,823
1945-46	London	..	..	3,958,800	..	..	..	3,958,800
	Australia	1,880,100	2,288,900	552,000	567,000	463,000	230,000	5,981,000
1946-47	Australia	..	..	1,037,928	200,000	..	250,000	1,487,928
	London	..	..	4,255,913	..	1,417,801	..	5,673,714
1947-48	New York	..	..	2,054,865	..	..	..	2,054,865
	Australia	4,774,247	4,470,035	1,904,985	2,920,283	1,838,409	614,390	16,522,349
1948-49	Australia	13,645,700	4,734,000	2,820,190	919,470	4,070,475	840,490	27,030,325
	London	12,268,490	12,022,295	2,000,000	8,391,100	2,716,302	1,076,000	38,474,187
1949-50	Australia	11,115,360	3,492,332	4,967,537	1,476,080	3,045,530	484,150	24,580,989
	London	..	6,055,545	..	..	..	..	6,055,545
1950-51	Australia	4,672,845	4,112,108	2,461,627	2,752,027	1,341,198	553,202	15,893,007
	London	11,707,278	..	5,948,800	..	..	2,798,000	20,454,078
1951-52	Australia	9,925,500	3,802,590	4,483,946	2,533,950	3,952,210	1,041,320	25,739,516
	London	7,000	..	484,718	..	..	..	491,718
1952-53	Australia	11,789,758	..	..	..	..	..	11,789,758
	London	4,511,685	4,039,193	1,812,426	2,589,478	1,238,774	709,306	14,900,856
1953-54	Australia	11,018,047	..	2,737,500	903,193	1,906,730	1,906,730	16,565,490
	London	12,967,810	8,924,580	7,454,768	6,879,990	3,768,510	1,759,760	41,755,418
1954-55	London	..	..	..	..	3,204,904	..	3,204,904
	Australia	13,928,901	8,810,568	2,727,892	5,560,792	3,707,568	1,187,400	35,923,121
1955-56	London	3,892,633	2,624,319	1,723,705	732,631	1,498,444	..	10,471,732
	Australia	1,931,000	808,000	922,685	1,324,000	476,000	242,100	5,703,785
1956-57	New York	4,312,648	..	..	..	..	..	4,312,648
	Australia	4,433,964	3,828,348	1,489,360	2,561,866	1,317,055	548,256	14,178,849
1957-58	London	38,171,400	..	..	..	..	..	38,171,400
	New York	4,334,327	1,874,559	1,492,374	1,000,837	516,992	227,796	9,446,885
1958-59	Australia	..	..	384,082	..	164,145	..	548,227
	London	3,829,050	13,553,800	3,700,750	..	..	..	21,083,600
1959-60	Australia	4,415,334	3,861,216	2,137,958	2,428,058	1,478,568	697,499	15,018,633
	London	..	2,902,116	..	..	877,408	..	3,779,524
1960-61	Australia	..	..	717,535	424,446	..	..	1,141,981
	London	..	6,563,275	21,305,370	3,657,346	1,739,527	174,200	33,439,718
1961-62	Australia	4,262,102	3,889,368	1,339,486	2,511,034	1,398,803	674,217	14,075,010
	London	..	..	..	..	4,866,583	..	4,866,583
1962-63	Australia	106,804	..	458,106	..	553,523	..	718,433
	London	10,283,396	..	..	..	..	..	10,283,396
1963-64	Australia	..	..	619,018	..	1,753,183	88,000	2,460,201
	London	..	..	396,532	..	129,714	..	526,246
1965-66	London	14,055,000	..	..	..	..	..	14,055,000
	London	..	..	1,920,650	..	..	..	1,920,650
1970-71	London	9,273,446	..	..	2,284,276	..	..	11,557,722
	London	..	..	..	3,693,587	8,829,191	1,080,750	13,603,528
1974-75	Australia	..	..	50,064	..	..	..	50,064
	London	2,957,816	14,433,131	19,097,888	13,888,787	12,976,462	1,228,987	65,183,071
Overdue and unconverted	Australia	90	..	230	..	..	..	320
	London	2,350	..	..	..	..	..	2,350
Interminable	Australia	363,707	..	..	98,382	..	..	462,089
	London	1,000	..	..	..	..	..	1,000
Treasurer's option	Australia	6,070,924	..	..	497,310	..	..	6,568,234
	London	..	..	..	2,433,499	..	..	2,433,499
Half-yearly drawings	Australia	..	..	3,819,834	..	332,731	460,819	4,613,384
	London	..	..	..	..	195,647	..	195,647
Indefinite	Australia	..	3,464,578	..	503,700	..	..	3,968,278

Total	Australia	192,088,910	113,586,235	59,342,241	64,712,416	50,261,270	13,655,609	493,646,681
	London	158,697,020	62,464,855	62,788,171	42,898,156	43,953,693	13,360,487	384,162,382
	New York	12,539,608	4,498,878	6,902,815	1,733,468	2,015,436	227,796	27,918,001
	Total	363,325,538	180,549,968	129,033,227	109,344,040	96,230,399	27,243,892	905,727,064

(a) For units of currency, see p. 913.

Particulars of the State Public Debts according to the year of earliest maturity are shown hereunder:—

STATE PUBLIC DEBTS, 30TH JUNE, 1940: EARLIEST DATES OF MATURITY.

Year of Maturity.	Place of Maturity.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Total.
		£ (a)	£ (a)	£ (a)	£ (a)	£ (a)	£ (a)	£ (a)
Before 1940-41	Australia	506,367	..	340,200	..	..	..	840,567
	London	24,127,391	..	4,255,913	..	5,500,113	..	33,883,417
	New York	3,892,633	..	1,025,106	..	..	..	4,917,739
1940-41	Australia	31,404,800	6,287,200	4,798,932	4,522,100	6,404,888	361,830	53,779,750
	London	20,919,876	11,798,025	26,016,400	8,751,095	6,226,675	3,289,000	77,001,071
1941-42	Australia	30,080,690	19,857,617	2,565,330	10,412,624	4,273,249	1,113,205	68,302,715
	London	1,649,868	..	..	..	4,866,583	4,604,800	10,521,251
1942-43	Australia	8,646,975	..	1,631,871	..	..	..	10,278,846
	London	16,045,324	4,901,045	2,255,220	5,324,815	3,688,377	591,890	32,806,671
1943-44	Australia	10,283,396	..	..	..	..	..	10,283,396
	London	7,369,350	11,383,010	908,840	2,548,570	2,874,920	285,850	25,370,570
1944-45	Australia	9,527,090	..	2,000,000	2,977,800	2,716,302	..	17,221,192
	London	7,815,582	10,631,517	5,771,012	5,580,887	1,995,994	921,931	32,686,923
1945-46	Australia	1,879,800	2,288,900	552,000	567,000	463,000	230,000	5,980,700
	London	19,754,216	21,285,280	19,697,888	19,302,087	12,976,462	2,304,987	95,320,920
1946-47	Australia	..	..	1,037,928	200,000	..	250,000	1,487,928
	London	4,766,147	4,470,035	1,904,985	2,920,283	1,838,409	614,390	16,514,249
1947-48	Australia	17,870,500	..	..	..	..	..	17,870,500
	London	..	..	1,492,374	1,000,837	516,992	227,796	3,237,999
1948-49	Australia	13,642,400	4,734,000	2,820,190	919,470	4,070,475	840,490	27,027,025
	London	4,866,232	5,170,146	..	..	903,193	..	10,939,571
1949-50	Australia	11,112,660	3,422,332	4,967,537	1,476,080	3,045,530	484,150	24,578,289
	London	..	6,055,545	1,920,650	..	..	..	7,976,195
1950-51	Australia	28,690,539	24,258,783	8,693,008	16,779,795	7,853,145	2,990,488	89,266,058
	London	17,941,573	..	..	2,737,500	..	1,963,750	22,585,823
1951-52	Australia	9,925,500	3,802,590	4,483,946	2,533,950	3,952,210	1,041,320	25,739,516
	London	12,965,110	8,924,580	7,140,108	6,879,990	3,768,510	1,759,760	41,438,058
1952-53	Australia	..	3,738,042	698,599	732,631	1,498,444	..	6,667,716
	London	9,455,923	5,082,034	1,848,907	2,947,460	2,467,805	763,130	22,565,256
1953-54	Australia	3,829,050	13,553,800	3,700,750	..	..	..	21,083,600
	London	..	..	799,378	..	..	..	799,378
1954-55	Australia	20,300,900	..	..	..	..	..	20,300,900
	London	..	..	317,869	..	..	..	317,869
1955-56	Australia	9,273,446	650,075	1,237,770	3,002,588	1,739,527	174,200	16,077,606
	London	..	760,836	..	..	..	..	760,836
1956-57	Australia	..	..	354,685	..	..	7,100	361,785
	London	..	..	284,069	..	142,890	548,256	975,221
1957-58	Australia	..	..	384,082	..	164,145	..	548,227
	London	..	7,984	886,858	..	311,563	165,000	1,371,405
1958-59	Australia	..	2,902,116	..	..	..	..	2,902,116
	London	..	..	717,535	..	424,446	..	1,141,981
1960-61	Australia	..	..	165,838	..	182,257	138,000	486,095
	London	..	..	458,106	..	153,523	..	611,629
1962-63	Australia	..	..	619,018	..	1,753,183	88,000	2,460,201
	London	..	..	396,532	..	199,714	..	526,246
1964-65	Australia	..	..	50,064	3,693,587	8,829,191	1,080,750	13,603,528
	London	..	..	..	..	..	..	50,064
Overdue and unconverted	Australia	90	..	230	..	..	..	320
	London	2,350	..	..	..	..	..	2,350
Interminable	Australia	363,707	..	..	93,382	..	..	462,089
	London	1,000	..	..	..	..	..	1,000
Treasurer's option	Australia	6,070,924	..	..	497,316	..	..	6,568,234
	London	..	..	..	2,433,499	..	..	2,433,499
Half-yearly drawings	Australia	..	..	3,819,834	..	332,731	460,819	4,613,384
	London	..	..	..	..	195,647	..	195,647
Indefinite	Australia	..	3,464,578	..	503,700	..	..	3,968,278
	London	..	..	..	..	..	..	..
Total	Australia	192,088,910	113,586,235	59,342,241	64,712,416	50,261,270	13,655,609	493,646,681
	London	158,697,020	62,464,853	62,788,171	42,898,156	43,953,693	13,360,482	384,162,382
	New York	12,539,608	4,498,878	6,902,815	1,733,468	2,015,430	227,796	27,918,001
	Total ..	363,325,538	180,549,968	129,033,227	109,344,040	96,230,399	27,243,892	905,727,064

(a) For units of currency, see p. 913.

6. **Sinking Funds.**—Prior to the passing of the Financial Agreement Act 1928, the practice of providing sinking funds by the States had been consistently followed in Western Australia only. This Act contains provisions for the establishment of a sinking fund on States' debts (see p. 929). Some particulars of the transactions of the National Debt Sinking Fund (States' Account) for 1939-40 are shown below, and further details are given in *Finance Bulletin* No. 31 issued by this Bureau.

STATE PUBLIC DEBTS, 30th JUNE, 1940 : SINKING FUNDS.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
	£	£	£	£	£	£	£
Total Receipts, 1939-40	2,606,081	1,263,031	950,654	750,308	688,439	185,754	6,444,267
Total Receipts, to 30th June, 1940..	21,877,511	11,620,884	8,485,403	7,018,749	6,252,147	1,693,551	56,948,245
Total Funds applied to Redemptions, 1939-40	2,206,175	1,265,457	975,394	746,756	744,119	169,276	6,107,177
Total Funds applied to Redemptions, to 30th June, 1940	21,421,217	11,119,550	8,343,897	6,898,177	6,902,566	1,667,746	56,353,153
Total Funds applied to Investments to 30th June, 1940 ^(a)	..	..	Cr. 35,137b	..	Cr. 954,395b	..	Cr. 989,532b
Total Expenditure to 30th June, 1940..	21,421,217	11,119,550	8,308,760	6,898,177	5,948,171	1,667,746	55,363,621
Balance at 30th June, 1940, not permanently invested	456,294	501,334	176,643	120,572	303,976	25,805	1,584,624
Investments at 30th June, 1940	..	..	616,165	..	..	..	616,165
Total Balance at 30th June, 1940	456,294	501,334	792,808	120,572	303,976	25,805	2,200,789

(a) Less amounts received on investments realized to 30th June, 1940.

(b) Excess of sales over purchases of investments.

D.—COMMONWEALTH AND STATE FINANCE.

1. **Revenue and Expenditure.**—The following tables show the aggregate revenue and expenditure of the Commonwealth and States for each of the five years to 1939-40, allowance having been made in cases of duplication :—

COMMONWEALTH AND STATES : REVENUE.

Year ended 30th June—	Revenue collected by Commonwealth Government.	Revenue collected by State Governments.	Total.
	(a)	(b)	
	£	£	£
1936	81,923,489	101,434,161	183,357,650
1937	82,775,120	108,275,484	191,050,604
1938	89,416,077	115,393,359	204,809,436
1939	95,001,628	115,193,501	210,195,129
1940	111,850,039	120,888,672	232,738,711

(a) Excludes miscellaneous receipts from States. Government to State Consolidated Revenue Funds.

(b) Excludes payments by Commonwealth

COMMONWEALTH AND STATES : EXPENDITURE.

Year ended 30th June—	Expenditure by Commonwealth Government. (a)	Expenditure by State Governments.	Total.
	£	£	£
1936	67,983,128	114,248,202	182,231,330
1937	71,445,401	118,689,919	190,135,320
1938	75,894,537	125,445,170	201,339,707
1939	84,674,147	128,763,948	213,438,095
1940	99,266,570	133,123,853	232,390,423

(a) Excludes payments by Commonwealth Government to State Consolidated Revenue Funds.

2. **Taxation.**—The table hereunder shows the combined Commonwealth and State taxation for each of the years 1935-36 to 1939-40, as well as the amount per head of population. Certain taxation collections by the State Governments which are not paid into the Consolidated Revenue Fund have been included.

TOTAL COMMONWEALTH AND STATE TAXATION.

Particulars.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
Commonwealth—	£	£	£	£	£
Customs and Excise ..	41,437,717	42,993,032	48,383,005	47,632,365	53,824,906
Sales Tax	9,432,468	8,008,427	8,023,886	9,308,334	12,196,175
Flour Tax	1,150,738	<i>Dr.</i> 12,193	3,025	1,808,972	2,486,070
Other	11,596,383	11,784,186	12,635,569	15,287,228	21,503,512
Total	63,617,306	62,773,452	69,048,485	74,036,899	90,010,663
State	40,971,713	45,449,101	49,674,765	50,506,997	54,386,815
Grand Total	104,589,019	108,222,553	118,723,250	124,543,896	144,397,478
Taxation per head—					
Commonwealth (a)—	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Customs and Excise ..	6 2 9	6 6 4	7 1 0	6 17 7	7 13 11
Sales Tax	1 7 11	1 3 6	1 3 4	1 6 10	1 14 10
Flour Tax	0 3 5	..	..	0 5 3	0 7 1
Other	1 14 5	1 14 8	1 16 10	2 4 1	3 1 6
Total	9 8 6	9 4 6	10 1 2	10 13 9	12 17 4
State (b)	6 1 8	6 13 11	7 5 1	7 6 2	7 15 11
Grand Total	15 9 11	15 18 1	17 5 11	17 19 6	20 12 10

(a) Based on mean population for each financial year.

(b) Based on aggregate population of the

six States—mean for each financial year.

3. Public Debt.—(i) *General.* The table hereunder shows the public debt of the Commonwealth and of the States at 30th June in each of the years 1936 to 1940. In this table all moneys borrowed by the Commonwealth on behalf of the States have been included with State debts only, and similarly, the debts taken over by the Commonwealth from South Australia on account of the Northern Territory and of the Port Augusta—Oodnadatta Railway have been included with the Commonwealth Debt.

COMMONWEALTH AND STATE PUBLIC DEBTS.

Particulars.	Where Redeemable.	At 30th June—				
		1936.	1937.	1938.	1939.	1940.
		£ (a)	£ (a)	£ (a)	£ (a)	£ (a)
Commonwealth	Aust. . .	218,291,973	214,818,637	216,400,462	218,496,483	257,116,685
	London	156,285,327	155,778,627	158,363,627	162,840,947	162,333,777
	New York	16,351,176	16,201,952	16,080,972	15,913,501	15,876,718
	Total (b)	390,928,476	386,799,216	390,845,061	397,250,931	435,327,180
States	Aust. . .	447,258,509	459,579,899	469,742,248	485,179,757	493,646,661
	London	388,575,335	387,633,735	385,888,993	384,327,833	384,162,382
	New York	28,908,661	28,747,909	28,549,461	28,264,451	27,918,001
	Total (b)	864,742,505	875,961,543	884,180,702	897,772,041	905,727,064
Total, Commonwealth and States	Aust. . .	665,550,482	674,398,536	686,142,710	703,676,240	750,763,366
	London	544,860,662	543,412,362	544,252,620	547,168,780	546,496,159
	New York	45,259,837	44,949,861	44,630,433	44,177,952	43,794,719
	Grand Total (b)	1,255,670,981	1,262,760,759	1,275,025,763	1,295,022,972	1,341,054,244

(a) The units of currency are—

For debt maturing in Australia	..	..	..	£ (Aust.)
For debt maturing in London	..	..	..	£ (Stg.)
For debt maturing in New York	..	..	..	..

* Payable in terms of dollars. See note (a) on next page.

(b) The "face" or "book" value of the debts without adjustment on account of currency changes since the loans were floated.

(ii) *Dates of Maturity.* The particulars given in the appended table show as at 30th June, 1940, the amounts of Commonwealth and State securities maturing in Australia and overseas according to the latest year of maturity, together with the amount of interest payable yearly thereon :—

COMMONWEALTH AND STATE PUBLIC DEBTS, 30th JUNE, 1940 : LATEST DATES OF MATURITY.

Year of Maturity.	Commonwealth and State Debts.				Annual Interest Payable at 30th June, 1940, in respect of Commonwealth and State Debts maturing in the Years stated.			
	Maturing in—				Interest Payable in—			
	Australia.	London.	New York.	Total.	Australia.	London.	New York.	Total.
	£ (Aust.)	£ (Stg.)	£ (a)	£ (b)	£ (Aust.)	£ (Stg.)	£ (a)	£ (c)
1940-41	65,811,313	27,125,001	..	92,936,314	1,189,291	604,085	..	1,793,376
1941-42	98,157,905	13,469,981	1,631,871	113,259,757	3,918,955	404,099	114,231	4,437,285
1942-43	37,835,167	16,551,402	..	54,386,569	1,432,404	455,164	..	1,887,568
1943-44	27,578,010	4,604,800	..	32,182,810	1,004,430	161,168	..	1,165,598
1944-45	57,450,545	3,958,800	..	61,409,345	2,201,280	138,558	..	2,339,838
1945-46	17,156,670	..	..	17,156,670	536,616	..	..	536,616
1946-47	1,487,928	5,073,711	2,051,865	9,216,507	56,791	177,300	123,292	357,383
1947-48	38,017,016	..	..	38,017,016	1,508,330	..	..	1,508,330
1948-49	31,429,605	38,474,187	..	69,903,792	1,039,329	1,447,059	..	2,486,388
1949-50	21,613,419	6,055,545	..	30,668,964	374,084	211,944	..	1,086,028
1950-51	29,239,348	20,454,078	..	49,693,426	1,162,312	759,627	..	1,921,939
1951-52	27,443,576	..	..	27,443,576	1,027,679	..	..	1,027,679
1952-53	491,718	11,789,758	..	12,281,476	17,149	412,641	..	429,790
1953-54	27,556,686	30,345,590	..	57,902,276	1,098,542	1,110,970	..	2,209,512
1954-55	52,684,568	3,204,904	..	85,889,472	1,188,377	112,172	..	2,300,549
1955-56	50,270,069	..	24,019,931	74,290,000	1,980,920	..	1,154,698	3,135,618
1956-57	23,933,085	6,996,000	4,312,648	35,241,733	815,806	262,350	215,633	1,293,789
1957-58	26,112,435	38,171,400	11,775,404	76,059,239	1,043,339	1,547,228	588,770	3,179,337
1958-59	548,227	21,083,600	..	21,631,827	19,188	737,926	..	757,114
1959-60	26,862,315	3,779,524	..	30,641,839	1,063,062	148,987	..	1,212,049
1960-61	1,141,981	55,662,035	..	56,804,916	34,259	2,336,324	..	2,370,583
1961-62	25,118,795	4,866,583	..	29,985,378	999,891	194,663	..	1,194,554
1962-63	718,433	10,283,306	..	11,001,829	21,660	411,336	..	432,996
1963-64	2,460,291	5,810,000	..	8,270,291	75,372	232,400	..	307,772
1964-65	526,246	..	..	526,246	15,787	..	..	15,787
1965-66 .. .. .	..	14,055,000	..	14,055,000	..	702,750	..	702,750
1966-67 .. .. .	..	..	..	..	..	..	..	..
1967-68 .. .. .	..	..	..	..	..	..	..	..
1968-69 .. .. .	..	..	..	..	..	..	..	..
1969-70 .. .. .	..	1,920,650	..	1,920,650	..	67,223	..	67,223
1970-71 .. .. .	..	11,557,722	..	11,557,722	..	462,309	..	462,309
1971-72 .. .. .	..	..	..	..	..	..	..	..
1972-73 .. .. .	..	..	..	..	..	..	..	..
1973-74 .. .. .	..	..	..	..	..	..	..	..
1974-75 .. .. .	..	13,933,306	..	13,933,306	..	452,833	..	452,833
1975-76	50,064	64,311,566	..	64,361,630	1,552	4,715,579	..	4,717,131
Overdue and unconverted	(d) 80,234	2,350	..	82,584	261	..	..	261
Interminable	462,089	1,000	..	463,089	15,217	50	..	15,267
Treasurers' Option	6,568,231	2,433,499	..	9,001,733	189,346	73,005	..	262,351
Half-yearly drawings	4,330,283	195,647	..	5,025,930	158,281	6,848	..	165,129
Annual repayments .. .. .	..	79,724,221	..	79,724,221	..	..	..	..
Indefinite	14,127,201	..	..	14,127,201	324,301	..	..	324,301
Total	750,763,366	546,496,159	43,794,719	1,341,054,244	27,013,811	18,346,598	2,196,624	47,557,033

(a) Payable in terms of dollars. For the purposes of this table, dollars have been arbitrarily converted at the rate of \$4,8665 to £1. (b) The total "face" or "book" value of the Public Debt, leaving out of account currency changes since the loans were floated. (c) Nominal amount of interest payable takes no account of exchange. (d) Includes £6,530 unconverted. (e) Capital and interest payments suspended by arrangement with British Government. (f) Includes War Savings Certificates and Citizens' National Emergency Loans.

The following table gives particulars of Commonwealth and State Public Debt as at 30th June, 1940, according to the earliest year of maturity, together with the amount of interest payable yearly:—

COMMONWEALTH AND STATE PUBLIC DEBTS, 30th JUNE, 1940 : EARLIEST DATES OF MATURITY.

Year of Maturity.	Commonwealth and State Debts.				Annual Interest Payable at 30th June, 1940, in respect of Commonwealth and State Debts maturing in the Years stated.			
	Maturing in—				Interest Payable in—			
	Australia.	London.	New York.	Total.	Australia.	London.	New York.	Total.
	£ (Aust.)	£ (Stg.)	£ (d)	£ (b)	£ (Aust.)	£ (Stg.)	£ (d)	£ (c)
Before 1940—41 ..	840,567	33,883,417	4,917,739	39,641,723	33,900	1,104,733	221,298	1,359,931
1940—41 ..	65,374,268	87,332,437	..	152,706,705	1,168,964	3,070,950	..	4,239,914
1941—42 ..	98,153,005	10,521,251	16,275,846	118,953,102	3,918,766	387,327	546,580	4,852,673
1942—43 ..	37,923,221	10,283,396	..	48,206,617	1,435,020	411,336	..	1,846,356
1943—44 ..	27,574,710	17,221,192	..	44,795,902	1,004,315	688,848	..	1,693,163
1944—45 ..	57,447,645	3,958,800	..	61,406,445	2,201,179	138,558	..	2,339,737
1945—46 ..	17,156,370	124,449,415	..	111,605,785	536,606	6,021,435	..	6,558,041
1946—47 ..	1,487,928	..	2,054,865	3,542,793	56,791	..	123,292	180,083
1947—48 ..	38,008,916	17,870,500	5,566,518	61,445,934	1,508,048	938,201	278,326	2,724,575
1948—49 ..	31,426,305	24,719,671	..	56,145,976	1,039,214	888,212	..	1,927,426
1949—50 ..	24,610,719	7,976,195	..	32,586,914	873,990	279,167	..	1,153,157
1950—51 ..	120,841,699	22,585,823	..	143,427,522	4,687,336	790,504	..	5,477,840
1951—52 ..	27,443,576	..	..	27,443,576	1,027,679	..	..	1,027,679
1952—53 ..	82,367,208	6,096,000	16,634,859	105,998,067	3,174,242	262,350	831,743	4,268,335
1953—54 ..	37,119,266	21,083,600	..	58,202,866	1,451,576	737,926	..	2,189,502
1954—55 ..	799,378	20,300,900	..	21,100,278	30,946	609,027	..	639,973
1955—56 ..	12,766,637	32,311,423	4,311,892	49,419,952	510,268	1,136,804	195,385	1,842,457
1956—57 ..	361,785	..	..	361,785	14,358	..	..	14,358
1957—58 ..	12,908,807	..	..	12,908,807	515,193	..	..	515,193
1958—59 ..	548,227	..	..	548,227	19,188	..	..	19,188
1959—60 ..	13,215,087	2,902,116	..	16,117,203	517,173	116,084	..	633,257
1960—61 ..	1,141,981	5,810,000	..	6,951,981	34,259	232,400	..	266,659
1961—62 ..	11,529,880	..	..	11,529,880	456,334	..	..	456,334
1962—63 ..	611,629	..	..	611,629	18,349	..	..	18,349
1963—64 ..	2,160,201	..	..	2,160,201	75,372	..	..	75,372
1964—65 ..	526,246	13,933,306	..	14,459,552	15,787	452,833	..	468,620
1965—66 ..	..	..	..	..	..	..	..	..
1966—67 ..	..	..	..	..	..	..	..	..
1967—68 ..	..	..	..	..	..	..	..	..
1968—69 ..	..	..	..	..	..	..	..	..
1969—70 ..	..	..	..	..	..	..	..	..
1970—71 ..	..	..	..	..	..	..	..	..
1971—72 ..	..	..	..	..	..	..	..	..
1972—73 ..	..	..	..	..	..	..	..	..
1973—74 ..	..	..	..	..	..	..	..	..
1974—75 ..	..	..	..	..	..	..	..	..
1975—76 ..	50,064	..	..	50,064	1,552	..	..	1,552
Overdue and unconverted ..	(d) 80,234	2,350	..	82,584	261	..	..	261
Interminable ..	462,089	1,000	..	463,089	15,217	50	..	15,267
Treasurers' Option ..	6,568,234	2,433,499	..	9,001,733	189,346	73,005	..	262,351
Half-yearly drawings ..	4,839,283	195,647	..	5,025,930	158,281	6,848	..	165,129
Annual repayments ..	114,127,201	79,724,221	..	193,851,422	..	..	..	..
Indefinite ..	..	..	..	11,127,201	..	..	..	..
Total ..	759,763,366	546,196,159	43,794,710	1,349,754,235	27,013,811	18,346,508	2,196,624	47,557,033

(a) Payable in terms of dollars. For the purposes of this table, dollars have been arbitrarily converted at the rate of \$4,866 to £1. (b) The total "face" or "book" value of the Public Debt, leaving out of account currency changes since the loans were floated. (c) Nominal amount of interest payable takes no account of exchange. (d) Includes £6,030 unconverted. (e) Capital and interest payments suspended by arrangement with British Government. (f) Includes War Savings Certificates and Citizens' National Emergency Loans.

(iii) Rates of Interest, 30th June, 1940. The amount of Commonwealth and State Public Debt at each rate of interest (internal and external debt shown separately) is given in the following table:—

COMMONWEALTH AND STATE PUBLIC DEBTS, 30th JUNE, 1940 : AMOUNTS AT EACH RATE OF INTEREST.

Rate of Interest.	Commonwealth and State Debt maturing—			
	In Australia. £ (Aust.)	In London. £ (Stg.)	In New York. £ (a)	Total £ (b)
7.0 .. ..	..	..	1,631,871	1,631,871
6.0 .. ..	..	..	2,054,865	2,054,865
5.25 .. ..	..	17,870,500	..	17,870,500
5.0375	522,275	..	..	522,275
5.0	(c) 4,976	126,476,366	30,848,352	157,329,694
4.91667 .. ..	..	79,724,221	..	79,724,221
4.75 .. ..	..	11,902,600	..	11,902,600
4.65	1,389,110	..	..	1,389,110
4.5 .. ..	..	..	9,259,631	9,259,631
4.45625	84,650	..	..	84,650
4.2625	3,392,475	..	..	3,392,475
4.25	84,711	..	..	84,711
4.06875	13,905,540	..	..	13,905,540
4.0	(d) 393,592,564	64,326,843	..	367,919,407
3.96667	5,685,910	..	..	5,685,910
3.95833	4,061,000	..	..	4,061,000
3.95417	1,875,750	..	..	1,875,750
3.89167	1,035,000	..	..	1,035,000
3.875	119,258,316	..	..	119,258,316
3.8125	200,000	..	..	200,000
3.79167	6,370,000	..	..	6,370,000
3.75	78,740,300	45,464,582	..	124,204,882
3.72917	350,000	..	..	350,000
3.675	66,510	..	..	66,510
3.625	9,846,830	..	..	9,846,830
3.5	27,821,920	76,734,848	..	104,556,768
3.4875	6,669,510	..	..	6,669,510
3.42083	1,130,950	..	..	1,130,950
3.375	24,011,230	..	..	24,011,230
3.25	23,511,976	34,687,007	..	58,198,983
3.125	173,230	..	..	173,230
3.1	7,661,221	..	..	7,661,221
3.0	33,660,568	45,630,439	..	79,291,007
2.90625	225,100	..	..	225,100
2.75	6,770,890	16,551,402	..	23,322,292
2.7125	1,091,181	..	..	1,091,181
2.325	1,851,937	..	..	1,851,937
2.25 .. ..	..	24,634,001	..	24,634,001
2.0 .. ..	..	2,491,000	..	2,491,000
1.5	(e) 55,605,248	..	..	55,605,248
War (1939-40) Savings Certificates (f)	6,099,887	..	..	6,099,887
Citizens' National Emergency Loans (Interest Free) ..	3,864,626	..	..	3,864,626
Overdue and unconverted	73,704	2,350	..	76,054
War (1914-19) Savings Stamps	14,271	..	..	14,271
Total	750,763,366	546,496,159	43,794,719	1,341,054,244
Average Rate of Interest Payable	£ s. d.	£ s. d.	£ s. d.	£ s. d.
	3 12 4	3 18 7	5 0 4	3 15 8

(a) See note (a) on previous page. (b) Total "face" or "book" value of the Public Debt without adjustment on account of currency changes since the loans were floated. (c) War (1914-19) Savings Certificates. (d) Includes unconverted securities, £6,530. (e) Includes Treasury Bills at 1½ per cent. converted to 1½ per cent. on renewal. (f) Compounded at 3½ per cent.

(iv) *Interest Payable.* The table hereunder shows the interest payable on the public debt of the Commonwealth and of the States at 30th June in each of the years 1936 to 1940:—

COMMONWEALTH AND STATE PUBLIC DEBTS : INTEREST PAYABLE.

Particulars.	Where Payable.	At 30th June—				
		1936.	1937.	1938.	1939.	1940.
		£ (a)	£ (a)	£ (a)	£ (a)	£ (a)
Commonwealth ..	Australia ..	8,363,055	8,245,897	8,301,752	8,344,627	9,420,640
	London (b) ..	3,077,601	3,040,262	3,201,299	3,493,554	3,387,796
	New York ..	797,954	790,935	785,240	777,586	775,930
	Total (c) ..	12,238,610	12,077,094	12,288,291	12,525,767	13,584,366
States	Australia ..	15,841,783	16,333,969	16,715,028	17,240,238	17,593,171
	London (d) ..	15,407,943	15,070,888	15,010,049	14,902,882	14,958,802
	New York ..	1,474,208	1,466,264	1,456,415	1,441,476	1,420,691
	Total (c)	32,723,934	32,871,121	33,181,492	33,644,596	33,972,667
Total Commonwealth and States ..	Australia ..	24,204,838	24,579,866	25,016,780	25,584,865	27,013,811
	London (b) ..	18,485,544	18,111,150	18,211,348	18,366,436	18,346,598
	New York ..	2,272,162	2,257,199	2,241,655	2,219,062	2,196,624
	Total (c) ..	44,962,544	44,948,215	45,469,783	46,170,363	47,557,033
Average Rate per cent.	Australia ..	£ s. d. 3 12 9	£ s. d. 3 12 11	£ s. d. 3 12 11	£ s. d. 3 12 9	£ s. d. 3 12 4
	London ..	3 19 6	3 18 1	3 18 5	3 18 7	3 18 7
	New York ..	5 0 5	5 0 5	5 0 5	5 0 6	5 0 4
	Total (c) ..	3 16 6	3 16 0	3 16 1	3 16 0	3 15 8

(a) The units of currency are—

For interest payable in Australia £ (Aust.)
 For interest payable in London £ (Stg.)
 For interest payable in New York *

* Payable in terms of dollars, see note (a) on page 922.

(b) Excludes suspended interest on War Debt due to the British Government.

(c) The nominal amount and average rate of interest payable taking no account of exchange.

(d) Includes contributions payable by Commonwealth and British Governments towards interest on Migration Loans.

(v) *Short-term Debt. (a) Amount.* Particulars of the short-term debt (Treasury Bills and Debentures) of the Commonwealth and States in London and in Australia at intervals from 30th June, 1933, to 30th June, 1940, are given in the following table :—

COMMONWEALTH AND STATES : SHORT-TERM DEBT.(a)

Date.	Maturing in London.			Maturing in Australia.		
	Commonwealth.	States.	Total.	Commonwealth.	States.	Total.
	£'000 Stg.	£'000 Stg.	£'000 Stg.	£'000 Aust.	£'000 Aust.	£'000 Aust.
30th June, 1933 ..	10,220	23,905	34,125	3,500	45,375	48,875
30th June, 1934 ..	10,220	23,405	33,625	..	48,469	48,469
30th June, 1935 ..	10,220	23,405	33,625	..	45,124	45,124
30th June, 1936 ..	10,220	23,155	33,375	..	47,013	47,013
30th September, 1936 ..	10,220	23,155	33,375	..	48,778	48,778
31st December, 1936 ..	9,720	23,155	32,875	..	53,584	53,584
31st March, 1937 ..	9,720	23,155	32,875	..	52,854	52,854
30th June, 1937 ..	9,720	23,155	32,875	..	46,408	46,408
30th September, 1937 ..	9,720	23,155	32,875	..	50,023	50,023
31st December, 1937 ..	9,470	23,155	32,625	..	54,808	54,808
31st March, 1938 ..	10,120	23,155	33,275	..	52,968	52,968
30th June, 1938 ..	5,495	23,155	28,650	..	46,598	46,598
30th September, 1938 ..	4,470	23,155	27,625	..	52,008	52,008
31st December, 1938 ..	4,220	23,155	27,375	..	59,573	59,573
31st March, 1939 ..	4,220	23,155	27,375	..	56,923	56,923
30th June, 1939 ..	4,220	23,155	27,375	..	50,228	50,228
30th September, 1939 ..	4,220	23,155	27,375	..	56,586	56,586
31st December, 1939 ..	3,970	23,155	27,125	..	64,368	64,368
31st March, 1940 ..	3,970	23,155	27,125	..	51,376	51,376
30th June, 1940 ..	3,970	23,155	27,125	..	45,463	45,463

(a) Exclusive of overdrafts.

(b) *Interest Rates. (i) London.* The rates of interest payable on Treasury Bills and Debentures in London during the period 1932-33 to 1939-40 were as follows :—

Year.	Minimum Rate.	Maximum Rate.
1932-33	2%	4½%
1933-34	2	3
1934-35	2	3
1935-36	2	2½
1936-37	2	2½
1937-38	2	2½
1938-39	2	2½
1939-40	2	2½

(ii) *Australia.* The Treasury Bills rates in Australia were as follows :—

- 5½ per cent. from 10th October, 1929.
- 6 per cent. from 1st October, 1930.
- 4 per cent. from 31st July, 1931.
- 3½ per cent. from 27th October, 1932.
- 3¼ per cent. from 21st January, 1933.
- 2½ per cent. from 18th February, 1933.
- 2½ per cent. from 1st June, 1933.
- 2¼ per cent. from 1st April, 1934.
- 2 per cent. from 15th October, 1934.
- 1¾ per cent. from 1st January, 1935.
- 1½ per cent. from 1st May, 1940.

(vi) *Debts of States and Municipal and Semi-Governmental Bodies.* For the reasons indicated on p. 912 direct comparisons of the debts of the several States should be made with caution. The table following shows for 1938-39 particulars of the debts of the States and the debts due to the Public Creditor by Municipal and Semi-Governmental bodies in each State. This affords a more reliable comparison, but as complete records are not available over a long period, particulars showing comparisons of the growth of the debt cannot be made. For further particulars relating to the Debt of Local and Semi-Governmental Authorities see *Finance Bulletin* No. 31, and Chapter XXII. "Local Government," § 3, p. 651 of this volume.

**PUBLIC DEBT : STATES, MUNICIPAL AND SEMI-GOVERNMENTAL BODIES,
1937-38 and 1938-39.**

State.	Debts of the States. (a)	Due to Public Creditor.(b)		Grand Total.
		Municipal.	Semi-Governmental Bodies.	
	£'000.	£'000.	£'000.	£'000.
New South Wales	359,844	37,343	52,512	449,699
Victoria	179,698	12,340	61,108	253,146
Queensland	127,593	19,904	3,514	150,921
South Australia	108,887	817	770	110,474
Western Australia	95,473	3,170	107	98,750
Tasmania	26,367	2,986	495	29,848
Total, All States { 1938-39	897,772	76,560	118,506	1,092,838
{ 1937-38	884,181	71,782	112,222	1,068,185

DEBT PER HEAD OF POPULATION.(c)

	£	£	£	£
New South Wales	131.0	13.6	19.1	163.7
Victoria	95.5	6.6	32.5	134.6
Queensland	125.4	19.6	3.5	148.5
South Australia	182.8	1.3	1.3	185.4
Western Australia	205.1	6.8	0.3	212.2
Tasmania	111.4	12.6	2.1	126.1
Total, All States { 1938-39	129.3	11.0	17.1	157.4
{ 1937-38	128.6	10.4	16.3	155.3

(a) Includes amounts due by Municipal and Semi-Governmental bodies. (b) Excluding overdrafts and debts due to Central Government. (c) At 30th June, 1938 and 1939.

4. **The Financial Agreement between the Commonwealth and the States.**—The original Financial Agreement between the Commonwealth and the States was made on 12th December, 1927. It was later affected by the following agreements made under the powers conferred by Section 105A of the Constitution :—

Debt Conversion Agreement—Made 21st July, 1931.

Debt Conversion Agreement (No. 2)—Made 22nd October, 1931.

Agreement relating to Soldier Settlement Loans—Made 3rd July, 1934.

The Debt Conversion Agreements did not affect the wording of the main agreement, but contained provisions stating that where their provisions were not in accordance with any contained in the Financial Agreement the former should prevail. An Agreement was

made between the Commonwealth and Tasmania only on 1st July, 1928. This was not an amendment, but was made under the authority of Part III., Clause 3 (l) of the original Agreement.

A summary of the original Agreement as affected by the subsequent Agreements is given below.

(i) *Australian Loan Council.* Under the Agreement, an 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, and the Premier of each State, or in their absences Ministers nominated by them in writing.

Each of the Governments submits annually to the Loan Council a programme setting forth the amount it desires to raise by loans for the financial year for purposes other than the conversion, renewal or redemption of existing loans or temporary purposes. Any revenue deficit to be funded must be included in the loan programme. Loans for Defence purposes are not subject to the Agreement, and therefore the Commonwealth is not required to include borrowing for that purpose in its programme for submission to the Loan Council.

If the Loan Council decides that the total amount of the loan programmes for the year cannot be borrowed at reasonable rates and conditions, it then decides the amount which shall be borrowed and may, by unanimous decision, allocate that amount between the Commonwealth and the States. In default of a unanimous decision, the Commonwealth is then entitled to one-fifth of the total amount to be borrowed and each State to a proportion of the remainder equal to the ratio of its net loan expenditure in the preceding five years to the net loan expenditure of all States during the same period.

Questions other than the apportionment of loans are decided by a majority vote of the Council members, the member representing the Commonwealth having two votes and a casting vote and each member representing a State having one vote.

(ii) *Borrowings of the Commonwealth and the States.* (a) 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.

(b) If the Loan Council unanimously decides, however, a State may borrow outside Australia in the name of the State, 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.

(c) 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.

(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.

(d) Where such borrowings are not solely for temporary purposes, they are treated as loans under the Agreement and, if their amount together with the amount of loan money raised for the Government concerned by the Loan Council exceeds the limit (if any) of the amount to be raised for or by that Government, the excess is deemed to be money received by the Government in the following year on account of its loan programme for that year.

(e) Any Government may use for temporary purposes any available public money and may, subject to terms approved by the Loan Council, borrow money for temporary purposes by way of overdraft, or fixed, special or other deposit. The conditions as to sinking fund, etc., do not apply to such temporary borrowing.

(iii) *Taking over of State Public Debts.* Subject to the provision of the Financial Agreement, 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 bondholders.

The net public debt of each State existing on 30th June, 1927, was as follows:—

	£				
New South Wales .. .. .	..	..	..	..	234,088,501
Victoria .. .. .	..	..	..	..	136,949,942
Queensland .. .. .	..	..	..	..	101,977,855
South Australia .. .. .	..	..	..	..	84,834,364
Western Australia .. .. .	..	..	..	..	61,060,675
Tasmania .. .. .	..	..	..	..	22,434,060
Total .. .. .	..	..	..	..	641,345,397

These amounts have been varied in accordance with the terms of the "Agreement relating to Soldier Settlement Loans" made on 3rd July, 1934. The amended figures are—

	£				
New South Wales .. .. .	..	..	..	..	233,153,779
Victoria .. .. .	..	..	..	..	136,348,982
Queensland .. .. .	..	..	..	..	101,840,622
South Australia .. .. .	..	..	..	..	84,029,376
Western Australia .. .. .	..	..	..	..	61,060,675
Tasmania .. .. .	..	..	..	..	22,314,180
Total .. .. .	..	..	..	..	638,747,614

These amounts represent the gross debt less—

(a) the values of properties transferred by the States to the Commonwealth as shown below.

(b) The balances of the State sinking funds at 30th June, 1927.

(iv) *Transferred Properties.* In respect of State properties transferred to the Commonwealth under Section 85 of the Constitution, the States, as from 1st July, 1929, are discharged from any liability in respect of principal, interest or sinking fund on so much of the debts bearing interest at 5 per cent. per annum taken over by the Commonwealth as amounts to the agreed value of these properties, namely £10,924,323, apportioned to the several States as follows:—

	£				
New South Wales .. .. .	..	..	..	..	4,788,005
Victoria .. .. .	..	..	..	..	2,302,862
Queensland .. .. .	..	..	..	..	1,560,639
South Australia .. .. .	..	..	..	..	1,035,631
Western Australia .. .. .	..	..	..	..	736,432
Tasmania .. .. .	..	..	..	..	500,754
Total .. .. .	..	..	..	..	10,924,323

(v) *Payment of Interest.* The Commonwealth will, in each year during a period of 58 years from 1st July, 1927, contribute the sum of £7,584,912 towards the interest payable on the State debts, the States paying the balance to the Commonwealth. After that period, the States will pay to the Commonwealth the whole of the interest due.

The distribution among the States of the contribution of the Commonwealth is 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
Total	7,584,912

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.

(vi) *Sinking Funds.* (a) 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 from revenue 2s. 6d. per cent. and each State 5s. per cent. on all State debts existing 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 commencing on 1st July, 1927 and those of New South Wales for a similar period commencing on 1st July, 1928.

(b) 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 cent. per annum is established and the State and the Commonwealth contribute 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).

(c) Any State may increase its contribution in respect of loan funds expended on wasting assets in order to redeem a loan within a shorter period than 53 years. When this shorter period has expired, the State contributions cease but the Commonwealth contributions continue until the full period of 53 years has elapsed. State contributions in respect of other loans are reduced by the amount of these Commonwealth contributions during the period remaining.

(d) Where loan moneys have been advanced by a State under terms providing for their repayment, the State may credit such repayments either to the loan account or to the sinking fund and, in addition, it must provide from revenue its sinking fund contributions in respect of the loan from which the money so advanced was provided. However, advances repaid to the State from the revenue of Public or Local Authorities may be used by the State to meet sinking fund contributions in respect of the loans concerned.

(e) In respect of any loan raised after 30th June, 1927 by a State to meet a revenue deficit accruing after that date, no 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.

(f) 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 bondholders. 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.

(g) 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, wherever 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 $4\frac{1}{2}$ per cent. on the face value of the cancelled security.

Consequent on the failure of the State of New South Wales to provide certain interest payments on its public debts in accordance with the Financial Agreement, the Commonwealth Parliament passed a Financial Agreement Enforcement Act (No. 3 of 1932). The State of New South Wales attacked the validity of this Act as being *ultra vires* the Commonwealth Parliament and an infringement of public moneys for specific services. The High Court by a majority decision of four to two held that this was a valid law and dismissed the action, subsequently refusing leave to appeal to the Privy Council.

It was realized at the inception of the Loan Council that, in the interests of co-ordinated borrowing, the Council should be advised of borrowings of large amounts by semi-governmental bodies. 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 is regarded as the "Gentlemen's Agreement," and provides, *inter alia*, for the submission of annual loan programmes in respect of semi-governmental authorities proposing to raise £100,000 or more in the 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.

CHAPTER XXVII. STATISTICAL ORGANIZATION AND SOURCES OF INFORMATION.

§ 1. General.

Development of Australian Statistics.—(i) *General.* An outline of the history and development of statistics in Australia is published in Official Year Book No. 19 (see p. 988) and previous issues, particular reference being made to the Crown Colony Blue Books, Statistical Registers, Prominent State Statisticians, Statistical Conferences, the Foundation of the Federal Bureau, and Uniformity of Statistical Control. It is not proposed to repeat this information in this issue.

(ii) *Present Organization.* The organization in respect of the collection, tabulation, etc., of statistical data as between the State and Commonwealth Statistical Bureaux, and State and Commonwealth Government Departments, is described in Official Year Book No. 19, p. 900. Limits of space preclude its repetition in this issue.

§ 2. Statistical Publications of Australia.

1. **General.**—The official statistical publications of Australia may be divided bibliographically into two main divisions, namely:—(1) Commonwealth publications dealing both individually and collectively with the several States of the Commonwealth; and (2) State publications dealing with individual States only. Besides these there are many other reports, etc., issued regularly which, though not wholly statistical, necessarily contain a considerable amount of statistical information.

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 June, 1941:—

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 Primary Industries.—Report prepared for the Empire Producers Conference, Sydney, March, 1938.

Census (1911) Results.—Bulletins. Vols. I, 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 XXXVII. Statistician's Report.

Dairying Summary, Monthly.—First issue, September, 1937.

Finance.—Bulletins, 1907 to 1916–17 annually; 1917–18 and 1918–19 (one vol.); 1919–20 and 1920–21 (one vol.); 1922–23 to 1939–40 annually.

Labour and Industrial Statistics.—Memoranda and Reports, various, to 1913.

Labour Report, annually, 1913 to 1938.

Local Government in Australia.—July, 1919.

Monthly Review of Business Statistics.—First issue, October, 1937.

Official Year Book of the Commonwealth of Australia.—Annually, 1907 to present issue (1940).

Oversea Trade, annually, 1906 to 1938–39.

Pocket Compendium of Australian Statistics (formerly Statistical Digest), 1913, 1914, 1916, and 1918 to 1940 annually.

Population and Vital Statistics.—Bulletins and Reports, various. Commonwealth Demography, 1911 to 1939 annually.

Production.—Bulletins, annually, 1906 to 1938-39. From 1936-37 issued in two parts: Part I. Secondary Industries; Part II. Primary Industries and Total Recorded Production.

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 60).

Social Insurance—Report to the Hon. the Minister of Trade and Customs, 1910.

Social Statistics—Bulletins, 1907 to 1915 annually, and 1918.

Superannuation for the Commonwealth Public Service—Report to the Hon. the Minister for Home Affairs, 1910.

Transport and Communication—Bulletins, 1906, 1908 to 1916 annually; 1919 to 1930 annually, and 1932 to 1939 annually.

Wages and Prices—January, 1932.

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 Summary, Monthly—First issue, July, 1936.

(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. 15, but limits of space preclude the incorporation of this information in the present volume.

3. **State Publications**.—The chief statistical publications of each State are set out hereunder. Limits of space preclude a further enumeration of the various Departmental Reports, statements of accounts, etc., issued by officials, boards, local government bodies, etc., in each State.

(a) New South Wales—Statistical Register (annual); Official Year Book of New South Wales (annual); Statesman's (Pocket) Year Book (annual); Statistical Bulletin (monthly to December, 1919, thereafter quarterly); Monthly Summary of Business Statistics.

(b) Victoria—Statistical Register (annual to 1916, then discontinued); Victorian Year Book (annual); Statistical Abstracts (quarterly to 1917).

(c) Queensland—Statistical Register (annual); Official Year Book, 1901; A.B.C. of Queensland Statistics (annual to 1936, then discontinued); The Queensland Year Book (annual, first issue 1937).

(d) South Australia—Statistical Register (annual); Official Year Book, 1912 and 1913; Statesman's Pocket Year Book (annual); Quarterly Summary of Statistics.

(e) Western Australia—Statistical Register (annual); Statistical Abstracts (quarterly, previously issued monthly to July, 1917); Pocket Year Book of Western Australia (annual).

(f) Tasmania—Statistical Register (annual); Pocket Year Book (annual).

§ 3. Select List of Representative Works Dealing with Australia.

(Compiled by the Librarian of the Commonwealth National Library.)

Under each heading a list is first given of the principal standard books which are still in print. This is followed by lists of selected books published during the current year and of official publications, excluding annual reports, of the same period. In the present list the period covered is 1st October, 1939, to 30th September, 1940. A few books which, though published earlier, were received after the compilation of the last issue are also included.

Technical works on Law, Medicine and the pure sciences are excluded.

The retail price in the country of publication is shown, but this is subject to fluctuation owing to war conditions.

A copy of each of the works mentioned is preserved in the Library and access thereto may be had by any Commonwealth official or other authorized person.

The Library also publishes an annual catalogue of Australian publications, official papers and books on Australia published overseas. Copies of this are obtainable from the Government Printer at a price of 2s.

General and Descriptive.

- AUSTRALIAN ENCYCLOPAEDIA, THE: *editors*, A. W. Jose, H. J. Carter and T. G. Tucker. 2 vols. (Angus & Robertson, 55s.) 3rd edition, Sydney, 1926-27.
 MCGUIRE, P. Australian Journey. (Heinemann, 6s.) London, 1939.
 MADIGAN, C. T. Central Australia. (Oxford University Press, 7s. 6d.) London, 1936.
 OFFICIAL YEAR BOOK OF THE COMMONWEALTH OF AUSTRALIA, Nos. 1 to date. (Government Printer, 5s. *per issue*.) Canberra, 1908 to date.
 RATCLIFFE, F. N. Flying fox and drifting sand: the adventures of a biologist in Australia. (Chatto & Windus, 8s. 6d.) London, 1938.
 TAYLOR, T. G. Australia—a geography reader. (Rand, McNally, \$1.50.) New York, 1931.
 WALKABOUT: Australia and the South Seas. (Australian National Travel Association, 12s. *per annum*.) Melbourne, 1934 to date.
 WOOD, T. Cobbers: A Personal Record of a Journey from Essex, in England, to Australia. (Oxford University Press, 3s. 6d.) London, 1934.

RECENT PUBLICATIONS.

- DINNING, H. W. Australian scene. (Angus & Robertson, 6s.) Sydney, 1940.
 ELDERSHAW, M. Barnard (*i.e.*, M. F. Barnard and F. S. P. Eldershaw). My Australia. (Jarrolds, 7s. 6d.) London, 1939.
 HASKELL, A. L. Walzing Matilda: a background to Australia. (Black, 12s. 6d.) London, 1940.

Territories Outside Australia.

- EGLESTON, F. W., *editor*. The Australian Mandate for New Guinea. (Melbourne University Press, 5s.) Melbourne, 1928.
 OFFICIAL HANDBOOK OF NEW GUINEA. (Government Printer, 5s.) Canberra, 1937.
 See also the annual reports of the Administrators of the various Territories.

RECENT PUBLICATIONS.

- HIDES, J. G. Beyond the Kubea. (Angus & Robertson, 6s.) Sydney, 1939.

OFFICIAL PUBLICATIONS.

- AUSTRALIA: *Committee* . . . [on] the possibility of establishing a combined administration of the territories of Papua and New Guinea, etc. Report. (Government Printer, 3s.) Canberra, 1939.
 AUSTRALIA—*External Affairs, Department of*. Handbook and index to accompany a map of Antarctica produced by the Department of the Interior, 1939: by E. P. Bayliss and J. S. Cumpston. (Government Printer, 5s.) Canberra, 1940.

History.

- CAMBRIDGE HISTORY OF THE BRITISH EMPIRE, vol. 7, pt. 1: Australia. (Cambridge University Press, 31s. 6d.) Cambridge, 1933.
 DAKIN, W. J. Whalemen adventurers: the story of whaling in Australian waters and other southern seas related thereto, from the days of sail to modern times: 2nd edition. (Angus & Robertson, 7s. 6d.) Sydney, 1938.
 FITZPATRICK, B. C. British imperialism and Australia, 1783-1833: an economic history of Australasia. (Allen & Unwin, 18s.) London, 1939.
 HARRIS, H. L. Australia in the making. (Angus & Robertson, 4s.) Sydney, 1936.
 HISTORICAL RECORDS OF AUSTRALIA: *editor*, J. F. Watson (*in progress*). (Commonwealth Parliament Library Committee, Canberra, 12s. 6d. *per vol.*) Sydney, 1914 to date. (34 vols. have so far appeared. Publication has been suspended since 1925.)
 HISTORICAL STUDIES: Australia and New Zealand. (Melbourne University Press, 10s. *per annum*.) Melbourne, 1940 to date.
 MADGWICK, R. B. Immigration into Eastern Australia, 1788-1851. (Longmans, 12s. 6d.) London, 1937.
 O'BRIEN, Rev. E. M. The foundation of Australia (1786-1800): a study in English criminal practice and penal colonization in the eighteenth century. (Sheed & Ward, 12s. 6d.) London, 1937.
 WOOD, G. A. The Discovery of Australia. (Macmillan, 25s.) London, 1922.

RECENT PUBLICATIONS.

- GIBLIN, R. W. The early history of Tasmania: v. 2. The penal settlement era, 1804-18. (Melbourne University Press, 35s.) Melbourne, 1939.
 RABONE, H. R. Lord Howe Island: its discovery and early associations, 1788-1888. (Australis Trading Pty., 2s.) Sydney, 1940.

European War, 1914-18.

- OFFICIAL HISTORY OF AUSTRALIA IN THE WAR OF 1914-18:** C. E. W. Bean, *editor* (in progress). (Angus & Robertson, 21s. *per vol.* Vols. 8, 10, 11; 18s.) Sydney, 1921 to date. (Vols. 1-5, 7-12 have so far appeared.)
- OFFICIAL HISTORY OF THE AUSTRALIAN ARMY MEDICAL SERVICES IN THE WAR OF 1914-18:** *editor* Col. A. G. Butler (in progress). (Australian War Memorial, 21s. *per vol.*) Canberra, 1930 to date. (Vols. 1 and 2 have so far appeared.)

RECENT PUBLICATIONS.

- BROWN, J. Turkish days and ways. (Angus and Robertson, 6s.) Sydney, 1940.

Biography.

- BIOGRAPHICAL HANDBOOK AND RECORD OF ELECTIONS FOR THE PARLIAMENT OF THE COMMONWEALTH.** (Commonwealth Parliament Library Committee, 10s. 6d.) Canberra, 1938. (A new issue is produced for each Federal Parliament.)
- JOHNS, F. An Australian Biographical Dictionary. (Macmillan, 21s.) Melbourne, 1934.
- WHO'S WHO IN AUSTRALIA:** 10th edition: *edited by* J. A. Alexander. (Herald Press, 15s.) Melbourne, 1938. (New edition in preparation.)

RECENT PUBLICATIONS—

- DIMONT, C. T., and BATTY, F. de W. St. Clair Donaldson: Archbishop of Brisbane, 1904-1921, Bishop of Salisbury, 1921-1935. (Faber, 12s. 6d.) London, 1939.
- MOWLE, P. C. A genealogical history of pioneer families of Australia. (John Sands Pty., 42s.) Sydney, 1939.

Constitution and Administration.*

- AUSTRALIA: Law: Statutes.** The acts of the Parliament of the Commonwealth of Australia passed from 1901 to 1935 and in force on 1st January, 1936: to which is prefixed the Commonwealth of Australia Constitution Act. 4 vols. and supplements. (Government Printer, £6 6s.) Canberra, 1936.
- AUSTRALIA:—Royal Commission on the Constitution of the Commonwealth.** Report. (Government Printer, 16s. 9d.) Canberra, 1929.
- AUSTRALIAN DIGEST, THE, 1825-1933:** Being a Digest of the Reported Decisions of the Australian Courts and of Australian Appeals to the Privy Council; *editors*, B. Sugerman and others: 22 vols. (Law Book Co., 60s. *per vol.*) Sydney, 1931 to 1940.
- BLAND, F. A., *editor*. Government in Australia: selected readings. 4 vols. (Government Printer, 15s.) Sydney. (Processed.)
- KERR, D. The law of the Australian Constitution. (Law Book Co., £2.) Sydney, 1925.
- KNOWLES, G. S. The Commonwealth of Australia Constitution Act (as altered to 1st July, 1936), and the acts altering the constitution: with notes, tables, indexes and appendices. (Government Printer, 15s.) Canberra, 1937.
- LAW BOOK COMPANY'S WAR LEGISLATION SERVICE: containing the emergency war legislation of the Commonwealth of Australia with rules, proclamations, etc., thereunder, with articles and notes of a practical nature. *General editor:* J. D. Holmes. (Law Book Co., 42s. *per annum.*) Sydney, 1939 to date.
- WOOD, F. L. The Constitutional Development of Australia. (Harrap, 10s. 6d.) Sydney, 1933.
- WYNES, W. A. Legislative and executive powers in Australia: being a treatise on the legislative and executive powers of the Commonwealth and States of Australia under the Commonwealth of Australia Constitution Act. (Law Book Co., 32s. 6d.) Sydney, 1936.

OFFICIAL PUBLICATIONS.

- TASMANIA:—*Royal commission on local government.* Report. (Government Printer.) Hobart, 1939. (P.P. 15 of 1939.)

Political History and International Relations.

- AUSTRAL-ASIATIC BULLETIN:** a two-monthly review. (Australian Institute of International Affairs Victorian division, 6s. *per annum.*) Melbourne, 1937 to date.
- AUSTRALIAN INSTITUTE OF INTERNATIONAL AFFAIRS.** Australian supplementary papers: [British Commonwealth Relations Conference, Lapstone, 1938.] *Series A.* Australian population. *Series B.* Australian economic policies. *Series C.* Australia in the British Commonwealth. *Series D.* Australian policies, political and strategic. *Series E.* Australia and the Pacific. (The Institute, 2s. *per series.*) Sydney, 1938.
- AUSTRALIAN QUARTERLY, THE:** A Quarterly Review of Australian Affairs. (2s. *per issue.*) Sydney, 1929 to date.
- CURRENT NOTES ON INTERNATIONAL AFFAIRS:** [fortnightly]. (Department of External Affairs.) Canberra, 1936 to date.
- DENNING, W. E. Caucus crisis: the rise and fall of the Scullin government. (Cumberland Argus, 1s. 6d.) Parramatta, 1937.
- DUNCAN, W. G. K., and JAMES, C. V., *editors*. The future of immigration into Australia and New Zealand. (Angus & Robertson, 6s.) Sydney, 1937.
- SMITH, A. N. Thirty Years: The Commonwealth of Australia, 1901-1931. (Brown, Prior, 12s. 6d.) Melbourne, 1933.

RECENT PUBLICATIONS.

- EVATT, H. V. Australian labor leader: the story of W. A. Holman and the labour movement. (Angus & Robertson, 21s.) Sydney, 1940.
- SHEPHERD, J. Australia's interests and policies in the far east. (Institute of Pacific Relations, 3s.) New York, 1940.

OFFICIAL PUBLICATIONS.

- AUSTRALIA:—*Prime minister's department.* What is Australia doing? War facts and figures. (Commonwealth Publicity Officer.) Canberra, 1940.

* It should be noted that several important books on this subject are out of print, and have therefore not been included.

Economic and Social Conditions.

- AUSTRALIA:—*Census and Statistics, Commonwealth Bureau of.* Census of the Commonwealth of Australia: 30th June, 1933: Detailed tables. 2 vols. (Government Printer, 40s.) Canberra, 1939.
- AUSTRALIAN STANDARDS OF LIVING: studies by F. W. Eggleston *and others*. (Melbourne University Press, 10s.) Melbourne, 1939.
- BRIGDEN, J. B. *and others*. The Australian Tariff: An Economic Enquiry. (Melbourne University Press, 3s. 6d.) Melbourne, 1929.
- CLARK, C. G. *and* CRAWFORD, J. G. The national income of Australia. (Angus & Robertson, 3s. 6d.) Sydney, 1938.
- ECONOMIC RECORD, THE: The Journal of the Economic Society of Australia and New Zealand. (Melbourne University Press, 10s. *per annum*.) Melbourne, 1925 to date.
- HARRIS, H. L. Australia's national interests and national policy. (Melbourne University Press, 4s.) Melbourne, 1938.
- SHANN, E. O. G. An Economic History of Australia. (Cambridge University Press, 18s.) Cambridge, 1930. 2nd impression, 1938.

RECENT PUBLICATIONS.

- DUNCAN, W. G. K., *editor*. Social services in Australia. (Angus & Robertson, 6s.) Sydney, 1939.
- WALKER, E. R. War-time economics: with special reference to Australia. (Melbourne University Press, 5s.) Melbourne, 1939.

OFFICIAL PUBLICATIONS.

- CONFERENCE OF YOUTH-ADULT EMPLOYMENT. Canberra, 4th–6th December, 1939. Short summary of proceedings. (Government Printer.) Canberra, 1940.
- NEW SOUTH WALES:—*Parliament: Legislative Assembly: Select Committee . . . upon the employment of youth in industry.* Progress report . . . together with minutes of proceedings of the committee, evidence and appendixes. (Government Printer, 12s.) Sydney, 1940.
- SOUTH AUSTRALIA:—*Committee appointed by the Government to inquire into delinquent and other children in the care of the State.* Report . . . , September, 1939. (Government Printer.) Adelaide, 1939. (P.P. 75 of 1939.)

Industrial Organization.

- FORNANDER, O. de R. Towards industrial peace in Australia: a series of essays in the history of the Commonwealth Court of conciliation and arbitration. (Melbourne University Press, 21s.) Melbourne, 1937.
- SUTCLIFFE, J. T. History of Trade Unionism in Australia. (Macmillan, 6s.) Melbourne, 1921.

Industries, Resources and Trade.

- AUSTRALIA TO-DAY: Special Number of the Australian Traveller. (United Commercial Travellers Association of Australia, 2s. *per issue*.) Melbourne, 1905 to date.
- AUSTRALIA:—*Royal Commission on the wheat, flour and bread industries.* Second to fifth reports. (Government Printer, 28s. 4d.) Canberra, 1935–6.
- WADHAM, S. M. *and* WOOD, G. L. Land utilization in Australia. (Melbourne University Press, 21s.) Melbourne, 1939.
- WOOL REVIEW: [annual]. (National Council of Wool Selling Brokers of Australia.) Melbourne, 1938 to date.

RECENT PUBLICATIONS.

- DARE, H. H. Water conservation in Australia. (Simmons Ltd.) Sydney, 1939.

OFFICIAL PUBLICATIONS.

- AUSTRALIA:—*Commonwealth Geological Advisor.* Report . . . on the technical aspects of the iron ore reserves in Australia, dated 14th April, 1938. (Government Printer, 3d.) Canberra, 1940. (P.P. 18 of 1940.)
- AUSTRALIA:—*Tariff Board.* Tariff revision . . . report on cotton-growing industry—question of assistance by bounty or duty, 3rd April, 1939. (Government Printer, 1s.) Canberra, 1939. (P.P. 214 of 1937–38–39.)
- CONFERENCE CONVENED BY THE COMMONWEALTH GOVERNMENT ON PETROL SUPPLIES . . . Canberra, 22nd and 23rd April, 1940. Report of proceedings. (Government Printer.) Canberra, 1940.
- QUEENSLAND:—*Royal commission on public works.* Report of the Royal Commission appointed to investigate and report upon the construction of an inland railway connexion between central and southern railway systems. (Government Printer, 4s.) Brisbane, 1930. (P.P. A.9 of 1939.)
- QUEENSLAND:—*Wool advisory commission.* Report of the wool advisory commission appointed to inquire into the economic condition of the wool industry in Queensland. (Government Printer, 5s.) Brisbane, 1939. (P.P. A.23 of 1939.)
- SOUTH AUSTRALIA:—*Parliament: Standing committee on public works.* Report on the northern areas—Whyalla water scheme. (Government Printer.) Adelaide, 1940. (P.P. 55 of 1940)

Natural History.

- AUDAS, J. W. *The Trees of Australia.* (Whitcombe & Tombs, 21s.) Melbourne, 1934.
 CAYLEY, N. W. *What Bird is That? A Guide to the Birds of Australia.* (Angus & Robertson, 12s. 6d.) Sydney, 1931.
 DAVID, Sir T. W. E. *Explanatory Notes to accompany a New Geological Map of the Commonwealth of Australia.* (Angus & Robertson, 20s.) Sydney, 1932.
 EWART, A. J. *Flora of Victoria.* (Melbourne University Press, 30s.) Melbourne, 1930.
 HARRIS, T. Y. *Wild flowers of Australia.* (Angus & Robertson, 7s. 6d.) Sydney, 1938.
 TILLYARD, R. J. *Insects of Australia and New Zealand.* (Angus & Robertson, 21s.) Sydney, 1926.

RECENT PUBLICATIONS.

- BARRETT, C. L. *Koonwarra: a naturalist's adventures in Australia.* (Oxford University Press, 8s. 6d.) London, 1939.
 HILLS, E. S. *The physiography of Victoria: an introduction to geomorphology.* (Whitcombe & Tombs, 8s. 6d.) Melbourne, 1940.
 WHITLEY, G. P. *The fishes of Australia, pt. 1: the sharks, rays, devil-fish and other primitive fishes of Australia and New Zealand.* (Royal Zoological Society of N.S.W., 7s. 6d.) Sydney, 1940.

Aborigines.

- BASEDOW, H. *The Australian Aboriginal.* (F. W. Preece & Son, 21s.) Adelaide, 1925.
 BATES, Daisy, *Mrs.* *The passing of the aborigines.* (John Murray, 7s. 6d.) London, 1938.
 ELKIN, Rev. A. P. *The Australian aborigines.* (Angus & Robertson, 8s. 6d.) Sydney, 1938.
 MCCARTHY, F. D. *Australian aboriginal decorative art.* (Australian Museum, 2s. 6d.) Sydney, 1933.
 NEEDHAM, Rev. J. S. *White and Black in Australia.* (S.P.C.K., 3s. 6d. and 2s. 6d.) London, 1935.
 OCEANIA: a journal devoted to the study of the native peoples of Australia, New Guinea and the islands of the Pacific Ocean. [Quarterly.] (Australian National Research Council, 20s. *per annum*.) Sydney, 1930 to date.
 SPENCER, Sir W. B. *Wanderings in Wild Australia.* 2 vols. (Macmillan, 42s.) London, 1928.
 SPENCER, Sir W. B., and GILLEN, F. J. *The Arunta.* 2 vols. (Macmillan, 36s.) London, 1927.
 WARNER, W. L. *A black civilization: a social study of an Australian tribe.* (Harper, 8s.) New York, 1937.

See also the Annual Reports of the Administrator of the Northern Territory and of the Aboriginal Departments in Queensland, South Australia and Western Australia.

RECENT PUBLICATIONS.

- KABERRY, P. M. *Aboriginal women.* (Routledge, 18s.) London, 1939.

Education.

- BROWNE, G. S. *Education in Australia: A comparative Study of the Educational Systems of the Six Australian States.* (Macmillan, 21s.) London, 1927.
 COLB, P. R., *editor.* *The Education of the Adolescent in Australia.* (Melbourne University Press, 10s.) Melbourne, 1935.
The Primary School Curriculum in Australia. (Melbourne University Press, 10s.) Melbourne, 1932.
The Rural School in Australia. (Melbourne University Press, 10s.) Melbourne, 1937.
 MUNN, R., and PITT, E. R. *Australian Libraries: A Survey of Conditions and Suggestions for their Improvement.* (Australian Council for Educational Research, 3s.) Melbourne, 1935.
 REVIEW OF EDUCATION IN AUSTRALIA [annual]: by K. S. (Cunningham and others). (Melbourne University Press, 8s. 6d. *per annum*.) Melbourne, 1939 to date.
 For records of specialized research, see the various publications of the Australian Council for Educational Research, Melbourne.

RECENT PUBLICATIONS.

- AUSTRALIAN educational studies (second series): by J. D. G. Medley *and others.* (Melbourne University Press, 8s. 6d.) Melbourne, 1940.
 AUSTRALIAN INSTITUTE OF LIBRARIANS. *Proceedings: second annual meeting and conference.* (The Institute.) Adelaide, 1940.
 SPENCER, F. H. *A report on technical education in Australia and New Zealand.* (Carnegie Corporation.) New York, 1939.

Literature.***CRITICAL AND ANTHOLOGIES.**

- ANNUAL CATALOGUE OF AUSTRALIAN PUBLICATIONS. (Commonwealth National Library, 2s. *per issue*.) Canberra, 1936 to date.
 COWLING, G. H., and MAURICE, F. (i.e., F. L. T. WILMOT), *compilers.* *Australian essays.* (Melbourne University Press, 4s. 6d.) Melbourne, 1935.
 ELDERSHAW, M. Barnard. *Essays in Australian fiction.* (Melbourne University Press, 6s.) Melbourne, 1938.
 GREEN, H. M. *Outline of Australian Literature.* (Whitcombe & Tombs, 5s.) Sydney, 1930.
 MACKANESS, G., *compiler.* *Australian Short Stories.* (Dent, 3s.) 2nd edition. London, 1932.
 MACKANESS, J. S., and MACKANESS, G., *compilers.* *The Wide Brown Land: A New Anthology of Australian Verse.* (Angus & Robertson, 4s. 6d. and 4s.) Sydney, 1934.
 SERLE, P., *compiler.* *Bibliography of Australasian Poetry and Verse.* (Melbourne University Press, 35s.) Melbourne, 1925.
 SERLE, P., WILMOT, F. L. T., and CROLL, R. H. *An Australasian anthology.* (Collins, 3s. 6d.) London, 1929.

* The works of individual authors have not been included in the first section of this list. References to them will be found in Green and Serle.

Poetry.**RECENT PUBLICATIONS.**

- BAYLEBRIDGE, W. *This vital flesh.* (Tallabilla Press, 42s.) Sydney, 1939.
 FINNIN, M. *Look down, Olympians.* (W.A. Hamer, 5s.) Melbourne, 1939.
 GRANO, P. L. *Quest.* (Hawthorn Press, 4s. 6d.) Melbourne, 1940.
 HUDSON, F. *In the wind's teeth.* (F. W. Preece, 2s. 6d.) Adelaide, 1940.
 INGAMILLS, R. C. *Memory of hills.* (F. W. Preece, 1s. 6d.) Adelaide, 1940.
 JURY, C. R. *Galahad, Selenemia and poems.* (F. W. Preece, 10s. 6d.) Adelaide, 1939.
 MATTHEWS, H. *Vintage of war: poems of Anzac, 1914-18.* (Viking Press, 2s.) Sydney, 1940.
 SORENSEN, J. *The lost shanty.* (R. S. Sampson, 5s.) [Perth, 1939].

Drama.**RECENT PUBLICATIONS.**

- MCCAUGHREN, R. *Running water, a play: and A hitch in time, a comedy sketch.* (Viking Press, 5s.) Sydney, 1940.
 MATTHEWS, H. *We are the people.* (Viking Press, 2s.) Sydney, 1940.

Essays.**RECENT PUBLICATIONS.**

- MICKLE, A. D. *Apartment in Brussels.* (Robertson & Mullens, 6s.) Melbourne, 1940.
 MURDOCH, W. L. F. *Collected essays.* (Angus & Robertson, 12s. 6d.) Sydney, 1940.

Fiction.**RECENT PUBLICATIONS.**

- FLEMING, W. M. *Broad acres: a story of Australian early life on the land.* (New Century Press, 6s.) Sydney, 1939.
 MACARTHUR, D. W. *Convict captain: a novel.* (Collins, 7s. 6d.) London, 1939.
 MATTHEWS, H. *Wet canteen: [short stories of the 1st A.I.F.].* (Viking Press, 1s.) Sydney, 1940.

Art.*

- ART IN AUSTRALIA: A Quarterly Magazine. (J. Fairfax & Sons, 5s. per issue.) Sydney, 1916 to date.
 MOORE, W. *The Story of Australian Art: From the Earliest Known Art of the Continent to the Art of To-day.* 2 vols. (Angus & Robertson, 25s.) Sydney, 1934.

RECENT PUBLICATIONS.

- AUSTRALIAN ART ANNUAL. (Ure Smith Pty., 21s.) Sydney, 1939.
 LINDSAY, N. A. W. *Norman Lindsay watercolour book: eighteen reproductions in colour . . . with an appreciation of the medium by Norman Lindsay: and a biographical survey of the artist's life and work, by Godfrey Blunden.* (Springwood Press, 42s.) Sydney, 1939.

* Books on the work of particular artists have been excluded from the list, though many of these, e.g., those published by Art in Australia, are indispensable for the study of Australian Art.

CHAPTER XXVIII.

MISCELLANEOUS.

§ 1. Patents, Trade Marks and Designs.

1. *Patents.*—(i) *General.* The granting of patents is regulated by the Commonwealth Patents Act 1903–1935, which, in regard to principle and practice, has the same general foundation as the Imperial Statutes, modified to suit Australian conditions. The Act is administered by a Commissioner of Patents. Fees totalling £10 are sufficient to obtain letters patent for the Commonwealth of Australia and the Territories of Papua, New Guinea and Norfolk Island. A renewal fee of £5 is payable before the expiration of the seventh year of the patent on all patents granted on applications lodged prior to 2nd February, 1931. On patents granted on applications made on or after 2nd February, 1931, renewal fees are payable as follows:—£1 before the expiration of the fifth year and an amount progressively increasing by ten shillings before the expiration of each subsequent year up to the fifteenth, when the fee becomes £6. If a renewal fee is not paid when it becomes due, an extension of time up to twelve months may be granted on grounds specified in the Act, and subject to the payment of prescribed fees.

(ii) *Summary.* The number of separate inventions in respect of which applications were filed during the years 1935 to 1939 is given in the following table, which also shows the number of letters patent sealed in each year:—

PATENTS : AUSTRALIA.

Particulars.	1935.	1936.	1937.	1938.	1939.
No. of applications	5,110	5,484	5,585	5,764	5,740
No. of applications accompanied by provisional specifications	3,238	2,384	3,094	3,067	3,161
Letters patent sealed during each year	2,129	2,429	2,642	2,973	3,141

(iii) *Revenue.* The revenue of the Commonwealth Patent Office during the years 1935 to 1939 is shown hereunder:—

PATENTS : REVENUE, AUSTRALIA.

Particulars.	1935.	1936.	1937.	1938.	1939.
	£	£	£	£	£
Fees collected under Patents Act	35,980	37,515	42,614	44,400	45,581
Receipts from publications	1,532	1,569	1,870	1,870	1,828
Total	37,512	39,084	44,484	46,270	47,409

2. *Trade Marks and Designs.*—(i) *Trade Marks.* Under the Trade Marks Act 1905 the Commissioner of Patents is also Registrar of Trade Marks. This Act has been amended from time to time, the last amendment having been made in 1936. Special provisions for the registration of a “Commonwealth Trade Mark” are contained in the Act of 1905, and are applicable to all goods included in or specified by a resolution passed by both Houses of Parliament that the conditions as to remuneration of labour in connexion with the manufacture of such goods are fair and reasonable.

(ii) *Designs.* The Designs Act 1906, as amended by the Patents, Designs and Trade Marks Act 1910 and the Designs Acts 1912, 1932, 1933 and 1934, is now cited as the Designs Act 1906–1934. Under this Act a Commonwealth Designs Office has been established, and the Commissioner of Patents appointed “Registrar of Designs.”

(iii) *Summary.* The following table shows the applications for trade marks and designs received and registered during the years 1935 to 1939:—

TRADE MARKS AND DESIGNS : AUSTRALIA.

Applications.	1935.	1936.	1937.	1938.	1939.
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RECEIVED.

Trade Marks	2,071	2,215	2,189	2,212	1,992
Designs	2,319	1,494	1,190	1,498	865

REGISTERED.

Trade Marks	1,349	1,664	1,372	1,740	1,580
Designs	2,085	1,546	971	1,404	736

(iv) *Revenue.* The revenue of the Trade Marks and Designs Office during the years 1935 to 1939 is given hereunder:—

TRADE MARKS AND DESIGNS : REVENUE, AUSTRALIA.

Particulars.	1935.			1936.			1937.			1938.			1939.		
	Trade Marks.	Designs.	Publications.												
Fees collected under Commonwealth Acts ..	£ 15,580	£ 1,053	£ 13	£ 16,434	£ 1,110	£ 19	£ 16,580	£ 1,006	£ 18	£ 17,194	£ 1,295	£ 21	£ 15,951	£ 1,082	£ 19

No fees in respect of Trade Marks have been collected under State Acts since 1922.

§ 2. Copyright.

1. **Legislation.**—Copyright is regulated by the Commonwealth Copyright Act 1912-1935 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, and the total revenue obtained for the years 1935 to 1939 :—

COPYRIGHT : AUSTRALIA.

Particulars.	1935.	1936.	1937.	1938.	1939.
Applications received—					
Literary	1,408	1,463	1,442	1,560	1,438
Artistic	78	86	92	53	53
International	2	3	2	3	3
Applications registered—					
Literary	1,346	1,389	1,367	1,422	1,359
Artistic	69	78	74	31	38
International .. .. .	..	1	1	4	1
Revenue	£ 378	388	384	397	411

§ 3. Local Option and Reduction of Licences.

Local option concerning the sale of fermented and spirituous liquors is in force in South Australia and Tasmania. In Victoria, Queensland and Western Australia State-wide polls have superseded the local polls, while in New South Wales the taking of local option polls has been suspended since 1913, though a special State-wide referendum was taken in 1928 on the question of State-wide prohibition with compensation. At the poll held in Victoria on 8th October, 1938, the voting was as follows :—

For abolition of licences .. .. .	..	..	..	368,676
Against abolition of licences .. .. .	..	..	..	721,704
Informal .. .. .	..	..	..	7,648

The percentage of electors who voted was 95.38.

In all States other than South Australia a maximum number is established above which licences shall not be increased except under certain specified conditions (the principal case being the greater demand for service of a considerably increased population). Licences Reduction Boards are in operation in New South Wales and Victoria and in all other States machinery exists for the reduction of licences where it seems desirable or where there is a local option vote in favour of the reduction of licences.

In earlier issues of the Official Year Book (see No. 22, pp. 1005-8), details, by States, were published of polls taken and of the operations of the Licences Reduction Boards.

§ 4. Lord Howe Island.

Lord Howe Island is situated in latitude $31^{\circ} 30'$ south, longitude $159^{\circ} 5'$ 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. Constitutionally the Island is a dependency of New South Wales and is included in King, one of the electorates of Sydney. A Board of Control at Sydney manages the affairs of the Island and supervises the palm seed industry. The population was 161 at the Census of 30th June, 1933, and 165 at 31st December, 1939.

§ 5. Commonwealth Council for Scientific and Industrial Research.

1. **General.**—By the Science and Industry Research Act 1920-39, the previously existing Commonwealth Institute of Science and Industry was reorganized under the title of the Council for Scientific and Industrial Research. An account of the organization and work of the former Institute is given in earlier issues of the Official Year Book. (See No. 18, p. 1062.)

2. **Science and Industry Research Act 1920-39.**—This Act provides for a Council, consisting of—

- (a) Three members nominated by the Commonwealth Government;
- (b) the Chairman and Vice-Chairman of each State Committee constituted under the Act; and
- (c) such other members as the Council, with the consent of the Minister, co-opts by reason of their scientific knowledge.

The three Commonwealth nominees form an Executive Committee which may exercise, between meetings of the Council, all the powers and functions of the Council, of which the principal are as follows:—(a) To initiate and carry out scientific researches in connexion with primary or secondary industries in the Commonwealth; (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 industrial research associations in any industries; (e) to test and standardize scientific apparatus and instruments; (f) to establish a Bureau of Information; and (g) to act as a means of liaison between the Commonwealth and other countries in matters of scientific research.

State Committees, whose main function is to advise the Council as to matters that may affect their respective States, have been constituted in accordance with prescribed regulations.

3. **Science and Industry Endowment Act 1926.**—Under this Act, the Government has established a fund of £100,000, the income from which is to be 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 be made to the fund, which is controlled by a trust consisting of the three Commonwealth nominees on the Council. 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 Council.**—The full Council held its first meeting in June, 1926, and thereafter at about half-yearly intervals. It has adopted a policy of placing each of its major fields of related researches under the direction of an officer having a standing at least as high as, if not higher than, that of a University Professor.

The main branches of work of the Council at present are (i) plant problems, (ii) soil problems, (iii) entomological problems, (iv) animal health and nutrition problems, (v) forest products, (vi) food preservation and transport, (vii) fisheries, (viii) physical standards, (ix) aeronautics, (x) industrial chemistry, (xi) radio research, (xii) mineragraphic investigations and ore-dressing (gold). Successful results have been obtained in a number of directions, particularly in regard to bitter pit in apples, spotted wilt in tomatoes, water blister of pineapples, blue mould of tobacco, the cultivation and drying of vine fruits, the cultivation of citrus fruits, contagious pleuro-pneumonia of cattle, the feeding of sheep for increased wool production, black disease, infectious entero-toxæmia, pulpy kidney and caseous lymphadenitis of sheep, internal parasites, coast disease of sheep, soil surveys, paper-making from Australian timbers, timber seasoning and preservation, and the preservation and transport of bananas, oranges, chilled beef and other food-stuffs. During the early years of its existence, the work of the Council was directed almost exclusively to the solution of problems affecting primary industries. Recently, however, the Commonwealth Government has provided the necessary funds to enable the Council to extend its activities to the field of secondary industrial research. For that purpose the National Standards Laboratory has just been completed in Sydney and an Aeronautical Research Laboratory in Melbourne. A Division of Industrial Chemistry has also been formed; its central laboratory will be erected in Melbourne. An information Section has been established at the Council's Head Offices, Melbourne; it specializes in bibliographical searches of the literature and the provision of photostat copies of articles and translations. More detailed information concerning the work of the Council appears in Official Year Book, No. 22, p. 1009.

§ 6. Australian Institute of Anatomy.

1. **Foundation of Institute.**—The Australian Institute of Anatomy, situated in Canberra, occupies a monumental building erected 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. Comparative anatomy is the basis of medical science, and while the importance of a study of Australian animals in the solution of various medical problems had for years been recognized by other countries and steps taken by them to procure specimens for their museums, national effort in this direction was neglected in Australia. The late Sir Colin MacKenzie, the first Director of the Institute of Anatomy, however, very kindly presented to the Commonwealth Government his entire private collection, and this magnificent gift was acquired and provision was made for its proper housing under special legislation by the Commonwealth Government. In 1931 the Institute became an integral part of the Commonwealth Department of Health.

2. **Additions to Original Collection.**—In addition to the original collection, which has been greatly augmented, the following free gifts have been made to the Australian Nation, and are on view in the Institute:—

- (1) *Horne-Bowie Collection.*—Dealing with the life of Central Australian aborigines, and throwing valuable light on the psychology of this Stone Age people.
- (2) *Burrell Collection.*—This deals with the life history of the platypus, and is unique in the world. The platypus is the most primitive mammal known to science, and is the link between the bird, the reptile and the mammal.
- (3) *Milne Collection.*—This is an anthropological and ethnological collection dealing with the aborigines of New South Wales, and contains many valuable and now unobtainable native weapons and implements.

- (4) *Murray Black Collection* of anatomical material representative of the aborigines of Southern Victoria and the River Murray.
- (5) *Nankivell Collection*, illustrating the anatomy of the aborigines of the Murray Valley.
- (6) *Harvard University Collection*.—This includes a collection of specimens from the Harvard University, U.S.A., representing a carefully worked out epitome of archaeology of the United States of America, and, together with two rare skeletons of primitive North American Indians, was a goodwill gift from the University to the Institute of Anatomy.
- (7) *The Sir Hubert Murray Collection*.—The ethnological and osteological collection of the late Sir Hubert Murray, formerly Lieutenant-Governor of Papua. This deals especially with the anthropology of Papua.
- (8) *The Rabaul Ethnological Collection*.—This concerns chiefly the ethnology of the Mandated Territory of New Guinea.
- (9) *The Basedow Collection*.—This collection has been recently purchased by the Commonwealth Government. It deals especially with the anthropology of Central and Northern Australia and was assembled, after many years of research, by the late Dr. Herbert Basedow of Adelaide, who was formerly Protector of Aborigines.
- (10) Many hundreds of specimens and books received from numerous interested scientists, the most outstanding being those from Mr. E. Hill, of Nagambie, Victoria; Mrs. Harry Burrell, New South Wales; and medical books for the Library from the estates of the late Drs. Molloy, David Grant and Robert Stirling.

3. **Endowments for Orations and Lectures.**—In addition to the aforementioned donations of material, there have been several endowments for Orations and Lectures as follows:—

- (1) *The Halford Oration*.—Endowed with a gift of £1,000 by the family of the late Professor G. B. Halford, founder of the first medical school in the Southern Hemisphere. The interest on this amount is given to a prominent scientist to deliver an oration on a subject suggested by the life and work of the late G. B. Halford.
- (2) *The Anne MacKenzie Oration*.—Founded with a gift of £1,000 by the late Sir Colin MacKenzie, in memory of his mother. The orator receives the annual interest for delivering an oration on any phase of "Preventive Medicine".
- (3) *The Dr. G. E. Morrison Memorial Lecture on Ethnology*.—Founded by Chinese residents in Australia, in memory of a great Australian who rendered important services to China.
- (4) *The Kendall Lecture in Veterinary Science*.—Endowed by the sons of the late Dr. W. T. Kendall, who was the founder of the first Veterinary School in the Southern Hemisphere.
- (5) *The Charles Mackay Lecture on Medical History*.—Endowed by Miss C. MacKenzie with a gift of £607 as a memorial to her grandfather, an educationalist, who arrived in Melbourne in 1852 and died at Kilmore, Victoria.
- (6) *The Cilento Medal*.—This bronze medal has been endowed in perpetuity by Sir Raphael Cilento, Director-General of Health for Queensland, to be awarded annually to the scientist deemed to have accomplished the best practical work for the furtherance of Tropical Hygiene and Native Welfare in Australia.

4. **The Scope of the Institute.**—The building occupies portion of the site which has been reserved for the National University of Australia.

The Institute consists of two separate and distinct entities. Portion of the original collection of anatomical specimens assembled by the late Sir Colin MacKenzie is arranged in two large museums which are open to the general public. The material in these museums has been arranged so as to present simple lessons in human hygiene as well as to display the anatomical features and especially the peculiarities of Australian fauna.

The remainder of the building is devoted to research work where scientific investigations have been carried out in many branches of science. The large collections of bony anatomical material donated by Murray Black have provided most interesting and valuable data on aboriginal diseases. These have been studied in some detail.

In order to provide a reservoir of koalas upon which observations might be made of their peculiar food habits, a small reservation has been acquired, and fenced, about 40 miles from Canberra. In this area abounds the peculiar gum tree on which the Victorian koala feeds. This reservation has already been stocked with koalas from Victoria. Later other animals will be added.

In 1938, following upon the retirement due to ill-health of Sir Colin MacKenzie, the activities of the Institute were extended to interpret more fully the ideas of the founder. In the later years of his life Sir Colin had been keenly interested in the relationship of nutrition to the development of the child. When a section for the study of child growth and development was established by the Commonwealth Department of Health in 1938 the head-quarters were transferred to the Institute.

During the last twelve months the section devoted to the study of nutrition has been considerably enlarged and many important problems relating to nutrition of the Australian people have been studied.

§ 7. The Commonwealth Solar Observatory.

1. **Reasons for Foundation.**—The Commonwealth Solar Observatory was established for the study of solar phenomena, for allied stellar and spectroscopic research, and for the investigation of associated terrestrial phenomena. It is so situated to complete the chain of existing astrophysical observatories round the globe separated by 90 degrees of longitude. In addition to advancing the knowledge of the universe and the mode of its development, it is hoped that the eventual discovery of the true relation between solar and terrestrial phenomena may lead to results which will prove of direct value to the country.

2. **History of Inauguration.**—A short account of the steps leading up to the establishment of the Observatory appears in Official Year Book No. 19, p. 979.

3. **Site of the Observatory.**—The site selected for the observatory is on Mount Stromlo, a ridge of hills about 7 miles west of Canberra. The highest point is 2,560 feet above sea level, or about 700 feet above the general level of the Australian Capital City.

4. **Equipment.**—The bulk of the telescopic equipment is due to the generosity of supporters of the movement in England and Australia. The gifts include a 6-in. Grubb refracting telescope presented by the late W. E. Wilson, F.R.S., and Sir Howard Grubb, F.R.S., trustees of the late Lord Farnham; a 9-in. Grubb refractor with a 6-in. Dallmeyer lens presented by the late Mr. James Oddie, of Ballarat; while Mr. J. H. Reynolds of Birmingham presented a large reflecting telescope with a mirror 30 inches in diameter. A sun telescope including an 18-in. celostat has been installed, and further additions include a spectrohelioscope, cosmic ray apparatus, radio research equipment and spectroscopes for the examination of spectra in the infra-red, violet and ultra-violet regions. Donations amounting to over £2,500 have been received, and form the nucleus of a Foundation and Endowment Fund.

5. **Observational Work.**—The observational work embraces the following:—(a) solar research; (b) stellar research; (c) spectroscopic researches; (d) atmospheric electricity; (e) cosmic radiation; (f) radio research; (g) ozone content of the atmosphere; (h) luminosity of the night sky; and (i) meteorological observations. A more detailed account of the observational work cannot, owing to limits of space, be published in this issue, but may be found in earlier issues (see No. 22, p. 1011).

§ 8. Standards Association of Australia.

The Standards Association of Australia is the national standardizing organization of the Commonwealth 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.

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 more than 4,500 individuals who are experts in their particular fields and are organized into more than 500 committees. Among these are technical committees on: Agricultural Machinery; Building Materials; Cement; Coal and Coke; Electrical; Galvanized Products; Locomotive and Railway Rolling Stock; Machine Parts; Non-ferrous Metals; Paint and Varnish; Pipes and Plumbing; Railway Permanent Way Materials; Roadmaking Machinery; Structural Steel; Sugar-mill Machinery; and Timber.

The Codes Group includes committees on: Boilers and Unfired Pressure Vessels; Concrete Structures; Cranes and Hoists; Electrical Wiring Rules; Explosives; Fire Protection; Lift Installations; Refrigeration; Road Signs and Traffic Signals; Steel Structures; Street Lighting; Welding; and Work in Compressed Air. Many committees, such as the Conditions of Contract Committee and the Institutional Supplies Committee, come under the Commercial Standards Division.

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. Research is undertaken for committees, members of the Association, and industry in general. Many hundreds of enquiries were answered during the last 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 also administers the Australian National Committees of the International Electrotechnical Commission, the World Power Conference 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 head-quarters and branch offices in the various States.

The head-quarters of the Association are at Science House, Gloucester-street, Sydney, and branches of the Association are situated at Temple Court, 422 Collins-street, Melbourne; Empire Chambers, cr. Queen and Wharf-streets, Brisbane; Alliance Building, Grenfell-street, Adelaide; Gladden Building, Hay-street, Perth; Premier's Department, Murray-street, Hobart; Department of the Interior, Canberra; and Howard Smith Chambers, Watt-street, Newcastle.

§ 9. Valuation of Australian Production.

1. **Value of Production.**—(i) *Net Values.* The annual value of production was defined by the Conference of Statisticians in 1924 as the sum available each year for distribution among those concerned in industry, i.e., workers, proprietors (including landlords) and providers of capital. In the past the want of complete uniformity in the methods of compilation and presentation of statistics of recorded production rendered it very difficult to make a satisfactory valuation of the various elements of production in accordance with the definition above. At the conference of 1924 and those subsequently held the method of determining the gross value, marketing costs and production costs was laid down into a definite procedure. This arrangement enabled the State Statisticians to compile the various elements of costs on a uniform basis which permitted the aggregation of the figures for each State to obtain a total for Australia.

The figures shown in the following table have been compiled by the Statisticians of the several States and, to a large extent, are based upon actual records. Where these have not been possible careful estimates have been made from the best available data. Complete uniformity has not yet been attained, but the few remaining differences of procedure are of little importance.

Attention is directed to the fact that the value shown in the table refers only to recorded production and excludes the building and construction industry, those industrial establishments not classified as factories, and agricultural and farmyard produce obtained from areas of less than one acre.

The following is a brief explanation of the terms used in the table:—

- (a) "Gross value" is the value placed on gross production at the wholesale price realized in 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" is the gross production valued at the place of production and 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" represents the net return to the producer after deducting from the gross value costs of marketing and 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 deduction has been made for depreciation and maintenance costs. This matter is more fully dealt with in *Production Bulletin* No. 33, Part II., issued by this Bureau.

It should be noted that maintenance costs of farm buildings and fences have not been deducted from the value of production of rural industries, as particulars are not available for all States. Since 1937-38, the costs for the pastoral industry in Queensland have been compiled from actual records; previously, the figures were largely estimated. The value shown for Mines and Quarries in Tasmania is understated owing to the omission of Quarries. This understatement, however, is more or less offset by the inclusion of

production costs in Mining. As explained in the note (a) below production costs are not available for all States in respect of Fisheries, and Local Values have been used for this industry with consequent overstatement.

GROSS, LOCAL AND NET VALUE OF RECORDED PRODUCTION: AUSTRALIA, 1938-39.

Industry.	Gross Production valued at Principal Markets.	Local Value—Gross Production valued at place of Production.	Net Value of Production (without deduction of depreciation or maintenance).
	£	£	£
Agriculture	76,730,388	63,435,356	41,678,580
Pastoral	75,939,028	68,087,493	63,821,111
Dairying	43,543,944	41,048,997	33,781,756
Poultry	11,974,265	10,869,748	7,302,490
Bee-farming	139,460	122,666	122,666
Total Rural (c)	208,327,085	183,564,260	146,706,603
Trapping	1,657,662	1,421,965	1,421,965
Forestry	8,755,399	7,797,372	7,780,032
Fisheries	1,972,075	1,654,504	(a) 1,654,504
Mines and Quarries	33,956,631	33,507,946	27,375,098
Total Non-rural	46,341,767	44,380,947	38,231,659
Total All Primary	254,668,852	227,945,207	184,938,262
Factories	(b) 203,416,244	(b) 203,416,244	203,416,244
Total All Industries	458,085,096	431,361,451	388,354,506

(a) Local value. Production costs not available for all States. (b) Net value. (c) The term "Rural" is used to cover those industries ordinarily considered to be farm industries.

The net value of production in each State is shown hereunder:—

NET (a) VALUE OF RECORDED PRODUCTION IN STATES, 1938-39.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
Agriculture	11,804	5,620	11,615	5,489	4,066	3,085	41,679
Pastoral	23,613	15,156	14,881	5,055	3,666	1,450	63,821
Dairying	10,446	9,959	9,878	1,943	893	663	33,782
Poultry	2,658	3,113	376	436	294	425	7,302
Bee-farming	43	23	15	28	11	3	123
Total Rural (net)	48,564	33,871	36,765	12,951	8,930	5,626	146,707
Trapping	604	544	50	98	52	74	1,422
Forestry	2,261	1,068	2,362	543	1,147	399	7,780
Fisheries (local)	620	177	277	221	270	90	1,655
Mines and Quarries	9,948	1,742	2,492	2,954	8,285	1,954	27,375
Total Non-rural (local and net)	13,433	3,531	5,181	3,816	9,754	2,517	38,232
Total All Primary	61,997	37,402	41,946	16,767	18,684	8,143	184,939
Factories	90,266	65,996	19,301	13,679	8,776	5,398	203,416
Total All Industries	152,263	103,398	61,247	30,446	27,460	13,541	388,355

(a) See letterpress at head of previous table.

NET (a) VALUE OF RECORDED PRODUCTION PER HEAD OF MEAN POPULATION,
1938-39.

Industry.	New South Wales.	Victoria.	Queensland.	South Australia.	Western Australia.	Tasmania.	Total.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Agriculture ..	4 6 4	2 19 11	11 10 9	9 4 8	8 15 9	13 0 5	6 0 4
Pastoral ..	8 12 9	8 1 8	14 15 7	8 10 1	7 18 5	6 2 4	9 4 3
Dairying ..	3 16 5	5 6 3	9 16 3	3 5 5	1 18 8	2 16 0	4 17 6
Poultry ..	0 19 5	1 13 2	0 7 6	0 14 8	0 12 9	1 15 11	1 1 1
Bee-farming ..	0 0 4	0 0 3	0 0 3	0 0 11	0 0 5	0 0 3	0 0 4
Total Rural (net)	17 15 3	18 1 3	36 10 4	21 15 9	19 6 0	23 14 11	21 3 6
Trapping ..	0 4 5	0 5 10	0 1 0	0 3 4	0 2 3	0 6 2	0 4 1
Forestry ..	0 16 7	0 11 5	2 6 11	0 18 3	2 9 7	1 13 9	1 2 6
Fisheries (local) ..	0 4 6	0 1 11	0 5 6	0 7 5	0 11 8	0 7 8	0 4 9
Mining (net) ..	3 12 9	0 18 7	2 9 6	4 19 5	17 18 2	8 4 11	3 19 0
Total Non-rural (local and net)	4 18 3	1 17 9	5 2 11	6 8 5	21 1 8	10 12 6	5 10 4
Total All Primary (local and net) ..	22 13 6	19 19 0	41 13 3	28 4 2	40 7 8	34 7 5	26 13 10
Factories ..	33 0 4	35 4 0	19 3 5	23 0 3	18 19 4	22 15 9	29 7 3
Total All Industries ..	55 13 10	55 3 0	60 16 8	51 4 5	59 7 0	57 3 2	56 1 1

(a) See letterpress above.

(ii) *Gross Values.* The estimated gross value of production shown in the following table is a continuation of the method previously used by this Bureau. It cannot be compared with the gross values shown in the table above on account of the difference in the methods used and the change in the computing authority. As the net values have now been computed for a series of years it is proposed to discontinue the publication of this table in future.

ESTIMATED GROSS VALUE OF PRODUCTION: AUSTRALIA.

Year.	Agriculture.	Pastoral.	Dairy, Poultry, and Bee-farming.	Forestry.	Fisheries.	Mining.	Manufacturing.(a)	Total.
	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.	£'000.
1928-29 ..	89,440	116,733	50,717	9,449	2,168	19,539	159,759	447,805
1929-30 ..	77,109	84,563	49,398	9,103	2,268	17,912	149,184	389,537
1930-31 ..	70,500	69,499	43,067	6,488	1,825	15,361	112,966	319,706
1931-32 ..	74,489	61,540	41,478	6,033	1,670	13,352	106,456	305,018
1932-33 ..	75,562	64,851	39,622	6,791	1,679	15,583	114,136	318,224
1933-34 ..	70,731	95,613	40,306	7,985	1,620	17,608	123,355	357,218
1934-35 ..	68,587	74,556	44,763	9,221	1,635	19,949	137,638	356,349
1935-36 ..	75,388	91,286	47,533	9,737	1,687	23,248	155,891	404,770
1936-37 ..	91,493	105,499	49,886	9,760	2,005	27,381	170,811	456,745
1937-38 ..	93,229	100,794	57,641	12,801	1,954	32,434	188,061	486,914
1938-39 ..	76,851	84,895	60,404	12,724	1,910	32,463	195,745	464,993

(a) Net Values. These amounts differ from those given in the previous two tables and in Chapter XVIII. "Manufacturing Industry", which include certain products included under Dairy Farming and Forestry in this table.

2. *Productive Activity*.—In earlier issues an attempt was made to measure the quantity of material production by means of production price index-numbers. It was found, however, that these were not satisfactory in their application to factory production. In the absence of a satisfactory measure of the total *quantity* of recorded production, the retail price index-numbers have been applied to the value of production, in the same manner as they have been applied to nominal wages, to measure their relative purchasing power. The results may be taken to indicate the purchasing power in retail prices of the things produced, and for convenience will hereafter be called *real* production. On account of the discontinuance of the "A" series index-number, it is not possible to continue the measurement on the basis of this series.

Two tables are given:—The first shows *real* production per head of population, but any deductions therefrom must take into account the following considerations. The production considered is material production only, and takes no account of services. As civilization advances, material production becomes less important relatively to services, and a smaller proportion of the population is engaged in such production. For example, the use of the motor car, the cinema and wireless is comparatively recent, and these employ a much larger number of people in services than in material production. Hence, material production per head of population will not measure accurately the progress of productive efficiency, but will tend to give too low a value. Unemployment, of course, will also depress it.

A better measure is afforded by *real* production per person engaged in material production. The second table attempts to give this. The result affords a better measure of productive efficiency, but does not take into account the effect of unemployment, though the index may be somewhat depressed by short time and rationing.

The two tables tell different stories. Before unemployment became severe in 1930 *real* production per head (as shown in the last column of the first table) had remained substantially steady with minor fluctuations since 1906. Whatever gain had been made in productive efficiency had been largely counterbalanced by the gradual change-over from production of goods to production of services. Coincident with the heavy increase in unemployment between the years 1930 and 1933, the maximum being reached in 1932, the index-number fell sharply from its normal level of about 100 to 78 in 1930-31. This would imply a fall in average *real* income of nearly one-fourth from the normal level, taking unemployment into account. Apart from a slight recession in 1934-35 due to a drop in wool values the index-number rose continuously from 1931-32 onwards; the pre-depression level was reached in 1935-36 and the peak of 1924-25 was exceeded in 1937-38. In 1938-39, however, a decrease in the value of material production due principally to the fall in both quantities and prices of wool and wheat was accompanied by an increase in the retail price index and *real* production per head of population fell 8 per cent. below the peak attained in 1937-38.

The index-number of *real* production per person engaged as given in the last column of the second table shows, on the other hand, an appreciable upward tendency. It rose steeply during the War of 1914-19, as might have been expected, fell somewhat after the war and recovered again. In 1929-30, the fall was substantial, due partly to the lag in the fall of retail prices, but it rose during the next four years to 126 only to fall again in 1934-35 to 117 with the drop in wool prices during that year. Most of this loss was recovered in 1935-36 while in 1936-37 it advanced to a record level at which it was maintained during the following year. For reasons already stated a decline of 7.4 per cent. was recorded for 1938-39. Although not so high as the previous year this figure for *real* production per person engaged implies a high *real* wage for those *in employment* and is consistent with available information concerning rates of *effective* or *real* wages, which more than maintained in recent years the high level reached in the years 1927 to 1929.

The data for the second table are not complete. The numbers engaged in timber-getting are not accurately known, so that the value of production on this account, and the corresponding persons engaged, are both left out of account. Further, the information concerning women engaged in primary production is unsatisfactory, and only males are counted in primary industries. In manufacturing, the numbers are converted into equivalent male workers on the basis of relative wages for male and female workers. The column headed "numbers engaged" is, therefore, rather an index than the absolute number of individuals occupied in material production, but, as an index, it should be accurate enough to give a satisfactory measure of production per person engaged.

PRODUCTION PER HEAD OF POPULATION: AUSTRALIA.

Year.	Gross Value of Material Production.			Retail Price Index-numbers. 1911 = 1,000.		Real Production per head of population (1911 = 100) measured in purchasing power over regimen of—	
	Total.	Per head of population.		"A" Series.	"C" Series.	"A" Series.	"C" Series.
		Actual.	Index-number. 1911 = 100.				
	£'000.	£					
1906 ..	147,043	35.9	87	902	..	97	..
1911 ..	188,359	41.2	100	1,000	(1,000)	100	100
1913 ..	220,884	45.1	110	1,104	..	99	..
1914 ..	213,552	43.0	104	1,140	1,140	92	92
1916 ..	261,996	53.3	129	1,324	1,319	98	98
1917 ..	279,418	56.1	136	1,318	1,406	103	97
1918 ..	291,875	57.5	140	1,362	1,501	102	93
1919-20 ..	343,997	64.9	158	1,624	1,695	97	93
1920-21 ..	390,644	72.2	175	1,821	1,935	96	91
1921-22 ..	344,426	62.5	152	1,600	1,680	95	90
1922-23 ..	379,445	67.4	163	1,642	1,619	100	101
1923-24 ..	400,276	69.6	169	1,714	1,664	99	102
1924-25 ..	454,580	77.3	188	1,690	1,637	111	115
1925-26 ..	431,670	72.0	175	1,766	1,673	99	104
1926-27 ..	447,354	73.1	178	1,763	1,663	101	107
1927-28 ..	452,901	72.5	176	1,776	1,676	99	105
1928-29 ..	447,805	70.5	171	1,785	1,693	96	101
1929-30 ..	389,537	60.6	147	1,783	1,688	83	87
1930-31 ..	319,706	49.2	120	1,574	1,528	76	78
1931-32 ..	305,018	46.5	113	1,432	1,406	79	80
1932-33 ..	318,224	48.2	117	1,358	1,344	86	87
1933-34 ..	357,218	53.7	130	1,365	1,344	96	97
1934-35 ..	356,349	53.2	129	1,399	1,366	92	95
1935-36 ..	404,770	60.0	146	1,437	1,392	101	105
1936-37 ..	456,745	67.1	163	1,489	1,431	110	114
1937-38 ..	486,914	70.9	172	1,530	1,467	113	117
1938-39 ..	464,993	67.1	163	(a)	1,512	(a)	108

(a) Not available.

PRODUCTION PER PERSON ENGAGED : AUSTRALIA.

Year.	Number engaged in Material Production.(a)	Value of Material Production per person engaged in production.(a)		"Real" Production per person engaged (1911 = 100) measured in retail purchasing power over regimen of—	
		Actual.	Index-number. 1911 = 100.	"A" Series.	"C" Series.
	('000)	£			
1906	659	223	87	96	..
1911	728	257	100	100	100
1913	756	290	113	102	..
1914	733	289	113	99	99
1916	685	381	148	112	112
1917	683	408	159	120	113
1918	685	424	165	121	110
1919-20 ..	743	460	179	110	106
1920-21 ..	760	510	199	109	103
1921-22 ..	775	441	172	107	102
1922-23 ..	793	475	185	113	114
1923-24 ..	810	491	191	111	115
1924-25 ..	826	547	213	126	130
1925-26 ..	831	515	201	114	120
1926-27 ..	841	527	205	116	123
1927-28 ..	838	536	209	118	125
1928-29 ..	830	536	209	117	123
1929-30 ..	803	482	187	105	110
1930-31 ..	728	431	168	108	112
1931-32 ..	741	411	160	112	114
1932-33 ..	781	407	158	117	118
1933-34 ..	815	437	170	125	126
1934-35 ..	862	412	160	115	117
1935-36 ..	901	448	174	121	125
1936-37 ..	930	491	191	128	134
1937-38 ..	961	504	196	128	134
1938-39 ..	962	481	187	(b)	124

(a) See explanatory remarks above tables.

(b) Not available.

§ 10. Indexes of Production.

In the tables below, indexes of price and quantity production are given for the following industrial groups, namely :—Agriculture, Pastoral, Farmyard and Dairying, Gold and Other Minerals, and for all groups combined. The method used in calculating these indexes is the fixed base weighted aggregative method. Prices for any year are obtained by dividing value of production by quantity produced in that year, and the

price indexes are computed by using as fixed quantity-multipliers, for the commodities involved, the average quantities produced over the period 1923-24 to 1927-28. For the quantity indexes the multipliers are weighted average prices over the same period, which are obtained by dividing the total value of any commodity for the period by the total quantity produced. Exactly the same method is used for the combined group indexes (i.e., for All Farming and Total) as for the indexes for individual groups.

PRIMARY PRODUCTION : INDEX-NUMBERS OF PRICES, AVERAGE 1923-24 TO 1927-28 AS BASE (=1,000).

Year.	Agricul- tural.	Pastoral.	Farmyard and Dairying.	All Farming.	Minerals.		Total Primary.
					Gold.	Other, excluding Gold.	
1911 ..	695	455	597	560	973	482	558
1912 ..	652	537	664	597	973	525	595
1913 ..	641	524	633	581	973	523	580
1914 ..	1,083	591	680	774	973	514	754
1915 ..	753	784	836	782	973	578	767
1916 ..	728	879	881	827	973	674	816
1917 ..	848	960	860	906	973	846	901
1918 ..	1,008	963	950	976	973	832	964
1919-20 ..	1,489	1,010	1,144	1,196	1,170	861	1,167
1920-21 ..	1,285	949	1,452	1,145	1,289	919	1,127
1921-22 ..	981	666	1,008	829	1,215	912	840
1922-23 ..	1,025	880	1,070	960	1,075	905	957
1923-24 ..	902	1,117	1,023	1,028	1,014	931	1,020
1924-25 ..	1,050	1,101	901	1,052	1,066	1,020	1,049
1925-26 ..	1,095	902	1,026	988	973	1,041	992
1926-27 ..	976	866	1,024	929	973	1,044	939
1927-28 ..	977	1,015	1,025	1,004	973	964	1,000
1928-29 ..	884	893	1,043	914	973	933	916
1929-30 ..	829	724	990	803	973	902	813
1930-31 ..	574	571	792	608	973	852	632
1931-32 ..	634	491	712	575	1,372	692	593
1932-33 ..	600	480	636	546	1,672	640	566
1933-34 ..	597	715	625	660	1,768	638	670
1934-35 ..	662	532	674	599	1,948	643	617
1935-36 ..	710	685	742	702	2,006	686	715
1936-37 ..	840	765	794	795	1,984	742	803
1937-38 ..	751	705	865	747	1,990	820	766
1938-39 ..	681	608	905	681	2,019	705	697

PRIMARY PRODUCTION : INDEX-NUMBERS OF QUANTITY PRODUCTION,
AVERAGE 1923-24 TO 1927-28 AS BASE (=1,000).

Year.	Agricul- tural.	Pastoral.	Farmyard and Dairying.	All Farming.	Minerals.		Total Primary.
					Gold.	Other, excluding Gold.	
1911 ..	611	938	742	794	4,172	1,176	862
1912 ..	775	859	721	808	3,906	1,265	879
1913 ..	807	970	743	878	3,707	1,332	946
1914 ..	359	948	720	709	3,451	1,172	777
1915 ..	1,199	768	570	884	3,270	1,075	925
1916 ..	971	742	701	814	2,798	962	847
1917 ..	805	750	814	779	2,446	936	810
1918 ..	635	849	796	767	2,138	1,000	801
1919-20 ..	527	938	737	765	1,794	717	771
1920-21 ..	1,046	763	809	868	1,585	785	868
1921-22 ..	944	877	955	913	1,273	783	906
1922-23 ..	896	934	872	911	1,269	873	912
1923-24 ..	971	837	886	891	1,196	974	901
1924-25 ..	1,151	977	1,091	1,055	1,135	1,003	1,052
1925-26 ..	880	1,033	1,009	976	939	1,008	979
1926-27 ..	1,090	1,093	971	1,072	876	991	1,063
1927-28 ..	908	1,060	1,043	1,005	854	1,025	1,005
1928-29 ..	1,093	1,133	1,068	1,109	760	809	1,087
1929-30 ..	952	1,067	1,071	1,028	717	852	1,010
1930-31 ..	1,346	1,035	1,175	1,164	784	810	1,130
1931-32 ..	1,211	1,129	1,265	1,179	1,000	665	1,134
1932-33 ..	1,334	1,212	1,350	1,276	1,199	774	1,233
1933-34 ..	1,228	1,160	1,423	1,226	1,394	828	1,194
1934-35 ..	1,066	1,200	1,485	1,200	1,489	883	1,176
1935-36 ..	1,096	1,166	1,415	1,182	1,529	984	1,169
1936-37 ..	1,158	1,206	1,359	1,214	1,981	1,050	1,209
1937-38 ..	1,313	1,260	1,432	1,306	2,320	1,130	1,302
1938-39 ..	1,154	1,211	1,497	1,237	2,674	1,173	1,247

§ 11. Consumption of Commodities.

1. *Australia*.—The movement in the consumption of commodities is of special interest, indicating, as it does, the presence or absence of a number of important factors in the communal life of Australia. These factors include such items as changes in diet, variations in supply and demand, in purchasing power and in population. It is not possible to measure the influence of each of these changes, but their net effect on consumption is revealed in the figures given.

Increases in the actual quantities consumed, while indicating a greater consumptive capacity for Australia as a whole, do not indicate the trends in consumption. These are recorded in the *per capita* figures. The most pronounced changes over a series of years have taken place in motor spirit, butter, meat, biscuits, maize, potatoes, tea, beer and spirits. With the development of motor transport the consumption of motor spirit has risen from 2 to 34 gallons between 1913 and 1936. Butter has been consumed in larger quantities during each of the periods shown in the table. The consumption of meat has increased since the war years of 1914-18, largely as the result of increases in mutton, lamb and pork.

Commodities showing trends in the opposite direction were : biscuits, maize, potatoes, tea, beer and spirits. It should be remembered, however, that the figures for the latest five-yearly period were seriously affected by the economic depression and the consequent rise in unemployment.

The following tables furnish a comparison over a long series of years of the average annual total and *per capita* quantities available for consumption in Australia. The data have been compiled by adding to production the excess of imports or subtracting the excess of exports as the case may be. Allowance should be made for stocks at the commencement and at the end of each period, but this was possible only in respect of wheat and flour. In consequence, the figures given for the remaining commodities are somewhat incomplete, but any discrepancy occasioned by this omission is minimized by ranging the consumption over periods of five to ten years.

A few brief notes on some features of the more important commodities are given below :—

Cereals.—The quantities shown for cereals represent the amounts available for human consumption as such or in some other consumable form. In addition, they include those quantities consumed by live stock, of which separate details are not available. These quantities, together with the amount required for seed purposes, give the total requirements of Australia.

Root Crops.—In arriving at the total quantity available for consumption the output of holdings of less than one acre has been excluded.

Dairy Produce.—The quantities of fresh milk consumed by the people of Australia cannot be determined accurately, and the figures are no more than estimates obtained from the best available sources. The quantities of butter and cheese consumed include those produced on farms.

Meats.—The accuracy of the figures of meat consumption depends upon the reliability of the average weights applied to the dressed carcasses. These are most difficult to obtain for the whole of Australia and the figures have been compiled from the most reliable estimates available.

Drink and Tobacco.—The quantities used in these compilations were those on which excise was paid and those cleared from bond.

Sugar.—In determining the consumption of sugar, allowance has been made for the estimated sugar contents of goods exported; these include canned fruit, condensed milk, jam, etc. The quantities shown, therefore, represent those actually available for consumption in Australia.

Flour.—The quantities of flour available for consumption include the amounts consumed in bread, cakes, pastry and biscuits; the quantities used by factories in other manufacturing processes are also included.

CONSUMPTION OF COMMODITIES: ESTIMATE OF ANNUAL REQUIREMENTS, AUSTRALIA.

Commodity.	Unit of Quantity.	Ten years ended 1913.	Seven years ended 1920-21.	Five years ended—		
				1925-26.	1930-31.	1935-36.
Cereals—						
Barley	1,000 bush.	2,385	3,132	3,364	4,343	4,351
Barley, seed requirements	" "	170	336	410	499	644
Maize	" "	9,544	8,324	9,741	8,645	6,961
Maize, seed requirements	" "	84	89	90	89	86
Oats	" "	10,845	9,271	10,772	9,526	10,927
Oats, seed requirements	" "	2,472	3,311	4,217	4,471	5,536
Rice (clean)	1,000 cwt.	284	245	343	335	298
Rice (paddy), seed requirements .. .. .	" "	.. .. .	.. .. .	.. .. .	9	12
Wheat	1,000 bush.	22,883	31,903	34,258	39,767	37,222
Wheat, seed requirements	" "	7,226	10,387	11,752	16,158	14,210
Root Crops—						
Onions	Ton	29,852	32,058	30,928	42,067	38,729
Potatoes	" "	327,633	283,644	311,866	314,236	292,129
Potatoes, seed requirements	" "	47,924	45,936	48,645	49,451	48,153
Other Crops—						
<i>Dried grapes—</i>						
Raisins	" "	9,587	7,039	9,282	11,363	12,307
Currants	" "			4,096	4,195	4,308	4,137
Sugar, raw	" "	231,495	266,242	303,010	345,942	338,471
Sugar, refined	" "	221,078	254,261	289,375	330,375	323,240
Dairy Produce—						
Butter	1,000 lb.	88,816	126,484	161,750	187,372	203,188
Cheese	" "	14,464	17,855	21,320	25,192	25,375
Milk	1,000 gal.	(a)	100,162	128,754	140,645	150,212
Meats—						
Beef	1,000 lb.	545,286	558,487	769,638	742,577	746,162
Mutton	" "	352,907	353,727	359,198	389,989	443,342
Lamb	" "				68,202	92,940
Pork	" "	(a)	20,911	30,006	41,247	54,574
Bacon and ham	" "	40,161	52,483	64,652	75,449	69,885
Total Meats	" "	(a)	985,608	1,223,494	1,317,464	1,406,903
Drink and Tobacco—						
Beer	1,000 gal.	50,085	63,196	64,823	66,358	54,646
Spirits (potable)	" "	3,438	2,752	2,361	2,168	1,275
Tobacco	1,000 lb.	11,458	14,957	18,699	20,230	18,933
Other Foodstuffs—						
Biscuits	" "	(a)	87,311	76,291	69,951	53,882
Coffee	" "	2,201	2,671	3,197	3,301	3,834
Fish preserved in tins	" "	20,394	15,695	22,588	23,957	20,176
Flour, wheaten	Ton	447,017	559,442	604,239	641,968	673,800
Jam	1,000 lb.	73,203	71,451	61,264	76,687	76,405
Oatmeal	1,000 cwt.	(a)	(a)	296	301	270
Sago and tapioca	1,000 lb.	(a)	9,047	9,961	8,070	8,347
Tea	" "	31,220	40,323	44,608	47,593	45,427
Other Commodities—						
Soap	1,000 cwt.	(a)	680	781	915	868
Kerosene	1,000 gal.	18,130	20,489	25,873	50,525	41,361
Motor spirit	" "	(c) 10,071	20,929	75,357	206,196	225,688
Cement—portland	Ton	(a)	(a)	520,622	651,618	437,309

(a) Not available. ended 1913.

(b) Average for four years ended 1925-26.

(c) Average for three years

**CONSUMPTION OF COMMODITIES : ESTIMATE OF ANNUAL REQUIREMENTS
PER HEAD OF POPULATION, AUSTRALIA.**

Commodity.	Ten years ended 1913.	Seven years ended 1920-21.	Five Years ended—		
			1925-26.	1930-31.	1935-36.
	lb.	lb.	lb.	lb.	lb.
Barley	27.79	30.76	29.25	34.28	32.50
Barley, seed requirements	1.98	3.29	3.56	3.94	5.00
Maize	124.56	91.55	94.84	76.43	58.80
Maize, seed requirements..	1.09	0.98	0.88	0.79	0.56
Oats	101.49	72.83	74.92	60.16	65.60
Oats, seed requirements ..	23.04	20.01	29.33	28.23	33.20
Rice (clean)	7.42	5.44	6.68	5.93	5.02
Rice (paddy), seed require- ments .. .. .	..	..	..	0.17	0.21
Wheat	319.99	375.93	357.00	376.80	335.40
Wheat, seed requirements	101.05	122.39	122.40	153.00	128.40
Onions	14.55	14.13	12.04	14.88	13.04
Potatoes	171.05	124.78	121.46	111.13	98.35
Potatoes, seed requirements	25.05	20.25	18.95	17.49	16.21
Dried grapes—Raisins ..	4.68	3.09	3.61	4.02	4.14
Currants		1.80	1.64	1.52	1.39
Sugar, raw	120.86	117.13	118.01	122.34	113.96
Sugar, refined	115.42	111.86	112.70	116.84	108.83
Butter	20.70	24.84	28.12	29.58	30.54
Cheese	3.37	3.51	3.71	3.98	3.81
Beef	127.08	100.68	133.81	117.24	112.15
Mutton	82.25	69.47	62.45	61.57	66.64
Lamb				10.77	13.97
Pork	(a)	4.11	5.22	6.50	8.20
Bacon and ham	9.36	10.31	11.24	11.91	10.50
Total Meats	(a)	193.57	212.72	207.99	211.46
Tobacco	2.67	2.94	3.25	3.19	2.84
Biscuits	(a)	17.15	13.26	11.04	8.10
Coffee	0.51	0.52	0.56	0.52	0.58
Fish, preserved in tins ..	4.75	3.08	3.93	3.78	3.03
Flour, wheaten	208.37	210.74	210.11	202.70	202.55
Jam	17.06	14.03	10.66	12.11	11.48
Oatmeal	(a)	(a)	(b) 4.49	5.32	4.55
Sago and tapioca	(a)	1.78	1.73	1.27	1.25
Tea	7.28	7.92	7.76	7.51	6.83
Soap	(a)	15.16	15.20	16.18	14.62
Portland cement	(a)	(a)	(b) 196.61	230.44	147.23
	gal.	gal.	gal.	gal.	gal.
Milk	(a)	19.67	22.39	22.20	22.58
Beer	11.67	12.41	11.27	10.48	8.23
Spirits (potable)	0.80	0.54	0.41	0.34	0.19
Kerosene	4.22	4.02	4.50	7.98	6.22
Motor spirit	(c) 2.13	4.11	13.10	32.55	33.92

(a) Not available.
ended 1913.

(b) Average for four years ended 1925-26.

(c) Average for three years

2. *International Comparison.*—The difficulties associated with the compilation of statistics of consumption in Australia have already been mentioned, and the absence of corresponding figures for other countries suggests a similar experience abroad. Some details are published in other countries, but these are restricted to a few commodities, and an extensive comparison on an international basis is not possible.

In the absence of complete details of the methods used in their computation, it is not possible to say whether the figures given are comparable in all respects with those shown for Australia. It is known that in some instances the figures relate to a single year, while those for Australia refer to the average over five years. In the following table the figures for Australia are below the normal, as the period taken included some years of the economic depression.

The details given in the following table have been taken from official or other authoritative sources and are the best available. They do not afford a comparison of the standards of living in the various countries, but are intended to present a comparison of more than usual interest.

CONSUMPTION PER HEAD OF POPULATION IN VARIOUS COUNTRIES.

Commodity.	Unit of Quantity.	Average annual consumption per head of population.				
		Australia.	New Zealand.	Canada.	United Kingdom.	U.S.A.
Wheat (excluding seed) ..	Bush.	5.6	5.7	5.5	5.8	4.7
Flour, wheaten	lb.	203	180	166	200	160
Sugar, refined	"	109	115	96	102	105
Milk, whole	Gal.	22.5	22.5	37.0	21.0	(a)
Butter	lb.	30.5	40.0	31.8	24.8	16.7
Cheese	"	3.8	8.0	3.6	8.6	5.4
Eggs	Doz.	(a)	20.0	20.8	13.0	(a)
Beef	lb.	112	140	62	69	63
Mutton and lamb	"	81	88	6	30	7
Pig meat	"	19	21	57	42	55
Total Meat	"	212	249	125	141	125
Wine	Gal.	0.3	0.2	0.3	0.3	0.4
Beer	"	8.2	8.6	6.0	33.1	13.0
Spirits (potable)	"	0.2	0.3	0.3	0.2	0.9
Tobacco	lb.	2.8	3.5	3.9	3.9	6.6
Tea	"	6.8	6.7	3.6	9.2	0.7
Coffee	"	0.6	(a)	3.4	0.7	13.3
Raisins and currants	"	5.5	8.4	3.8	5.7	2.2
Rice	"	5.0	5.3	7.3	5.2	(a)
Onions	"	13	12	(a)	(a)	(a)
Potatoes	"	98	108	(a)	241	(a)

(a) Not available.

§ 12. Film Censorship.

1. Legislation.—The censorship of imported films derives its authority from Section 52 (g) of the Customs Act, which gives power to prohibit the importation of goods. Under this section regulations have been issued prohibiting the importation of films except under certain conditions and with the consent of the Minister. The regulations provide, *inter alia*, that no film shall be registered which in the opinion of the Censor is (a) blasphemous, indecent or obscene; (b) likely to be injurious to morality, or to encourage or incite to crime; (c) likely to be offensive to the people of any friendly nation; (d) likely to be offensive to the people of the British Empire; or (e) depicts any matter the exhibition of which is undesirable in the public interest.

The regulations governing the exportation of Australian-made films are similar, with the addition that no film may be exported which in the opinion of the Censorship is likely to prove detrimental or prejudicial to the Commonwealth of Australia.

The Censorship consists of a Censorship Board of three persons and an Appeal Censor, the head-quarters being in Sydney. There is also a right of appeal to the Minister.

In addition to the censorship of moving pictures, the Censorship may refuse to admit into Australia any advertising matter proposed to be used in connexion with the exhibition of any film. Such control does not, however, extend to locally-produced publicity.

2. **Imports of Films.**—Imported films dealt with by the Censorship for the year 1939 were as follows:—1,574 films of 3,834,814 feet passed without eliminations, 103 films of 484,283 feet passed after eliminations, and 24 films of 145,523 feet rejected in first instance, making a total of 1,701 films of 4,464,620 feet (one copy). The countries of origin were as follows:—United States of America, 1,176 films of 3,438,317 feet; United Kingdom, 370 films of 714,412 feet; and 155 films of 311,891 feet from other countries.

The foregoing figures relate to standard size films (35 millimetres). There were also imported during 1939, 2,003 miniature films (16, 9.5 and 8 millimetres) of 772,643 feet.

3. **Exports of Films.**—The number of films exported for the year 1939 was 1,108 of 1,230,349 feet (one copy), of which 957 films of 1,117,276 feet were sent to places in the British Empire including Mandated Territories.

§ 13. Marketing of Australian Commodities.

1. **Introduction.**—Particulars in respect of the various Commonwealth Acts and Regulations together with the operations of the Boards or Councils appointed to assist or control the marketing of Australian commodities are set out below. It should be noted that the particulars refer to the marketing of Australian commodities in the normal times of peace, and that no reference has been made to changes induced by the outbreak of War. A brief summary of the war-time arrangements for the marketing and sale of Australian commodities is included in §14.

2. **Dairy Produce.**—(i) *The Dairy Produce Export Control Act 1924–1938.* 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. It dealt with matters relating to the organization and supervision of oversea marketing of dairy produce. 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 improvement 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.

(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 the Commonwealth to cover the administrative expenses of the Board and for advertising and other purposes. The rate of the levy is fixed by regulation.

(iii) *The Dairy Produce Act 1933–1935.* In §1 par. 3 of Chapter XV. "Farmyard, Dairy and Bee Products" reference is made to the voluntary and compulsory plans introduced for the purpose of stabilizing the prices of dairy produce in Australia. Under State legislation regulating authorities fixed the proportion of the States' output to be sold within the respective States, and the Dairy Produce Act was passed by the

Commonwealth Parliament to protect these "quotas" from the effects of interstate competition. A decision of the Privy Council in 1936, however, held that the Commonwealth had no power under its Constitution to control interstate trade and the Commonwealth legislation is therefore inoperative. The industry is now carrying on its stabilization plan on a purely voluntary basis.

3. *Dried Fruits.*—(i) *The Dried Fruits Export Control Act 1924–1938.* This Act was passed by the Commonwealth Parliament at the request of the dried fruits industry to organize the oversea marketing of Australian dried vine fruits. The Dried Fruits Control Board, consisting of eight members—including five growers' representatives, two members with commercial experience and one Government nominee—was appointed to control the export, and the sale and distribution after export, of Australian sultanas, currants and lexias. In conjunction with its London agency, the Board has improved the marketing of Australian dried fruits overseas, and has increased the demand for the product. Its system of appraisalment has resulted in more satisfactory realizations. Its methods of ensuring continuity of supply and regulating shipments and its participation in the advertising campaign of the Australian Overseas Trade Publicity Committee have benefited the industry considerably. No dried fruits may be exported except by means of a licence, which is issued subject to conditions recommended by the Board.

(ii) *Dried Fruits Export Charges Act 1924–1929.* This Act provides for the imposition of a levy on all sultanas, currants and lexias exported from the Commonwealth for the purpose of defraying the administrative expenses of the Board and the cost of advertising, etc. The rate of the levy is fixed by regulation. Under an amendment made in 1927 provision was made for the exemption of sultanas, currants and lexias from the levy upon recommendation by the Board.

(iii) *The Dried Fruits Act 1928–1935.* In previous issues of the Official Year Book reference has been made to the Dried Fruits Act and its provisions outlined (see p. 894 of Official Year Book, No. 25). This legislation is in a similar position to that for dairy produce referred to in par. 2 (iii) above.

4. *Canned Fruits.*—(i) *The Canned Fruits Export Control Act 1926–1938.* This legislation was introduced at the request of canners and representative organizations of fruit-growers with the object of organizing the oversea marketing of canned fruit. The original Act referred to canned apricots, peaches and pears only, but canned pineapples and canned fruit salads consisting of not less than 75 per cent. of specified fruits were subsequently brought within the scope of the Board's operations. The personnel of the Australian Canned Fruits Board consists of one representative each from proprietary and privately owned canneries, co-operative canneries, State-controlled canneries, pineapple interests and the Commonwealth Government. No canned fruits to which the Act applies are permitted to be exported except under a licence issued in accordance with conditions recommended by the Board. The system of marketing adopted by the Board, including the fixation of minimum selling prices overseas, the appointment of a London agency and the engaging in oversea trade publicity, has resulted in the satisfactory disposal of the annual exportable surplus of canned fruits. The distribution of canned fruits has been widened and the exporting side of the industry placed on a sounder basis through the Board's operations.

(ii) *The Canned Fruits Export Charges Act 1926–1938.* This Act provides for the imposition of a levy on the export of canned fruits to meet the administrative and other commitments of the Board. The rate of the levy is fixed by regulation from time to time. An amendment in 1929 provided for certain exemptions from payment of the levy when recommended accordingly by the Board.

5. *Wine.*—(i) *The Wine Overseas Marketing Act 1929–1936.* This Act was introduced at the request of the viticultural interests in Australia with the object of placing the oversea marketing of Australia's surplus wine on an orderly basis. The Wine Overseas Marketing Board was appointed to supervise the exports, and the sale and distribution after export of Australian wine.

The name of the Board was changed to the Australian Wine Board in 1936. No wine may be exported except by means of a licence, which is issued under conditions recommended to the Minister by the Board; these include the withholding of shipments as directed by the Board. The Board has a London agency which advises on marketing conditions. The methods of marketing adopted by the Board have resulted in the widening of the distribution of Australian wines overseas.

(ii) *The Wine Grapes Charges Act 1929-1937*. This Act provides for the imposition of a levy on all grapes used in the Commonwealth 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.

6. *Meat*.—(i) *The Meat Export Control Act 1935-1938*. This Act was introduced following a decision of a conference of Commonwealth and State Ministers with members of the Commonwealth Meat Advisory Committee, held in October, 1935, to set up a Meat Board with defined statutory powers. The Australian Meat Board, which was appointed under the Act in January, 1936, consists of eighteen members, representative of producers, processors, exporters and the Commonwealth Government. Provision is made for the appointment from within the Board of an Executive Committee and a Beef Committee. Export of meat is controlled by licence. The Board has power to regulate shipments of meat and to arrange contracts in respect of freights and insurances; to promote oversea sales by advertising and to foster research into meat problems; and to supervise the issue of export licences. The Board also has power to appoint a London representative.

(ii) *The Meat Export Charges Act 1935*. By means of a levy collected on all meats exported from the Commonwealth, funds are provided for the purpose of defraying the expenses and charges incurred by the Australian Meat Board in the course of its business. The customary provision is made for exemption from the levy when recommended by the Board.

7. *Apples and Pears*.—(i) *The Apple and Pear Organization Act 1938*. 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 for the purpose of organizing and controlling the export trade in fresh apples and pears.

The Board consists of one member to represent the Commonwealth Government; eleven members to represent the growers of apples and pears on the basis of four from Tasmania, two each from Victoria and Western Australia, and one each from New South Wales, Queensland and South Australia; and four members to represent exporters of apples and pears on the basis of one from each of the States of Victoria, South Australia, Western Australia and Tasmania.

The Board has power to regulate the shipment of apples and pears from Australia by licensing exporters and issuing permits to export. Power is also given to determine export quotas, and to allocate the consignments from each State. The Board may appoint persons to represent it overseas.

(ii) *The Apple and Pear Export Charges Act 1938*. This Act provides for the imposition of a levy on all apples and pears exported from the Commonwealth for the purpose of providing the funds necessary to meet the administrative and other expenses of the Board.

(iii) *The Apple and Pear Publicity and Research Act 1938*. Under this Act, the Australian Apple and Pear Board is empowered to expend moneys, specifically collected and appropriated, for the purpose of increasing and extending the consumption of apples and pears throughout Australia by publicity, research or any other means.

The fund for this purpose is to be created from the proceeds of a tax levied on all apples and pears sold for consumption in Australia as fresh fruit. Apples and pears exported or to be exported, or processed or to be processed, are exempt from the tax.

The related taxing measures are:—The Apple and Pear Tax Act 1938 and the Apple and Pear Tax Assessment Act 1938.

8. Wheat Industry Assistance Act 1938.—This legislation, which came into operation in December, 1938, supplements legislation of a uniform type passed by all the State Parliaments, and is designed to enable the operation of a home consumption price scheme for the wheat industry on a Commonwealth basis.

The legislation is based on a home consumption price of 5s. 2d. a bushel, free on rail, Williamstown, equivalent to 4s. 8d. at country sidings. When the price of wheat falls below that level the returns of growers will be supplemented by payments from a fund established from the proceeds of a flour tax which varies inversely with the price of wheat. When the export price rises above that level provision is made for a tax on wheat sold, the proceeds of which are to be applied to ensure that the cost of wheat gristed for home consumption shall not exceed 5s. 2d. per bushel.

Out of the general fund a sum not exceeding £500,000 per year will be reserved during the first five years for special purposes including the transfer of producers growing wheat on marginal lands to other areas where they will be able to engage in mixed farming or to enable them to increase the size of their holdings to make wheat-growing worth while.

A Wheat Stabilization Advisory Committee has been established to determine the appropriate times for a variation in the rate of tax which will be fixed on the basis of a rigid formula.

The State legislation undertakes to ensure that prices charged to consumers are reasonable and the Commonwealth legislation contains provision that no State shall be entitled to receive payments where that undertaking is not carried out.

With the acquisition of wheat by the Commonwealth Government after the outbreak of War and the payment direct to them by the Wheat Board, the provision for payment of flour tax to growers was varied by the Wheat Industry (War-time Control) Act, 1939. Flour tax proceeds under this Act are paid into the Commonwealth Bank for repayment of advances made and in this way are incorporated with the receipts of the wheat pools.

9. Export Guarantee Act.—For a considerable time this Act has not been invoked directly to provide for assistance in the marketing of primary products. The Dried Fruits Advances Act, disbursements under which were made for the appropriation pursuant to the Export Guarantee Act, has ceased to operate. The Board of Trade, which was formed to advise and recommend on expenditure proposed under the Act, has not functioned for some years. The only recent expenditure under the Act has been in respect of special oversea trade publicity, but since 1st July, 1934, expenditure under that heading has been made the subject of a separate appropriation. The total assistance granted under the Act during its period of operation amounted to £670,574 which included substantial payments on account of both the Dried Fruits Advances Act and oversea trade publicity. Although the Export Guarantee Act has not been repealed, it is not proposed that any further payments shall be made under it.

10. Australian Agricultural Council.—Particulars of the formation, personnel and functions of the Australian Agricultural Council are given in Chapter XIV., "Agricultural Production".

§ 14. War-time Marketing of Primary Products.

1. General.—Before the outbreak of the present War an understanding had been reached by the Governments of the United Kingdom and the Commonwealth which enabled exports from Australia to proceed normally even before any contracts for the sale of commodities had been concluded.

On the outbreak of hostilities, the existence of Statutory Boards for the meat, dairy produce and fruit industries facilitated war-time organization. The experience already gained in marketing control enabled the Commonwealth Government to proceed quickly with the formation of committees and/or boards in those industries where Statutory Boards or organizations had not been established previously, namely, the Central Wool Committee, the Australian Wheat Board, the Australian Barley Board, the Apple and Pear Marketing Committee, the Australian Hide and Leather Industries Board, and a Committee to supervise the export of eggs.

In addition to the organizations established in respect of these commodities, a Shipping Control Board was set up to control coastal shipping should the need arise for close supervision and control of cargo movements in interstate trade. At a later stage, a Shipping Committee was established to control and supervise oversea shipping to and from Australia in conjunction with the Ministry of Shipping in the United Kingdom.

Prior to the outbreak of War, a survey was made of refrigerated and cold storage space in Australia. Thus the handling of refrigerated produce up to the time of shipment was not only facilitated, but the survey was also of material assistance in connexion with the arrangements made subsequently for the transport of commodities to the United Kingdom.

2. Wool.—The Government of the United Kingdom has arranged with the Commonwealth Government to acquire the Australian wool clip for the duration of the War and one full wool season after the cessation of hostilities.

The arrangement embraces all wool, wool tops, noils and waste, not required for use by Australian manufacturers.

The principal conditions of the arrangement are :—

- (i) The United Kingdom Government will pay 10½d. (Stg.) equivalent to 13.4375d. (Aust.) per lb. flat rate price for the wool in store at the oversea port of shipment.
- (ii) The United Kingdom Government will pay up to ¾d. (Stg.) equivalent to ¾d. (Aust.) per lb. to cover all costs from store to ship
- (iii) The United Kingdom Government will pay to the Commonwealth Government 50 per cent. of the profits derived from wool sold for use outside the United Kingdom, which sales shall be at the order and disposition of the United Kingdom Government.
- (iv) In May of each year the arrangement shall be subject to review at the instance of either Government.

In Australia the scheme is administered by the Central Wool Committee (with subordinate State Committees) which controls the receipt of the wool into store, its appraisalment and shipment overseas. The Central Wool Committee cables to the United Kingdom Government the appraised value of the wool comprised in each round of appraisements and the United Kingdom Government makes the necessary funds available to the Committee. These are paid to the respective growers within fourteen days of appraisalment, less a percentage retained by the Central Wool Committee to enable each grower's return to be adjusted in conformity with the flat rate price paid by the United Kingdom Government. During the first season (1939-40) of operation of the scheme the amount so retained was 10 per cent. but for the current clip (1940-41) only 5 per cent. will be retained.

During the 1939-40 season the issue price of wool for Australian manufacturers was the "appraised price." From 1st July, 1940 (1940-41 season) the issue price was fixed by the Central Wool Committee at the "appraised price", plus cost of delivery plus 7½ per cent.

3. Meat.—From 1st October, 1939 to 30th September, 1940, the United Kingdom Government agreed to purchase f.o.b. 240,000 tons of beef, mutton, lamb, veal and pork and to use its best endeavours to lift any additional quantities available for export. The contract embodies a long range of prices for various cuts, pieces and offals. The returns to Australian producers are satisfactory and are higher than those received during the previous season. Under the contract 90 per cent. is paid on shipment and 10 per cent. within 28 days of arrival, or in the case of a steamer being lost, the estimated due date of arrival.

The contract has been renewed for the year 1st October, 1940, to 30th September, 1941, and covers beef, veal, mutton, lamb, porker pork and offals, and baconer pork. Under the new contract certain classes of meat will not be accepted and there have been slight variations in some prices.

4. **Butter.**—The quantity of butter to be sold under this contract, between 13th November, 1939 and 30th June, 1940, was 75,500 tons. The contract prices per cwt. in Australian currency were: Choicest 137s. 2½d.; First Grade 135s. 7½d.; Second Grade 131s. 1¾d.; and Pastry 127s. 6d. On shipment, 90 per cent. is paid, and the balance within 28 days after arrival.

In addition, the Commonwealth Ministry undertook, subject to freight being available, to use its best endeavours to ship additional quantities available for export within the limit of its requirements.

Negotiations for the renewal of the contract for the year 1st July, 1940, to 30th June, 1941, were successfully concluded. The British Ministry of Food has agreed to purchase at the same prices and on the same terms and conditions as those in the previous agreement.

5. **Cheese.**—From the outbreak of War to 30th June, 1940, the United Kingdom Government contracted to take 13,000 tons of cheese. The prices per cwt. in Australian currency, f.o.b. Australian port, were: Choicest and First Grade 76s. 6¾d.; Second Grade 74s. 0½d.; and Third Grade 71s. 6¾d. Payment was made on the same terms as for butter. The contract has been renewed in its entirety as regards terms and conditions for a year as from 1st July, 1940.

6. **Eggs.**—This contract was for the one season and covered all eggs packed for export up to 31st December, 1939. The quantity mentioned in the agreement was 900,000 long hundreds, but subject to freight being available, the United Kingdom Government agreed to accept any additional quantity available for export on the same terms as those specified in the agreement. The prices in Australian currency, f.o.b. Australian port, were: 13½-lb. and 14-lb. packs 9s. 10.83d.; 15-lb. and 16-lb. packs 12s. 2.87d.; and 17-lb. and 18-lb. packs 12s. 4.25d. On shipment, 85 per cent. was paid, and 15 per cent. within 28 days after arrival.

A further contract covering eggs shipped between 1st July, 1940 and 31st December, 1940, has been made at prices which represent an increase of 1s. 3d. (Aust.) per long hundred for each pack over prices in the previous contract. In addition, the terms of payment have been improved to 90 per cent. on shipment instead of the previous 85 per cent.

Negotiations for the extension of the contract to cover eggs available for shipment during the months of January and February, 1941, have been successfully concluded.

7. **Sugar.**—Arrangements were concluded in September, 1939, by the Queensland Government for the sale to the British Ministry of Food of the balance of Australia's surplus production of raw sugar *ex* the 1939 crop at £7 10s. sterling per ton c.i.f. United Kingdom ports, basis 96 degrees polarization, plus the existing British tariff preference of £3 15s. on Dominion sugar, making a total gross price of £11 5s. sterling per ton. The same conditions applied to Australia's surplus production of raw sugar *ex* the 1940 crop except that the gross price was effectively increased by 10s. per ton.

8. **Lead.**—A contract was arranged between the British Ministry of Supply and the Broken Hill Associated Smelters Pty. Ltd. for a period of twelve months. The contract price was £15 18s. 3d. sterling or £18 16s. 7d. Australian currency per ton.

This contract has been renewed for a further period of twelve months from 1st September, 1940, on the same terms as the original contract.

9. **Zinc.**—A contract was also entered into by the British Ministry of Supply with the Electrolytic Zinc Company of Australasia Ltd. with regard to zinc. The period of contract was for twelve months and the contract price was £18 sterling per ton or £22 10s. Australian currency.

This contract has been renewed for a further period of twelve months from 1st September, 1940, on the same terms as the original contract.

10. **Canned Fruits.**—The United Kingdom Government has agreed to take a quantity of canned apricots, peaches and pears from the 1940 season's pack. The prices payable under the purchase have been fixed on f.o.b. basis Australian ports.

The terms of the contract provide that, in respect of quantities shipped prior to the conclusion of the negotiations, 90 per cent. of the value of the fruit, together with freight and other charges paid in Australia, become payable upon arrival in the United Kingdom and the balance of 10 per cent. within 28 days. For subsequent shipments, 90 per cent. of the purchase value is payable at the time of export and the remainder within 28 days after arrival at the port of destination.

11. Apples and Pears.—To meet the emergency conditions which confronted the apple and pear industry following the outbreak of War, the Commonwealth Government promulgated the National Security (Apple and Pear Acquisition) Regulations on 14th November, 1939 to provide for the acquisition and orderly marketing of the 1940 crop. A Marketing Committee of the Australian Apple and Pear Board was appointed to supervise the whole of the marketing arrangements and State Committees were set up to assist in the administration of the Scheme.

All growers occupying orchards of which not less than 1 acre was wholly or principally used for the growing of apples and/or pears were required to register under the regulations and to furnish particulars of their plantings and production. The registration of other persons growing apples or pears was not compulsory.

Until 1st March, 1940, the marketing of the crop proceeded in the usual manner but from that date the Commonwealth acquired all apples and pears in Australia, subject to minor exemptions, and the sale of any apples or pears not grown by a registered grower was prohibited.

Advances were made to the growers in respect of compensation payments at the rates of 2s. a bushel on apples and 3s. a bushel on pears on the basis of 75 per cent. of their estimated production which was determined by an official assessment of the individual crops. In addition growers receive a further advance of 1s. a bushel on apples and pears of prescribed quality delivered to places or agents of the Board. All advances in respect of compensation are on the basis of bare fruit, the costs of cases and packing, freight, storage and all marketing expenses being met by the marketing authority.

Agents have been appointed throughout Australia to receive and deal with apples and pears as directed, and a system of distribution devised to meet the particular needs of the domestic market in each State. In so far as freight has been available, overseas shipments have been directed from those States having the largest quantities available for export.

12. Wheat and Flour.—The Commonwealth Government negotiated with the United Kingdom Government immediately on the outbreak of War for the purchase and transport of the old season's wheat, of which there was estimated to be about 20,000,000 bushels on hand. All old wheat in Western Australia and South Australia, approximately 7,500,000 bushels, was sold to the United Kingdom Government and a contract was also secured for 50,000 tons of flour.

These arrangements were administered by the Australian Wheat Board, which has been established to receive, care for and market wheat acquired by the Commonwealth Government.

The Australian Wheat Board has been entrusted with the task of marketing and storing wheat. The price of wheat for local requirements is determined by the Board. Free movement of wheat within the Commonwealth has been stopped and deliveries of wheat must be made to licensed receivers who are the receiving and distributing agents of the Board and by whom sales are made to the usual retailers. The Board has an Australian Selling Committee in London which negotiates sales of wheat and flour in the United Kingdom, Europe and certain other markets.

The 1940 harvest was pooled in No. 2 Pool, and at the end of November, 1940, advances of 3s. 5½d. per bushel bagged, and 3s. 3½d. silo wheat had been paid to growers. The advances were guaranteed by the Commonwealth, and the total guarantees for No. 2 Pool were £34,500,000.

Over 140,000,000 bushels of wheat and flour as wheat were sold by the Board to October, 1940, at satisfactory prices. This includes over 100,000,000 bushels for export flour and wheat. In January, 1940 a sale was made to the United Kingdom of 1,500,000 tons of wheat, and 150,000 tons of flour. This is equivalent to 63,000,000 bushels of wheat, and is one of the largest sales in grain history.

13. **Barley.**—The outbreak of War came a few weeks prior to the commencement of harvesting operations for the new barley crop, the estimates for which indicated that production would be on a higher scale than in former years.

An Australian Barley Board, representative of the industry, was formed with head-quarters at Adelaide, and the Commonwealth Government acceded to its request to acquire the entire barley crop, which was placed under the control of the Board. A pool was established from which proceeds will be distributed with appropriate margins for different grades of barley.

The Board is responsible for the marketing and storage of barley, and, like the Australian Wheat Board, has appointed its licensed receivers in all States to receive grain on its behalf and to act as agents for all local and oversea sales.

The crop was a record one of 15,000 000 bushels, but the Board has made satisfactory sales, and the carry-over at the end of the season is expected to be only 1,500,000 bushels to 1,750,000 bushels. This is all export grade barley. Local demand was greater than usual because of the drought, and the surplus from last season will be needed to augment this season's small crop. Some satisfactory export sales were made although war-time difficulties limited the scope for oversea sales.

Advances to growers were guaranteed by the Commonwealth, and payments to date range from 2s. 11d. per bushel, less railage, for No. 1 malting quality to 1s. 9d. per bushel less railage, for feed grade.

14. **Dried Fruits.**—Contracts have been entered into with the United Kingdom Government which provide for the disposal of portion of the exportable surplus of the 1940 pack of dried vine fruits. Advances of 80 per cent. are payable to exporters on shipment and the final payment of 20 per cent. on landing weights after inspection and approval.

15. **Hides and Leather.**—Late in 1939 it became necessary to introduce a scheme for the control of the marketing of hides and leather and suitable action was taken by Regulations under the National Security Act. The Australian Hide and Leather Industries Board was appointed to administer the scheme.

All cattle hides and yearling and calf skins must be submitted for appraisalment in accordance with a Table of Limits prepared by the Board. On appraisalment they are acquired by the Board acting on behalf of the Commonwealth and thereupon become the property of the Commonwealth. The owners of the hides and skins immediately prior to acquisition, receive compensation at rates determined by the Minister from time to time. Hides and skins acquired by the Board are sold on behalf of the Commonwealth. Tanners' purchases of hides are regulated and exports of hides, skins and leather are controlled.

When the scheme commenced, hide export prices were much higher than the domestic appraised prices. About the middle of 1940, however, the oversea market for hides and skins collapsed. The scheme stood the strain of the reversed position. Appraisalment continued as before, the rates of compensation to hide owners were reduced by 25 per cent. for a time and the fund already built up by the Board acted as a cushion for the change-over period. The export position in respect of both hides and leather has since improved. Rates of compensation have returned almost to normal and the scheme continues to function satisfactorily.

16. **Rabbit Skins and Hats.**—A marketing control scheme for rabbit skins was introduced under the National Security (Rabbit Skins) Regulations on 10th June, 1940. After the outbreak of War, rabbit skin prices rose sharply owing to the keen demand from overseas. In order that the prices of military and civilian hats in Australia might

be kept at reasonable levels and that sufficient skins should be available to Australian hat manufacturers at prices which would enable them to produce hats at those price levels, a scheme of marketing control became necessary.

The Australian Rabbit Skins Board was appointed to administer the control. The basis of the scheme is the payment to hat manufacturers of compensation equivalent to the difference between appraised prices in a Table of Limits prepared by the Board, which are based on a Commonwealth Prices Commission determination, and ruling open market prices.

Funds for the payment of such compensation are obtained by collections from a levy imposed on the export of rabbit skins under the Rabbit Skins Export Charges Act 1940. Purchases by hat manufacturers at appraised prices are closely regulated by the Board, and the operations for the first winter buying season which was closed by the suspension of certain regulations on 1st October, 1940, have been satisfactory.

17. **Sheepskins.**—Negotiations for the purchase by the United Kingdom Government of Australian sheepskins, were concluded in April, 1940.

It was arranged that the British Ministry of Supply would purchase the exportable surplus of Australian sheepskins and that the period of the arrangement should extend to and terminate with that of the wool arrangement.

The purchase is on the basis of skins packed and graded Australian ports and the price is based on—

- (a) the value of the wool product of the skin in accordance with the scoured wool limits in the Central Wool Committee's Table, plus
- (b) the pelt values in accordance with an agreed table, less
- (c) the cost of fellmongering.

Charges from store to f.o.b. port of shipment, a periodical review of pelt values and adjustment of appraisement values from time to time, have been provided for.

§ 15. The 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. In various States it issues by courtesy of the Traffic Authorities a booklet with every motor driver's licence, and conducts continuous propaganda through the press and other sources. It also forms Junior Safety Councils in the schools for developing a safety conscience among children. The children themselves are officers of these Councils and patrol the roads in the neighbourhood of the schools and conduct the scholars across in safety. Posters are available to schools at cost in connexion with Health and Safety lessons in the schools. Small films specially taken are available for children's and home 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 are responsible being given a certificate to that effect. A Factories' Service of four posters per month, together with slips for pay envelopes, constitutes a regular service for the dissemination of safety advice, and was supplied to over 50,000 workers in factories last year. Committees deal with specific problems regarding traffic, films, safety in industry, air safety and home dangers. The Air Safety Committee has issued a 32-page booklet "Air Sense" for distribution with "A" pilots' licences through the Civil Aviation Department and has a plan for emergency night landings for aircraft in difficulties.

The Council is supported by public subscription and sales of service, and is a non-profit organization. Its work is carried on by a small paid staff controlled by committees and governed by an executive. The following committees, whose work is of an entirely honorary nature, are in operation, namely, Traffic, Industrial Safety, Home and Air Safety.

§ 16. League of Nations.

Australia was one of the original signatories of the Treaty of Versailles of 28th June, 1919, under which the League of Nations was established, and thus became a Member of the League and its kindred organizations—the International Labour Organization and later the Permanent Court of International Justice. On 2nd October, 1933, Australia was elected a non-permanent member of the Council of the League of Nations for a period of three years, and was succeeded by New Zealand in September, 1936. South Africa was elected in the place of New Zealand in December, 1939.

The last elections to the Council were held in December, 1939. At that date only two permanent members of the Council remained, namely Great Britain and France. In addition eleven non-permanent members were elected for a term of three years, namely, Belgium, Bolivia, China, the Dominican Republic, Egypt, Finland, Greece, Iran, Peru, South Africa and Yugoslavia.

For some months after the outbreak of War the League attempted to continue its work at Geneva but the events in May and June, 1940, made it clear that this would henceforth be impossible. After a period of negotiation, in the course of which the Secretary-General, M. Avenol, resigned, it was announced that some at least of the activities of the League would be carried on in the Western Hemisphere. The technical sections dealing with health, opium, economic and social questions would, at the invitation of the Institute for Advanced Studies at Princeton University, be transferred to the United States of America for the duration of the War, while the Canadian Government would provide accommodation for the International Labour Office at the McGill University, Montreal. It was intended, however, that the head-quarters of the League would nominally remain at Geneva.

A considerable number of Members have formally indicated their desire to support the League and International Labour Office in their new environment and the process of transfer is still continuing. It was, of course, impossible for any regular meetings of either body to be held during 1940.

§ 17. War Service Homes.

The operations of the War Service Homes Commission at 30th June, 1940, may be briefly set out as follows:—Total applications approved, 44,277; expenditure on provision of homes, purchase of land for future use, etc., £29,775,146; 21,356 houses had been completed; and 34 homes had been enlarged.

In addition, the Commission had purchased on behalf of eligible applicants, 12,990 already existing properties, and had taken over mortgages existing on 2,967 dwelling-houses. Dual assistance had been approved in respect of 38 applications, making the total number of homes provided under the War Service Homes Act, 37,385. Homes are insured under a comprehensive policy, the total insurances in force including cover notes amounting to £20,014,305. The total receipts of the Commission to 30th June, 1940, were £27,715,874, of which £10,555,701 was paid to the National Debt Sinking Fund. Arrears of instalments outstanding at the close of the year equalled £664,180, or 2.78 per cent. of the total instalments due.

DIARY OF PRINCIPAL ECONOMIC EVENTS.

1931.

The events of 1931 and the years immediately following were mainly attempts to meet the extraordinary position created by the economic depression which began in 1929-30.

22nd January.—The Commonwealth Court of Arbitration after a protracted hearing made a comprehensive survey of the economic position (see *The Crisis*, pp. 102-145), and awarded a 10 per cent. reduction in all railway wages which were the subject of the case, operative from 1st February, 1931. This judgment was followed by others, making the same reduction in practically all wages and salaries which were determined by Commonwealth award. This reduction of 10 per cent. was in addition to the "automatic" adjustment to falling prices, and made the total reduction over 20 per cent. on the wage rates of 1929. Wages under State jurisdiction were gradually brought into line, except in New South Wales where no adjustment was made in State awards for some time.

January to February.—*Premiers' Conference, Canberra and Melbourne.*—A committee of Treasury officers presented a report analysing the financial and economic position. The report preserved much of the deflationary tone of an earlier statement by Sir Otto Niemeyer of the Bank of England, and commented adversely on the high exchange rate. Curtailment of Government expenditure was strongly urged, but no definite reductions were proposed. This report was signed by four of the State Under-Treasurers only.

Mr. Lang (Premier of New South Wales) proposed as an alternative the reduction of internal interest on Government bonds to 3 per cent., the cessation of oversea interest payments pending agreement for a similar reduction, and the substitution for the gold standard of "currency based on the wealth of Australia".

The Conference rejected Mr. Lang's motion and resolved to aim at budget equilibrium in three years, reducing salaries and wages on a cost of living basis, taxing interest on Government bonds at the source and putting on the banks the responsibility of reducing interest rates.

January.—*The Unpegging of the Exchange.*—Australian exchange with sterling had been held by the banks at $8\frac{1}{2}$ per cent. discount since 9th October, 1930. On 5th January, 1931, on the initiative of the Bank of New South Wales, the rate was allowed to move up until it reached 30 per cent. on 29th January, 1931, and it was held at that figure notwithstanding some competition at higher rates by "outside" dealers.

2nd April.—Letter from the Commonwealth Bank to the Chairman of the Loan Council, stating that it was unable to finance Governments beyond the outstanding £25,000,000 in London, and a limit of £25,000,000 in Australia. This limit in Australia was bound to be, and was, in fact, reached within three months.

25th May to 11th June.—*Premiers' Conference, Melbourne.*—The Conference had before it a report of a Committee of economists and Treasury officers, of which Professor D. R. Copland was Chairman. This report proposed a definite scheme of reduction of expenditure of all kinds, including wages, salaries, pensions and interest. The reduction aimed at was from 20 to 25 per cent. below the 1928-29 level, based on the actual reduction in wage rates in Commonwealth awards of something over 20 per cent. The aim of the proposals was to reduce total Government deficits in 1931-32 from a prospective £40,000,000 to some figure not much above £10,000,000. This report formed the basis of the "Premiers' Plan," and was adopted on 10th June, 1931.

19th June.—*Gold Position.*—The minimum proportion of gold to be held against notes was reduced from 25 per cent. to 15 per cent., with provision for gradual restoration over a term not exceeding five years to 25 per cent. This amendment of the Commonwealth Bank Act was put through by general consent to permit further shipments of gold to meet short-term debt in London.

26th June.—Reduction of Bank Deposit and Advance Rates.—The Commonwealth Bank and the trading banks reduced by 1 per cent. the rates on new fixed deposits or renewals.

1st July.—The Commonwealth Bank reduced rates for advances by 1 per cent. The other trading banks by successive small steps fell into line.

The Commonwealth and State Savings Banks reduced interest rates by 1 per cent., except in Victoria where successive reductions of one-half, one-quarter, and again one-quarter of 1 per cent. were made by the State Savings Bank.

July-August.—Conversion Loan.—A conversion loan was launched to reduce the rate of interest on all internal Government debt by approximately 22½ per cent.

The results of the conversion plan will be best understood by consideration of the following figures:—

	£
Total Internal public debt at 31st July, 1931	557,998,904
Conversion applications notified	510,331,153
Dissents notified	16,655,769
Conversion effected automatically (in absence of notification of either conversion or dissent)	31,011,982
	557,998,904

The amount held by dissentients was thus a little less than 3 per cent. of the total outstanding public debts.

The annual savings in interest to all the Governments for a full year in consequence of the conversions effected were calculated to be about £6,500,000, but some part of this relief was to be passed on to settlers and others debtors to the State Governments.

31st July.—A reduction in the rate of interest on Treasury Bills from 6 per cent. to 4 per cent. was announced.

10th to 14th August, and 1st to 12th September.—Premiers' Conference, Melbourne.—The several Governments reported their attempts to adjust their budgets to the "Premiers' Plan." After some allowance had been made for unforeseen contingencies, the new budgets appeared on the whole to be in fair conformity with the "Plan," though for some of the State Governments there was an appreciable gap. Measures were agreed upon for applying compulsion to the small amount of Debt which had not been converted, and provision was made for the redemption from the National Debt Sinking Fund of securities held by persons in necessitous circumstances.

21st September.—Great Britain ceased payment in gold, and sterling depreciated over 20 per cent. in terms thereof, thus making a corresponding reduction in the real burden of interest payments by Australian Governments, which are for the most part fixed on sterling. Australian exchange was kept for the time at the old discount of 30 per cent. with sterling, so that no direct relief to Australian budgets ensued.

30th October.—The Commonwealth Government made provision for the payment of a bounty of 4½d. per bushel on wheat produced in the 1931-32 season.

27th November.—Further reduction in bank deposit rates of one-half and one-quarter of 1 per cent. on short and long-term deposits respectively.

3rd December.—Exchange.—Commonwealth Bank Board resolved to take responsibility for the regulation of sterling exchange and to announce rates for the coming week every Friday. The rate was fixed at £125 for £100 sterling, in place of £130, which had been the official bank rate since 29th January. It may be noted that sterling in the preceding week had depreciated from about 20 per cent. discount on gold to about 30 per cent. For some weeks the banks had been rationing their purchases of exchange, with the result that the "open market" rate had fallen considerably below the "carded" rates.

1932.

January.—Letter from the Commonwealth Bank to the Chairman of the Loan Council calling attention to the growth of the floating debt, and suggesting that "national finance" might be refused.

28th January to 5th February.—*Premiers' Conference, Melbourne.*—A serious drift in State finances was revealed. After receiving assurances that further economies would be sought, the Commonwealth Bank agreed to provide further assistance for the small States. During the meetings, New South Wales announced its default on interest payments due in London, New York and Australia. The payments were met, after a short delay, by the Commonwealth Government.

February.—A beginning was made in the revision of the tariff and the removal of prohibitions on imports.

8th March.—Further reductions in bank deposit rates of one-half of 1 per cent. on three months' deposits and one-quarter of 1 per cent. on six and twelve months' deposits.

12th March.—The Financial Agreements (Commonwealth Liability) Act resolved all doubts as to the liability of the Commonwealth for debts taken over in pursuance of the Financial Agreement.

March to May.—The Financial Agreements Enforcement legislation was enacted, giving the Commonwealth drastic powers to attach State revenues and other moneys in the event of failure by a State to pay to the Commonwealth moneys due under the Financial Agreement. The High Court decided in favour of the Commonwealth on a writ for recovery of interest paid on behalf of New South Wales. The New South Wales Government then contested the validity of the Enforcement Acts, which were upheld by the High Court, leave to appeal being refused.

13th April.—A Committee of Experts appointed by the Commonwealth Government to make a "Preliminary Survey of the Economic Problem" issued its report, recommending the restoration of economic balance by a combination of reduced costs and a high exchange rate, the former to be secured in part by the general application by State wage-fixing authorities of the 10 per cent. "cut" in real wages. The chief measures of more immediate alleviation recommended were (i) systematic revision of the customs tariff; (ii) construction of public works when the reductions in costs of construction made it possible for such works to earn interest; (iii) advances on debentures to large-scale enterprises for which three-quarters of the needed capital had been privately subscribed; and (iv) the settlement of married recipients of sustenance as cottagers on established farms.

14th to 21st April.—*Premiers' Conference, Melbourne.*—It was decided to raise a loan of £2,400,000 for expenditure on unemployment relief works.

May.—The trade union unemployment percentage reached the peak of 30 per cent. Mr. Lang was dismissed by the Governor of New South Wales, and the Victorian Labour Government was defeated at the elections. A widespread agitation for a higher exchange rate commenced, and lasted for some months.

11th June.—The State Labour Party was defeated in the New South Wales elections, while in Queensland the Labour Party was victorious.

16th and 17th June.—The New South Wales Industrial Commission was reconstituted. The Commonwealth Court of Arbitration refused an application for restoration of the special 10 per cent. reduction in wages.

21st June.—The Commonwealth Bank Act was amended to allow part of the note reserve to be held in English sterling. Subsequently, £G10,000,528 of gold was shipped overseas from the gold reserve of the Australian Notes Fund.

May-June.—Further reductions in bank deposit rates of one-quarter and one-half of 1 per cent. on twelve and 24 months' deposits, respectively.

30th June.—*Balance of Payments.*—The balance on current account, excluding the movement of monetary gold, was estimated to be in Australia's favour by approximately £7,492,000 sterling in 1931-32, as against a debit balance in 1930-31 of approximately £17,974,000 sterling.

28th June to 8th July.—*Premiers' Conference, Canberra and Sydney.*—The Conference unanimously affirmed its adherence to the "Premiers' Plan" of 1931. The estimated deficits for 1931-32 were reported to the Conference, and, with the notable exceptions of New South Wales and Queensland, they disclosed a satisfactory conformity with the "planned" deficits. The Conference agreed to reduce the total deficits in 1932-33 to £9,000,000 (inclusive of £6.45 millions for sinking funds), and arranged for a three-year unemployment relief works plan involving the ultimate expenditure of £15,000,000. Of this amount, £7,000,000 was to be spent in 1932-33, in addition to the ordinary works programme of £6,000,000.

1st July.—The Commonwealth Bank reduced its rate for advances by a further one-half of 1 per cent., bringing the rate to 5 per cent. The average reduction by the trading banks, since 1st October, 1931, was stated to be 1 per cent. Further reductions were anticipated by prominent bankers.

21st July to 19th August.—*Imperial Economic Conference at Ottawa.*

26th August.—The New South Wales Industrial Commission reduced the basic wage for adult males from £4 2s. 6d. to £3 10s., and for adult females from £2 4s. 6d. to £1 18s.

1st September.—The Commonwealth Budget provided *inter alia* for a further reduction of pensions and salaries, decreased customs duties, the final removal of import prohibitions, exemptions from sales tax and primage, and suspension of the gold bounty, which had been introduced on 1st January, 1931.

September to November.—Wool prices showed some improvement; share prices advanced substantially; the value of imports and Commonwealth customs revenues increased steadily. Early in October all the 4 per cent. Commonwealth bonds reached par, after allowing for accrued interest.

4th October.—A conversion loan was issued in London at 3½ per cent., issue price £97½, maturing 1936-37, to replace £12,360,000 of 5¾ per cent. N.S.W. stock maturing in October, 1932.

14th October.—Revision of the Customs Tariff to validate the Ottawa Agreement. The margin of preference under the British Preferential Tariff was considerably widened, mainly by means of increased duties on a wide range of foreign manufactures.

24th to 29th October.—*Premiers' Conference, Melbourne.*—It was decided to place on the Australian market a loan of £8,000,000 at 3¾ per cent., maturing in 1942, for Unemployment Relief and the funding of Treasury Bills. A reduction in the rate of interest on Treasury Bills from 4 per cent. to 3½ per cent. was announced.

1st November.—Further reductions in bank deposit rates of one-quarter of 1 per cent. for all terms, bringing the rates down to 2½, 2¾, 3 and 3½ per cent. on 3, 6, 12 and 24 months' deposits respectively.

5th December.—In view of the improved revenue position, the Commonwealth Government made substantial reductions in land and income (property) taxes, further exemptions from sales tax, increased the payments to certain invalid and old-age pensioners, and provided from revenue £2,000,000 for assistance to wheat-growers and £250,000 for assistance to other primary producers.

1933.

January.—Considerable improvement in the unemployment situation was shown in the trade union percentages for the last quarter of 1932. This improvement continued.

20th January.—A reduction in the rate of interest on Treasury Bills from 3½ per cent. to 3¼ per cent. was announced.

4th February.—The Loan Council agreed with the Commonwealth Bank that future requirements for loan programmes should be raised on the open market.

7th February.—Further reductions in bank deposit rates of one-quarter of 1 per cent. for all terms, bringing the rates down to 2, 2½, 2¾ and 3 per cent. on 3, 6, 12 and 24 months' deposits respectively.

17th February.—Further reduction in the Treasury Bill rate from $3\frac{1}{4}$ per cent. to $2\frac{3}{4}$ per cent.

23rd February.—A conversion loan was issued in London at 4 per cent., issue price par, maturing 1955-70, to replace £9,621,000 of 4 per cent. stock maturing in July, 1933.

30th May.—Appointment of Commonwealth Grants Commission to inquire into matters relating to grants of financial assistance to the States.

A conversion loan was issued in London at $3\frac{1}{2}$ per cent., issue price £99, maturing in 1937-38, to replace £11,400,000 of $6\frac{1}{2}$ per cent. stock with optional rights of redemption.

31st May.—Lists closed for internal loan of £5,000,000 for State public works, issued at $3\frac{3}{4}$ per cent. at par, maturing in 1942, with subscriptions amounting to £8.4 millions.

1st June.—A further reduction in the Treasury Bill rate from $2\frac{3}{4}$ per cent. to $2\frac{1}{4}$ per cent. was announced.

8th to 14th June.—*Premiers' Conference, Melbourne.*—By arrangement with the Loan Council, the Commonwealth Bank agreed to finance revenue deficits in 1933-34 by short-term loans to the amount of £8.5 millions, subject to reduction to the extent of any relief obtained by the States from conversion of oversea loans.

30th June.—The Commonwealth Court of Arbitration ordered the restitution of the 10 per cent. reduction in real wages in the Glass Industry; subsequently extending the restitution to the Paper and Pulp, Jam and Fruit-preserving, and certain other industries.

13th July.—A conversion loan was issued in London at 4 per cent., issue price £99, maturing in 1943-48, to replace £17,221,000 of 6 per cent. stock with optional rights of redemption.

14th September.—A conversion loan was issued in London at $3\frac{1}{4}$ per cent., issue price £98, maturing in 1948-53, to replace £20,951,000 of 6 per cent. and $5\frac{1}{4}$ per cent. stock with optional rights of redemption.

4th October.—The Commonwealth Budget provided *inter alia* for substantial remissions of direct and indirect taxation, including further exemptions from sales tax and reduction of the rate of tax from 6 to 5 per cent., reduction of special tax on income from property from 10 to 5 per cent., reductions in the income taxation on Life Assurance and other companies, and partial restoration of Financial Emergency reductions in invalid, old-age and war pensions, public service salaries and contributions to the Public Service Superannuation Fund. The total relief of taxation was estimated to be at the rate of £7.5 millions annually. At the same time the Government signified its intention of giving effect to that part of the report of the Tariff Board on the protective incidence of primage and exchange which applied to protected goods entitled to admission under the British Preferential Tariff.

16th November.—An internal loan of £10,000,000 was issued at $3\frac{1}{2}$ per cent., issue price £99, maturing in 1943, half for State public works and half for the purpose of retiring Treasury Bills.

30th November.—The price of wool, which had been advancing rapidly for some months, reached nearly 15d. per lb. (greasy merino, standard average). Wheat prices continued to fluctuate at very low levels. Export prices as a whole, in Australian currency, had recovered to 72 per cent. of their 1927-28 level.

4th December.—Flour tax of £4 5s. per ton imposed to provide portion of revenue required to assist necessitous farmers.

5th December.—A conversion loan was issued in London at $3\frac{1}{2}$ per cent., issue price £99, maturing in 1946-49, to replace £16,647,000 of $5\frac{1}{2}$ per cent. and 5 per cent. stock with optional rights of redemption.

The Commonwealth Government provided £3,000,000 for assistance to wheat-growers to be financed partly from a temporary sales tax on flour of £4 5s. a ton, and in part from other sources. The special tax on incomes from property was raised from 5 to 6 per cent. and the customs duty on imported tobacco raised by 6d. a lb.

1934.

January.—During 1933, Unemployment statistics disclosed by trade union returns showed steady progressive improvement. Percentage unemployed in December quarter—23 per cent.—lowest level since August, 1930.

2nd January.—Wool realized increased prices at first of 1934 sales. The average prices realized were the highest since September, 1928.

22nd February.—Conversion in London of £21,636,550, 5½ and 5 per cent. loans. New issue 3½ per cent. at £97, maturing 1954–59.

1st April.—Treasury Bill rate reduced from 2½ per cent. to 2¼ per cent.

12th April.—Bank deposit rates further reduced to 2¼, 2½ and 2¾ per cent. for 6, 12 and 24 months respectively.

31st May.—Provisions of 1933 Flour Tax Act ceased to operate.

5th June.—Internal loan of £12,234,000, 3¼ per cent. at £98 10s., repayable at par in fourteen years, raised for Commonwealth and State public works and funding of Treasury Bills. The terms of this flotation were the lowest ever offered for a Commonwealth loan.

19th June.—Commonwealth Bank Board agreed to finance Revenue Deficits for 1934–35 to a limit of £5,880,000, subject to the funding of an equivalent amount of Treasury Bills during the year. This amount was subject to reduction by any additional special grants from the Commonwealth over the 1933–34 basis.

25th June.—The Commonwealth Bank Board announced its withdrawal of the guarantee of payment and the undertaking that treasury bills would be rediscounted before maturity at the fixed rate in regard to new issues and re-issues after 30th June. Rediscounting will still be possible but at the rate fixed by the Commonwealth Bank at the time of the transaction.

24th July.—Commonwealth Budget for 1934–35 provided *inter alia* for further remissions in indirect taxation including additional exemptions from sales tax and reductions in primage, concessions in wireless licence fees and telephone charges; further restoration in part of public service salaries; more liberal war pensions, repatriation, old-age and invalid pensions, and maternity allowance benefits; assistance to primary producers in the form of a fertilizer subsidy; assistance to fruit-growers and other primary producers; and a special non-recurring grant of £2,000,000 to the States.

8th August.—Bank deposit rates for three months terms reduced from 2 per cent. to 1½ per cent.

11th October.—Further reduction in Bank deposit rates of one-quarter of 1 per cent. to 2, 2¼ and 2½ per cent. respectively for 6, 12 and 24 months' terms.

15th October.—Treasury Bill rate reduced from 2¼ to 2 per cent.

8th November.—Conversion loan of £14,601,806 issued in London at £99, maturing in 1964–74, interest at 3¼ per cent.

20th November.—An internal loan of £15,000,000 raised for Public Works and funding of Treasury Bills issued at 3 per cent. at £99 15s., maturing in fourteen years.

8th December.—Commonwealth 5 per cent. stocks in New York reached par.

13th December.—Flour tax reimposed. Rate of tax £2 12s. 6d. per ton.

17th December.—Further reduction of Bank Deposit rates—three and six months terms reduced to 1 and 1½ per cent. respectively. Treasury Bill rate on new issues and re-issues to be reduced to 1¾ per cent. from 1st January, 1935.

1935.

January.—Evidence of improved financial conditions was given in the increase in bank clearings and the decrease in unemployment during 1934. The total of bank clearings (including Treasury Bills) amounted to £2,095,000,000, and was 8.4 per cent. higher than the corresponding figure for 1933. Unemployment statistics disclosed by the trade union returns continued to show progressive improvement. Percentage unemployed in December quarter—18.8 per cent.—lowest level since May, 1930.

7th January.—Flour tax commenced to operate. Rate of tax, £2 12s. 6d. per ton.

18th January.—Conversion loan of £22,384,000 issued in London at par, interest at 3¼ per cent., repayable 1956–61. Largest single conversion operation.

2nd February.—Commonwealth Government announced £12,000,000 grant to States over three years for the purpose of adjusting farmers' debts by means of composition arrangements.

6th March.—The price of gold in Australian currency reached the new high level of £9 4s. 4d. per fine ounce.

13th March.—The Wheat Commission reported that production should be adjusted to find a new economic equilibrium at the existing world parity, as no permanent rise in price could logically be expected. The Commission further recommended that the wheat industry should be assisted through the application of a home consumption price, that a Commonwealth Board should be appointed to supervise oversea sales, and that a plan of debt adjustment should be undertaken over a period of seven years.

30th March.—New tariff schedule announced. Reduction in duties on apparel and stockings, farm and engineering machinery, and certain classes of motor body panels made in Great Britain.

20th May.—The Commonwealth Bank Board agreed to finance Revenue Deficits in 1935-36 to the limit of £4,730,000, subject to the funding of an equivalent amount of Treasury Bills during the year.

11th June.—Internal loan of £12,500,000, 3½ per cent. at £99 10s. repayable at par in 1949, raised for Commonwealth and State public works and funding of Treasury Bills.

30th June.—Public Debt of Commonwealth and States (including short-term debt) totalled £1,242,004,000—Commonwealth, £394,040,000, and States, £847,964,000. Net increase in 1934-35, £19,556,000, or 1.6 per cent.

24th July.—Conversion loan of £13,470,000 issued in London at 3 per cent. at par repayable 1939-41. Annual saving in interest and exchange of £26,000 per annum.

23rd September.—Commonwealth Budget for 1935-36 provided *inter alia* for reduction from 6 per cent. to 5 per cent. of super tax on property income; extension of the list of commodities exempted from sales tax; some remission of primage duty and a reduction in excise on tobacco of local origin; further restoration in part of public service salaries; extension of eligibility for war pensions and repatriation benefits; some expansion of the Defence programme; a contribution to interest and sinking fund payments on municipal loans; and the provision of a bounty on oranges exported during the 1935 season.

24th September.—Report of Commonwealth Grants Commission recommended increased special grants for 1935-36, namely, South Australia, £1,500,000; Western Australia, £800,000; Tasmania, £450,000.

4th to 7th October.—Conference of Commonwealth and State Ministers and Experts on the Wheat Industry. The conference approved in theory the application of a home consumption price for wheat, the scheme to be superintended by the Commonwealth.

15th November.—Commonwealth Government appointed Royal Commission to inquire into and report upon the banking and monetary systems of the Commonwealth.

26th November.—Internal loan of £7,500,000, 3½ per cent. at £99 15s., repayable at par in 1949, raised for Commonwealth and State public works and the funding of Treasury Bills. The optional privilege of tendering the bonds at their par value for Commonwealth probate purposes was withdrawn.

5th December.—An Act was passed to continue the operation of the Flour tax in 1936 to contribute towards a bounty on the 1935-36 harvest.

31st December.—Trade union unemployment percentage showed further reduction to 13.7 per cent. for fourth quarter.

1936.

7th January.—Conversion Loan in London of £21,657,000. New South Wales 5 per cent. stocks converted to 3 per cent., issued at £95 10s., maturing 1955-58.

17th January.—Internal conversion loan £2,393,000, Queensland £5 os. 9d. per cent., converted at 3½ per cent. at par.

28th February.—Commonwealth Bank announced a public issue of £1,000,000 Treasury Bills at a discount rate of 1½ per cent. The issue was unsuccessful, only £315,000 being subscribed.

2nd March.—Bank of New South Wales increased interest rates on fixed deposits to 2 per cent. for three months, $2\frac{1}{2}$ per cent. for six months, $2\frac{3}{4}$ per cent. for twelve months, and 3 per cent. for 24 months. Bank of Adelaide made similar increases on the following day.

24th March.—Commonwealth Bank and the other trading banks increased rates on fixed deposits to conform to the rates offered by the Bank of New South Wales from 2nd March.

2nd June.—Internal loan of £9,000,000, $3\frac{3}{4}$ per cent., issued at £98 10s., repayable 1951–52, under-subscribed by £1,800,000.

8th June.—Conversion loan in London of £16,551,000, at $2\frac{3}{4}$ per cent., issued at £99, repayable 1941–43. The stocks converted were 3 per cent. Western Australia, $3\frac{1}{2}$ per cent. Commonwealth and South Australia, and $4\frac{1}{2}$ per cent. New South Wales and Western Australia. The loan was over-subscribed.

25th June.—Import restrictions placed by the Government of Japan on imports from Australia, on the grounds that Australia had applied "unreasonable restrictive measures in respect of the importation of goods produced or manufactured in Japan."

4th August.—Excess of exports over imports for year 1935–36 was £stg. 22,862,000. Wheat prices rose to a new six-year peak of 5s. per bushel for city parcels in Melbourne.

10th September.—Commonwealth Budget for 1936–37 introduced, providing for taxation remissions equal to £5,275,000 in a full year (£3,868,000 for remainder of current year); increased grants on account of Federal Aid Roads; restoration of public service salaries; increases in certain classes of war pensions; increased old-age and invalid pension rates, and liberalized conditions for maternity allowances. A surplus of £45,000 was anticipated for 1936–37.

11th September.—Commonwealth Grants Commission recommended the following grants for 1936–37: South Australia £1,330,000, Western Australia £500,000, and Tasmania £600,000. Sales tax reduced from 5 per cent. to 4 per cent. and further exemptions granted.

18th September.—Further exemptions from primage duties promulgated.

26th September.—Remissions of sales tax, estimated at £1,000,000, on a wide range of goods.

28th September.—Price of gold rose by about 3s. to £A3 13s. 9d. per fine ounce.

7th November.—Australian Loan Council decided to grant extra £1,000,000 to Western Australia because of drought conditions in that State; loan programme for year increased by £750,000 to £22,450,000.

26th November.—Internal loan of £7,500,000, $3\frac{3}{4}$ per cent., at £97 10s., maturing on 15th November, 1951.

27th December.—Settlement of trade dispute with Japan.

1937.

3rd January.—Japan resumed buying at Sydney wool sales; prices advanced from 10 to 15 per cent.

13th January.—The percentage of unemployment amongst trade unionists declined to 10.7 in the last quarter of 1936.

28th January.—Life assurance sold during 1936 was a record for Australia.

6th April.—Wheat prices for city parcels touched 6s. a bushel in Melbourne.

27th April.—Internal loan of £7,500,000, $3\frac{3}{8}$ per cent., at £99 5s., maturing on 15th October, 1948.

10th May.—Export quota of 400,000 tons allotted to Australia under International Sugar Agreement.

9th June.—Conversion loan in London. £12,360,958 New South Wales stocks converted to $3\frac{1}{2}$ per cent., issued at £96 10s., maturing in 1950–52.

23rd June.—Commonwealth Arbitration Court increased the Commonwealth basic wage by an average of 5s. for males and 2s. 6d. for females.

30th June.—Deposits in the trading banks reached record total of £320,917,000 in the quarter ended June, 1937. Increase for the year was £22,460,000. Savings bank deposits were also a record at £230,851,000.

3rd August.—Australia's favourable balance for 1936-37 was £stg. 36,684,000 compared with £stg. 22,862,000 in 1935-36 and £stg. 16,013,000 in 1934-35.

24th August.—Presentation of Report of the Royal Commission on Banking.

Fourth Report of the Commonwealth Grants Commission recommended the following State grants: South Australia, £1,200,000; Western Australia, £575,000; Tasmania, £575,000.

27th August.—Commonwealth Budget presented. Provision of £11,531,000 for defence. Invalid and old-age pensions raised from 19s. to £1. No taxation reductions. Estimated surplus, £30,000.

19th October.—Australian butter (salted) touched new seven-year high level of 135s. to 136s. a cwt. on London market.

23rd October.—Commonwealth elections held.

18th November.—Conversion loan in London of £11,409,965 Commonwealth Government stocks converted to 3½ per cent., issued at £97, and maturing in 1951-54.

30th November.—Internal loan of £8,194,760, 3½ per cent., issued at £99 15s., repayable 1951.

16th December.—Radio licences in Australia reached 1,000,000 on 30th November. Eighty homes out of every 100 in metropolitan areas had a wireless set and 44 out of every 100 in country areas.

1938.

13th January.—Prime Minister announced that it was hoped to resume assisted British migration by the end of 1938.

20th January.—In the last quarter of 1937 unemployment among trade unionists had fallen to 8.2 per cent., the lowest point since August, 1927.

24th January.—Gold produced in Australia during 1937 was 1,381,135 fine ounces, valued at £A11,993,007, the greatest output since 1917.

14th March.—Modification of existing trade agreement between Australia and New Zealand.

24th March.—Australian Defence Programme involving expenditure of £43,000,000 over three years announced. This programme was subsequently expanded.

31st March.—British Empire Producers' Conference opened at Sydney.

9th April.—Substantial reductions in cable and wireless messages between Empire countries.

5th May.—Commonwealth loan in London of £stg.7,000,000, 3½ per cent., issued at £99, maturing in 1952-56; £2,000,000 for Defence purposes and the balance for conversion of portion of Australian Treasury Bills held by Commonwealth Bank in London.

19th May.—Internal loan of £10,418,130, 3½ per cent., issued at £99 10s., maturing in 1952-54.

17th June.—Internal conversion loan of £2,186,120, 3½ per cent., issued at £99 10s., maturing in 1952-54.

30th June.—National Insurance Bill passed by Commonwealth Parliament.

2nd July.—New Trade Treaty between Japan and Australia signed.

5th July.—Factory employees in 1936-37 were 523,948, the highest ever recorded.

13th July.—Australia's favourable overseas trade balance for 1937-38 was £stg.11,863,000, the lowest since the depression years.

26th August.—Premiers of all States agreed upon plan for home-consumption price for wheat.

31st August.—Taxation in Australia during 1937-38 was £17 6s. per head of population.

9th September.—General coal strike commenced in all States except Western Australia.

20th September.—Fifth Report of the Commonwealth Grants Commission recommended the following State grants: South Australia, £1,040,000; Western Australia, £570,000; and Tasmania, £410,000.

21st September.—Commonwealth Budget presented. Provision of £16,796,000 for Defence. Substantial increases in taxation. Estimated surplus, £26,000.

29th September.—Sales tax raised from 4 to 5 per cent. ; estimated increased yield, £1,300,000. Income tax raised by 15 per cent. ; estimated increased yield, £1,400,000.

21st October.—Meeting of Loan Council at Canberra. Commonwealth and State Governments discussed urgent Defence works.

9th November.—Internal conversion and redemption loan of £69,026,730 and new loan of £4,089,131, 3½ per cent., issued at par, maturing in 1952-54.

22nd November.—Savings Banks deposits attained new record total of £243,220,000 in October, 1938, an increase of £8,903,000 on total for October, 1937.

2nd December.—Flour tax of £5 15s. per ton applied under Commonwealth Government's wheat legislation. The tax was reduced to £5 7s. 6d. per ton from 16th December.

6th December.—Revised three-year Defence programme estimated to cost £63,000,000.

8th December.—Conversion loan in London of £2,517,800, 4 per cent., issued at par, maturing in 1955-70.

17th December.—In announcing a subscription of £6,000,000 to the conversion and defence loan the Chairman of the Commonwealth Bank stated that the Bank considered it should make adequate funds available to minimize any possible deflationary consequences of reduced income from exports and diversion of money to defence works.

1939.

2nd January.—Owing to the refusal of waterside workers to load pig-iron for Japan 4,000 steel workers at Port Kembla were thrown out of employment.

29th January.—Arrival of technical members of British Air Mission to investigate possibilities of further development of aircraft manufacture in Australia. Subsequently one of the members stated that he was surprised at the potential capacity of Australian factories for the manufacture of aircraft.

7th February.—Internal loan of £8,525,710, 3½ per cent., issued at par, maturing in 1953-55, for public works and other purposes.

8th February.—Employees in factories during 1937-38 increased by 35,000 to 559,160 and the value of production rose from £178,000,000 in 1936-37 to £196,000,000 in 1937-38.

17th March.—Council for Scientific and Industrial Research directed to make comprehensive survey of the raw materials of industry ; to ascertain what imports were vital to continuance of national effort ; and to devise means of coping with the non-arrival of vital raw materials from overseas.

24th March.—Prime Minister announced that British and Commonwealth Governments had adopted the general recommendations of the British Air Mission regarding the manufacture of military aircraft in Australia ; plant and equipment to start the industry estimated to cost £1,000,000.

27th March.—Test flight of Wirraway No. 1, the first modern service aircraft built in Australia.

29th March.—Revising its earlier decision, the Government decided to introduce immediately a compulsory register of man-power.

4th May.—The proposed new industry for the manufacture of tinplate in Australia would probably be established by Broken Hill Pty. Co. Ltd. at Whyalla (South Australia) at a cost of £2,500,000 and would give employment to 1,000 men.

9th May.—First cargo of steel—8,200 tons—ever sent from Australia to England left Newcastle.

24th May.—The Minister for Supply announced decision to proceed immediately with a compulsory register of productive capacity and resources of industries of defence significance.

30th May.—Internal loan of £4,751,470, 3½ per cent., issued at £99, maturing in 1953-55, for public works and other purposes.

7th June.—Commonwealth loan in London of £6,000,000, 4 per cent., issued at £98 10s., maturing in 1961-64, for defence purposes.

8th June.—Government accepted amendment to National Register Bill to provide for register of private wealth ; all persons possessing assets of £500 or more to be required to answer comprehensive range of questions.

10th June.—*Parramatta*, the new 1,400-ton sloop for the Royal Australian Navy, launched at Cockatoo Dock.

22nd June.—Loan Council agreed to loans of £41,000,000 for Commonwealth and States.

27th June.—Internal loan by Commonwealth Bank of £3,000,000, 3½ per cent., issued at par, maturing 15th August, 1943, for public works and other purposes.

1st July.—Public debt at 30th June, 1939, was £1,295,022,972 or £186 os. 10d. per head of population.

2nd July.—It was reported that more than twenty ships had been chartered to carry to Britain cargoes of Australian steel totalling between 150,000 and 170,000 tons.

7th July.—Commonwealth Government surplus for 1938-39 was £627,309; the aggregate State deficit was £3,870,275.

1st August.—Savings Bank deposits reached record total of £245,548,615 at 30th June, 1939, equal to £35 5s. 7d. per head of population.

15th August.—Commonwealth Arbitration Court decided that in general the standard working week for Australian industry should be 44 hours.

26th August.—Commonwealth Government assumed wide powers to safeguard national interests.

28th August.—Commonwealth control of oversea exchange transactions and export of money.

29th August.—Commonwealth took over a number of Australian ships.

3rd September.—Australia declared war on Germany.

4th September.—Board set up for the control of shipping. Captain G. D. Williams appointed Controller of Shipping.

5th September.—Britain bought Australia's wool clip and surplus food products.

7th to 8th September.—Action taken for the control of prices to prevent profiteering. Professor D. B. Copland appointed Controller of Prices with the assistance of two assessors. Proclamation issued enumerating eighteen groups of commodities immediately subject to price control at rates obtaining on 31st August; list to be extended later as required.

Temporary budget presented providing for increases in income tax, sales tax, customs and excise duties, including spirits, beer and petrol, to raise £5,910,000. Expenditure for 1939-40 estimated at £101,916,000 and revenue £101,940,000.

13th September.—Status of official representative in Canada raised to that of High Commissioner. Simultaneously Canada intends to appoint a High Commissioner in Australia.

Australian wheat crop during war period purchased by Commonwealth Government and marketed through a compulsory Federal Wheat Pool with Mr. Clive McPherson as Chairman.

15th September.—Special Volunteer Force of 20,000 to be enlisted for service within or without Australia.

21st September.—Australia offered the British Government six Australian Air Squadrons for service overseas.

23rd September.—Commonwealth control of exports.

29th September.—Regulations issued to create War-time Price-Fixing Organization, conferring virtually unlimited powers on Commissioner of Prices, who is enabled to compel sale of any goods in trade in Australia in the reasonable and ordinary course of trade.

3rd October.—Under the agreement with the British Government, Australian growers will receive 13.4375d. per lb. for current wool clip and also one-half of profit on resales by Britain.

5th October.—Commonwealth Emergency Planning and Organization Regulations gazetted, under which sixteen separate classes of industries engaged in manufacture of wide range of commodities are to furnish returns of their manufacturing operations.

Commonwealth Government assumed wide powers for marshalling of oversea credit of Australia for national purposes.

9th October.—Australian Air Expeditionary Force to be built up to about 3,200 men.

21st October.—Compulsory military training for home defence to be introduced from January, 1940.

27th October.—Commonwealth and State taxation for 1938–39 was £124,543,896 or at the rate of £17 19s. 7d. per head of population.

30th October.—Great Britain's purchases from Australia during war period are estimated at £100,000,000 annually.

31st October.—Plans for the Australian Air Expeditionary Force recast in view of unprecedented Empire Air Scheme.

1st November.—Further National Security Regulations issued empowering Commonwealth Government virtually to commandeer services of Australian factories.

17th November.—It was announced that between 8,000 and 10,000 men will probably be engaged in the manufacture of military aircraft in Australia during 1941.

29th November.—Prime Minister announced that Australian troops would embark for abroad early in New Year.

30th November.—Revised Commonwealth Budget for 1939–40 increased defence expenditure from £33,137,000 to £62,014,000. No increase in taxation.

1st December.—Internal loan of £12,000,000, arranged by the Commonwealth Bank in conjunction with the trading banks, interest 3½ per cent., issued at par, £4,000,000 repayable in each of the years 1942–44, for purposes of defence and public works.

6th December.—Commonwealth Government decided to provide subsidy up to £1,500,000 to encourage the production of complete motor cars in Australia.

8th December.—Conversion loan in London of £4,604,800, 3½ per cent., issued at £99, maturing in 1942–44.

15th December.—Prime Minister stated that first objective of Australia's contribution to the Empire Air Scheme would be the training of 26,000 men, including 10,400 pilots, at an estimated cost of £A50,000,000.

22nd December.—Company with nominal capital of £1,000,000 to be formed by Australian Consolidated Industries Ltd. to manufacture motor engines and chassis in Australia.

30th December.—Plans announced for a new £1,000,000 factory in Sydney for the manufacture of aeroplane engines.

1940.

4th January.—Commencement of production of crude oil at Glen Davis, New South Wales.

8th January.—Right Hon. R. G. Casey, Minister for Supply and Development, appointed His Majesty's Envoy Extraordinary and Minister Plenipotentiary to the United States of America.

9th January.—Mr. C. E. Gauss, American Consul-General at Shanghai, appointed Envoy Extraordinary and Minister Plenipotentiary of the United States of America to Australia.

11th January.—Britain agreed to purchase large quantity of Australian wheat.

15th January.—Special committee appointed to direct all shipping between Australia and Great Britain.

24th January.—Commonwealth Bank and Private Trading Banks reduced rates on fixed deposits by 5s. per cent.

31st January.—Agreement with Australian Consolidated Industries Ltd. for manufacture of motor cars in Australia suspended by Commonwealth Government.

7th February.—Recruiting for reinforcements for Second Australian Imperial Force to begin on 1st March, at rate of about 2,400 per month.

29th February.—Appointment of Aircraft Production Commission to supervise local production and maintenance of aircraft required in Australia for Empire Air Scheme.

1st March.—Internal loan of £18,164,740, 3½ per cent. for five years, or 3½ per cent. for ten to sixteen years, issued at par, for defence and public works.

6th March.—Additional troops to be recruited in Australia for service abroad ; Second Australian Imperial Force to consist of existing Sixth Division, a Seventh Division and Corps troops totalling in all 48,000 men ; further 42,000 reinforcements to be recruited before June, 1941 : Army Co-operation Squadron of Royal Australian Air Force also to go abroad.

11th March.—General coal strike began after failure of proposal that colliery owners or mining unions should apply to Commonwealth Court of Conciliation and Arbitration for compulsory conference.

14th March.—New Commonwealth Ministry sworn in ; Country Party represented by three Ministers and two Assistant Ministers.

18th March.—Sale of war savings certificates began.

29th March.—New regulations governing private investment of money and interest rates.

30th March.—Further restrictions on imports from non-sterling countries ; import of more than £2,000,000 worth of goods a year prohibited.

10th April.—Announcement by Commonwealth Treasurer that Australian war expenditure by Commonwealth Government to 31st March was £30,773,000.

11th April.—Commonwealth Government ordered immediate compulsory census of coal stocks throughout Australia.

1st May.—Commonwealth Bank reduced interest rate on Treasury Bills from $1\frac{1}{2}$ to $1\frac{1}{4}$ per cent.

2nd May.—Commonwealth Treasurer announced proposals to increase taxation revenue by £20,000,000 in next financial year.

3rd May.—Regulations issued empowering Commonwealth Government to re-open coal-mines and protect all free labour engaged.

9th May.—Commonwealth Government decided to re-open coal-mines ; volunteer labour to be sought.

10th May.—Gas restrictions imposed in Sydney owing to coal strike.

13th May.—New South Wales Premier signed proclamation calling for volunteer labour for coal-mines. Age-limit for Australian Imperial Force volunteers increased from 35 to 40 years.

20th May.—Coal strike ended ; dispute to be referred immediately to Commonwealth Court of Conciliation and Arbitration.

22nd May.—Plans for acceleration of war effort announced by Prime Minister ; a third Australian Imperial Force division for service abroad to be raised ; Brigadier-General H. W. Lloyd appointed Director-General of Recruiting ; Mr. Essington Lewis appointed Director-General of Munition Supplies ; naval graving dock for capital ships to be constructed at Sydney at cost of nearly £3,000,000.

28th May.—Commonwealth Bank and Private Trading Banks reduced interest rates on fixed deposits by $\frac{1}{4}$ per cent. Newsprint rationing plan announced.

29th May.—Internal war loan of £20,582,400, $2\frac{3}{4}$ per cent. for five years, or $3\frac{1}{2}$ per cent. for ten to sixteen years.

31st May.—Commonwealth Parliament passed Bill concluding agreement between Government and Australian Consolidated Industries Ltd. for manufacture of motor cars in Australia, but clause granting monopoly to company deleted.

6th June.—Commonwealth Government to spend £2,032,000 on training aircraft and bomber planes ; order for 500 trainers placed in Australia.

10th June.—Italy declared war on Allies.

11th June.—Announcement of petrol rationing scheme to effect reduction of one-third of petrol consumption.

21st June.—National Security Act passed giving Commonwealth Ministry widest powers ever held by an Australian Government.

23rd June.—Mass production of anti-tank guns planned by Commonwealth Government. Importance to the war effort of salvage of all waste metals and paper stressed by Minister for Supply.

25th June.—Arrival of New Zealand Minister for Supply to discuss industrial co-operation between Australia and New Zealand.

26th June.—Plans prepared by Ministry of Munitions for expenditure of £50,000,000 to expand munitions production.

28th June.—Further non-sterling import restrictions on goods valued at £2,650,000.

29th June.—Camps to accommodate 30,000 more troops under home defence scheme to be provided.

6th July.—Prime Minister stated 150,000 persons will be employed directly and indirectly in making munitions within twelve months.

8th July.—Commonwealth Treasurer announced surplus of £2,928,000 for year ended 30th June.

10th July.—Prime Minister announced extension of munitions production in Australia.

12th July.—San Francisco—Auckland air service inaugurated.

19th July.—Australian cruiser H.M.A.S. *Sydney* sinks Italian warship *Bartolomeo Colleoni*. Australian Imperial Force strength in Australia fixed at 80,000; recruiting to be temporarily interrupted. Imports from Netherlands East Indies to be given similar treatment to that given goods from other countries within sterling area.

26th July.—Prime Minister announced establishment of Trade Unions Advisory Panel; invited Australasian Council of Trade Unions to be represented; six other unions joined panel.

31st July.—Proclamation issued for the calling up of four new age-groups (20, 22, 23 and 24) of men in Australia for military training under plan to maintain home defence force of 250,000.

1st August.—Introduction of compulsory system of tax collection by instalments announced by Commonwealth Treasurer.

2nd August.—War Cabinet plans to expand production of power alcohol; committee to be appointed to explore possibilities of producing fuel from molasses and wheat.

9th August.—Australian motor-car importers agree to cease importation of motor chassis for nine months.

13th August.—Air crash at Canberra; three Commonwealth Ministers killed.

14th August.—Loan Council makes available funds for essential works to continue; unemployment relief works to be reduced.

16th August.—Amended petrol rationing proposals announced.

18th August.—Sir John Latham appointed first Envoy Extraordinary and Minister Plenipotentiary to Japan.

20th August.—Commonwealth Treasurer estimated cost of war to be £177,000,000 for 1940-41. Unemployed registration lowest on record.

26th August.—First Australian petrol produced on commercial scale distilled.

29th August.—Record Australian butter production for 1939-40.

1st September.—Record Australian wool production for 1939-40.

3rd September.—Extension of Empire Air Training Scheme announced by Minister for Air; another 1,200 aeroplanes to be acquired.

18th September.—Australian price of gold reached record peak at £10 14s. a fine ounce.

21st September.—Commonwealth elections held.

24th September.—War Cabinet decided to form Ninth Division of Australian Imperial Force.

1st October.—Petrol rationing began.

8th October.—Further expansion of Royal Australian Air Force announced by Minister for Air; 25 per cent. increase in intake of pupil pilots to initial training schools.

9th October.—Amendment to Commonwealth Investment Control Regulations announced.

10th October.—Arrangements completed for storage in United States of America of 250,000,000 lb. of Australian wool as strategic reserve to be held by British Government.

11th October.—Commonwealth Government loan of £1,000,000 to States for drought relief.

22nd October.—Australian political leaders agreed on establishment of National Advisory War Council.

27th October.—Reconstruction of Commonwealth Government announced by Prime Minister.

28th October.—Prime Minister announced new War Cabinet, comprising six members instead of nine as in previous Government.

6th November.—Sir John Latham, Envoy Extraordinary and Minister Plenipotentiary to Japan, left for that country.

8th November.—Sinking of British oversea vessel in Bass Strait, attributed to enemy mine; Bass Strait temporarily closed to shipping.

Wheat stabilization scheme announced; guaranteed price of 3s. 6d. per bushel f.o.r., ports, bagged wheat, and licensing of growers to ensure rigid control over production. Commonwealth Government approved loan of £2,770,000 for drought relief.

Action taken by Commonwealth Government to control by licence release of dutiable goods in order to prevent abnormal clearances in anticipation of higher duties.

12th November.—Australian war expenditure rose to £153,000,000 a year; £98,000,000 more than previous year.

18th November.—Revised wheat stabilization plan providing for payment of 3s. 10d. per bushel f.o.b., ports, bagged wheat.

21st November.—Commonwealth Treasurer introduced record war-time Budget, providing for increases in direct and indirect taxation. For 1940–41 revenue estimated at £150,100,000, expenditure, omitting War Services, at £84,853,000, and War Services expenditure charged to the Budget at £65,220,000, making total expenditure of £150,073,000. In addition loan expenditure estimated at £119,731,000, comprising £117,231,000 for defence and war purposes.

28th November.—Internal war and works loan of £28,499,420, 2½ per cent. for five years and 3½ per cent. for ten to sixteen years.

5th December.—Commonwealth Government effected compromise with Labour Party on Budget proposals; threat of election removed.

Approval of Commonwealth Treasurer necessary for certain building work.

8th December.—Payment of third advance of 3d. per bushel on wheat of 1939–40 crop.

10th December.—Australia's total expenditure on war and defence since 1st July, 1939, £109,524,000.

11th December.—Revised scheme for applying War-time Company Tax accepted by Commonwealth Government.

13th December.—Ten more age-groups liable for military service in Commonwealth; all single men and widowers without children, aged 19 years and in the 25 to 33 age-groups (inclusive) affected.

16th December.—Prime Minister announced establishment of Central Reference Board for conciliation in coal industry.

31st December.—Broken Hill Pty. Co. Ltd. applied to Commonwealth Treasurer for permission to raise £2,500,000 by issue of 2,500,000 shares at par; intends to use extra capital for shipbuilding.

APPENDIX.

(Recent information and returns which have come to hand since the various chapters were sent to press are given hereunder.)

CHAPTER III.—GENERAL GOVERNMENT.

§ 3. Administration and Legislation, p. 64.

2 Governors-General and Ministries—

Commonwealth Ministry: The Commonwealth Ministry was reconstructed on 26th June, 1941, and is now constituted as follows:—

*Prime Minister and Minister for Defence Co-ordination	The Rt. Hon. R. G. Menzies, K.C.
†Treasurer	The Hon. A. W. Fadden.
*Attorney-General and Minister for the Navy	The Rt. Hon. W. M. Hughes, C.H., K.C.
*Minister for the Army	The Hon. P. C. Spender, K.C.
†Minister for Supply and Development and Vice-President, Federal Executive Council	Senator the Hon. G. McLeay.
*Minister for Air and Minister for Civil Aviation	The Hon. J. McEwen.
*Minister for the Interior and Minister for Information	Senator the Hon. H. S. Foll.
†Minister for Commerce	The Rt. Hon. Sir Earle Page, G.C.M.G.
†Minister for External Affairs, Minister for Health, and Minister for Social Services	The Hon. Sir Frederick Stewart.
*Minister for Munitions	Senator the Hon. P. A. M. McBride.
†Minister for Trade and Customs	The Hon. E. J. Harrison.
†Minister for Labour and National Service	The Hon. H. E. Holt.
Minister for Repatriation	Senator the Hon. H. B. Collett, C.M.G., D.S.O., V.D.
Postmaster-General	The Hon. T. J. Collins.
Minister for Aircraft Production	Senator the Hon. J. W. Leckie.
†Minister for Transport	The Hon. H. L. Anthony.
Minister for War Organization of Industry	The Hon. E. S. Spooner.
Minister for Home Security	The Hon. J. P. Abbott, M.C.
Minister for External Territories	The Hon. A. McK. McDonald.
* War Cabinet.	† Economic and Industrial Committee.

CHAPTER V.—TRANSPORT AND COMMUNICATION.

B. RAILWAYS.

§ 1. General.

9. Summary of Operations, p. 116.—A summary of the working of all Government railways open for general traffic during 1939-40 is given hereunder :—

GOVERNMENT RAILWAYS, AUSTRALIA, 1939-40.

Particulars.	C'wealth.	N.S.W.	Vic.	Q'land. (a)	S. Aust. (b)	W. Aust.	Tas.	Aust.
Miles Open	2,261	6,141	4,759	6,497	2,558	4,381	658	27,195
Revenue—								
Coaching .. £'000	230	8,079	4,491	2,291	788	725	156	16,760
Goods	247	10,852	4,637	5,646	2,178	2,744	362	26,666
Miscellaneous ..	145	(c) 1,024	733	(d)	218	87	18	2,225
Total Revenue ..	622	(e) 19,955	9,861	7,937	3,184	3,556	536	45,651
Expenditure	841	14,647	8,059	6,254	2,950	2,820	(f) 591	36,171
Train-miles Run '000	958	29,471	17,008	14,090	5,028	(g) 6,262	(h) 2,081	75,708
Earnings per train-mile ..	13s. 0d.	13s. 7d.	11s. 7d.	11s. 3d.	10s. 9d.	11s. 4d.	5s. 2d.	12s. 1d.
Expenditure per train-mile ..	17s. 7d.	9s. 11d.	9s. 6d.	8s. 11d.	9s. 11d.	9s. 0d.	5s. 8d.	9s. 7d.
Earnings	135. 35	73. 40	81. 72	78. 81	92. 67	79. 54	110. 25	79. 23
Passenger-journeys '000	129	179,066	144,649	24,533	17,642	10,793	2,436	379,248
Coal, Coke and Shale carried '000 tons	71	6,888	189	705	126	268	453	8,636
Other Minerals	8	1,350	(i)	473	595	(j) 219	(k)	2,645
Live Stock	70	808	640	512	190	111	31	2,362
Other Goods	114	5,574	5,357	3,728	1,788	2,061	395	19,017
Total Freight	199	14,620	6,186	5,418	2,699	2,659	879	32,660

(a) Exclusive of Uniform Gauge Railway. (b) Including Road Motors. (c) From sale of electrical energy only, other miscellaneous included with Coaching and Goods. (d) Included with Coaching. (e) Excluding Governmental contributions towards losses on non-paying developmental lines. (f) Excluding depreciation. (g) Including Assistant and Light Miles. (h) Including Assistant, Light and Rail-motor Miles. (i) Included with Other Goods. (j) Miscellaneous—includes Ores and Minerals. (k) Included with Coal, Coke and Shale.

[NOTE.—The figures in the above table, taken from quarterly statements, are preliminary only, and do not entirely agree with the final particulars in the Annual Railways Reports of the several States.]

D. MOTOR VEHICLES.

5. Motor Vehicles on the Register, p. 133.—Motor vehicles registered at 30th June, 1940, were as follows :—

MOTOR VEHICLES REGISTERED AT 30th JUNE, 1940.

State or Territory.	Motor Cars.	Commercial Vehicles.	Motor Cycles.	All Vehicles.	
				No.	Per 1,000 of Population.
New South Wales	210,808	75,887	21,542	308,237	110.8
Victoria	156,337	84,575	25,705	266,677	140.1
Queensland	77,037	44,689	8,031	129,757	127.1
South Australia	56,510	23,966	8,825	89,301	149.6
Western Australia	38,930	25,135	6,791	70,856	151.7
Tasmania	17,598	5,235	3,351	26,184	110.1
Northern Territory	459	1,061	100	1,620	205.7
Australian Capital Territory	1,854	446	91	2,391	187.5
Australia	559,533	260,994	74,496	895,023	127.3

6. New Vehicles Registered, p. 134.—New vehicles registered in the various States during the year 1939-40 were as follows:—

REGISTRATIONS OF NEW VEHICLES DURING THE YEAR ENDED JUNE, 1940.

Vehicles.	N.S.W.	Vic.	Q'land.	S.A.(a)	W.A.(b)	Tas.	A.C.T.	Total.
Motor Cars	14,255	11,613	5,786	4,028	1,744	1,400	151	38,980
Commercial Vehicles, etc.	6,117	5,773	4,037	1,623	450	540	18	18,558
Motor Cycles	1,385	1,370	721	535	170	176	6	4,363
Total	21,757	18,756	10,544	6,186	2,364	2,116	178	61,901

(a) Exclusive of Northern Territory.

(b) Metropolitan Area only.

F. AVIATION.

13. Statistical Summary, p. 148.—The subjoined table gives a summary of operations in 1939-40:—

CIVIL AVIATION, 1939-40.

Registered Aircraft Owners. (a)	Registered Aircraft. (a)	Licensed Pilots. (a)		Flights Carried Out.	Hours Flown.	Approx. Mileage.	Passengers Carried.	Weight of Goods Carried.	Weight of Mails Carried.
		Private.	Commercial.						
No.	No.	No.	No.	No.	No.	Miles.	No.	lb.	lb.
AUSTRALIA.									
137	288	1,225	324	175,737	120,133	12,822,751	142,797	1,770,738	6416,996
NEW GUINEA.									
9	43	(c)	(c)	14,142	13,814	1,253,632	16,984	23,499,629	146,998

(a) At 30th June, 1940.

(b) Includes gross weight of oversea mails.

(c) Included in Australia.

G. POSTS, TELEGRAPHS AND TELEPHONES.

§ 6. Radio Telegraphy and Telephony.

2. Wireless Licences, p. 170.—The following table shows the number of each class of licence issued in each State, etc., at 30th June, 1940:—

WIRELESS LICENCES IN FORCE AT 30th JUNE, 1940.

Station Licence.	N.S.W.	Vic.	Qld.	S.A.	W.A.	Tas.	N.T.	A.C.T.	Aust.
Coast	1	1	6	1	5	3	1	..	18
Ship	32	94	14	10	3	1	1	..	205
Aircraft	9	10	5	5	3	2	1	..	35
Land (a)	19	4	61	35	77	9	50	1	256
Broadcasting (b)	35	19	19	8	9	8	..	1	99
Broadcast Listeners	456,012	348,158	151,109	124,585	87,764	42,182	306	2,143	1,212,259
Experimental	101	106	42	37	26	9	..	..	321
Portable	13	2	8	4	6	..	6	2	41
Special	72	28	21	3	12	1	..	..	137
Total	456,344	348,422	151,285	124,688	87,905	42,215	365	2,147	1,213,371

(a) In addition to the licensed stations there are two operated by the Postmaster-General's Department, viz., Camooweal (Q.) and Wave Hill (N.T.). (b) There are also 29 stations operated by the National Broadcasting Service, including 3 short-wave stations (VLR, Lyndhurst, Vic.; VLQ, Sydney, New South Wales; and VLW, Perth, Western Australia).

CHAPTER XII. MINERAL INDUSTRY.

§ 1. The Mineral Wealth of Australia.

3. Value of Production, p. 280.—The value of gold production and the total value of mineral production in Australia for 1939 are given in the following table:—

MINERAL PRODUCTION.—VALUE, 1939.

Mineral.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	N. Terr.	Total.
	£	£	£	£	£	£	£	£
Gold	848,985	1,533,899	1,428,598	38,895,11	796,085	192,596	163,414	16,002,472
Other Minerals	11,274,766	714,276	3,128,364	3,281,286	492,447	1,864,145	81,064	20,836,342
Total	12,123,751	2,248,165	4,556,962	3,320,181	12,288,532	2,056,741	244,478	36,838,814

CHAPTER XX.—POPULATION.

§ 4. Distribution and Fluctuation of Population.

2. Growth and Distribution, p. 519.—The population of Australia at 31st December, 1940, was estimated at 7,068,689 persons distributed amongst the States and Territories as follows:—

ESTIMATED POPULATION AT 31st DECEMBER, 1940.

State or Territory.	Males.	Females.	Persons.
New South Wales	1,401,005	1,388,118	2,789,123
Victoria	949,764	969,010	1,918,774
Queensland	536,775	492,838	1,029,613
South Australia	297,849	300,242	598,091
Western Australia	244,137	224,174	468,311
Tasmania	123,225	119,832	243,057
Northern Territory	6,308	2,544	8,852
Australian Capital Territory	7,034	5,834	12,868
Total	3,566,097	3,502,592	7,068,689

CHAPTER XXIII.

LABOUR, WAGES AND PRICES.

D.—EMPLOYMENT.

§ 2. Fluctuations in Employment.

2. Unemployment, p. 720.—The following are the percentages of unemployment in each State for the four quarters of 1940 and the first quarter of 1941.

UNEMPLOYMENT.—PERCENTAGES.

Period.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1940—							
March Quarter	9.7	6.5	5.8	8.5	6.9	4.8	7.9
June " (a)	15.9	6.6	6.8	8.3	5.6	5.0	10.5
September "	9.8	5.9	4.9	6.6	6.0	4.6	7.4
December "	8.5	4.3	4.5	4.7	4.0	6.5	6.2
1941—							
March Quarter	7.0	3.2	5.9	3.9	4.3	3.6	5.3

(a) Coal-mining employees out of work owing to an industrial dispute were excluded from the tabulation, but persons in other industries indirectly unemployed owing to the dispute were included.

GENERAL INDEX.*

Note.—This index is followed by a list of maps, graphs and diagrams, also a list of special articles, etc., in previous issues of the Official Year Book. Area, population, etc., of particular localities are indexed under the locality concerned. Where the subject matter extends continuously over more than one page the first page only is indexed.

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S. R. CARVER, Acting Commonwealth Statistician.