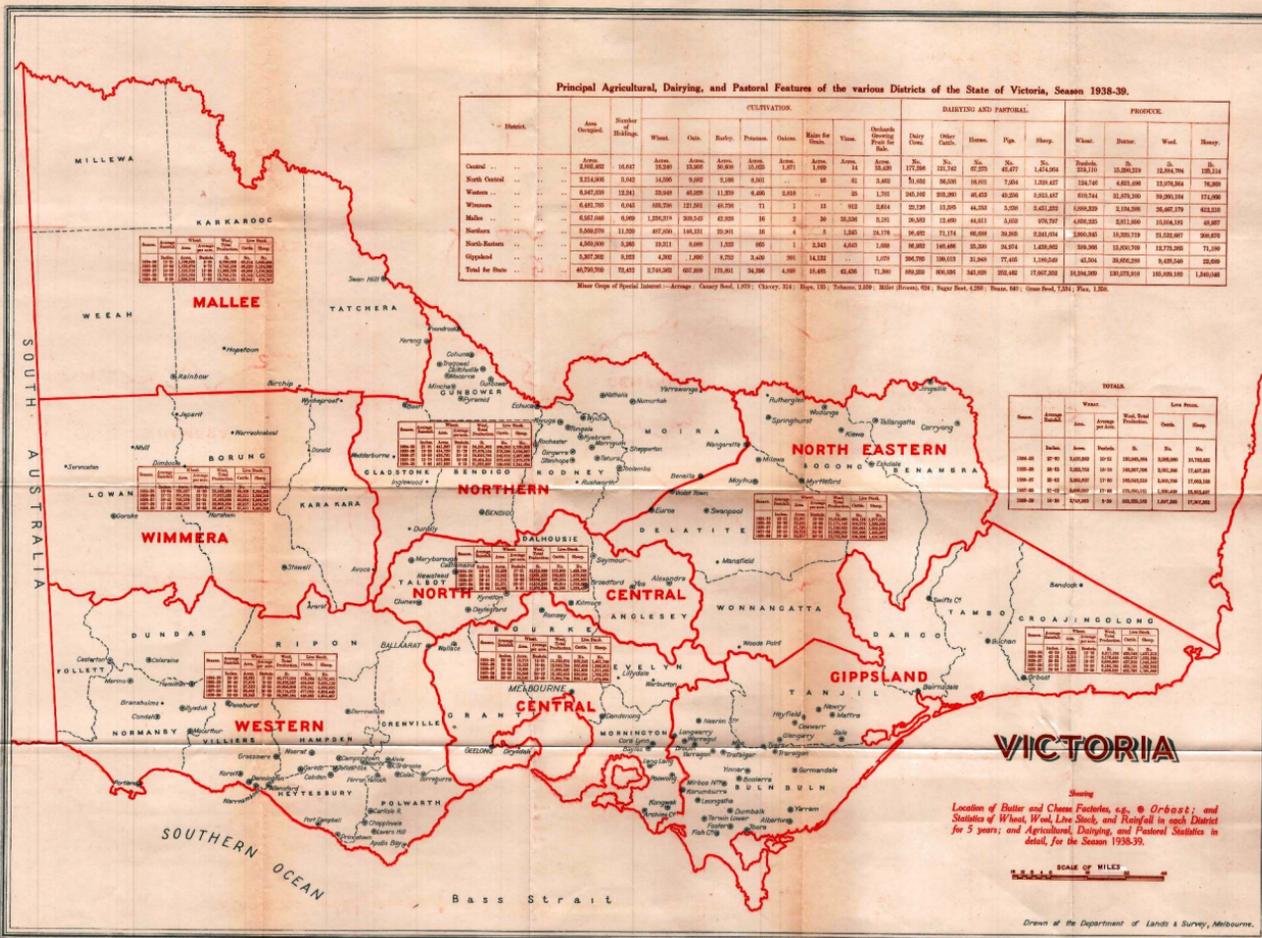


Principal Agricultural, Dairying, and Pastoral Features of the various Districts of the State of Victoria, Season 1938-39.

District	Area Occupied	Stocking Holdings	CULTIVATION										DAIRYING AND PASTORAL					PRODUCE	
			Wheat	Oats	Barley	Peas and Beans	Other Cereals	Other For. Crops	Vines	Orchards Growing Fruit for Sale	Dairy Cows	Other Cattle	Horses	Pigs	Sheep	Wool	Butter	Wool	Meat
Overall	4,622,780	16,417	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780	4,622,780
North Central	524,000	2,042	14,000	9,800	5,500	5,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Wimmera	6,647,200	22,841	20,000	11,200	6,600	6,600	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Winnamatta	6,482,700	2,042	100,700	122,300	67,700	71	2	13	102	2,614	20,200	12,200	46,200	5,200	2,452,200	6,000,200	3,100,200	2,682,270	622,510
Mallee	6,227,700	6,000	1,200,700	1,200,700	62,000	10	2	20	20,200	2,200	20,200	12,600	46,200	5,200	2,452,200	6,000,200	3,100,200	2,682,270	622,510
North Eastern	5,200,200	11,200	417,200	148,100	20,200	10	4	1	1,200	20,200	10,400	10,100	10,100	10,100	10,100	10,100	10,100	10,100	10,100
North Western	4,200,000	3,000	10,200	8,800	1,000	600	1	2,340	4,000	1,000	20,200	10,100	10,100	10,100	10,100	10,100	10,100	10,100	10,100
Gippsland	5,307,200	3,000	4,200	1,200	2,200	2,400	300	14,100	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000	1,000
Total for State	40,700,700	15,415	1,740,200	1,740,200	170,200	20,200	4,200	10,400	71,200	20,200	20,200	20,200	20,200	20,200	20,200	20,200	20,200	20,200	20,200

Most Crops of Special Interest - Average: Canees Road, 1,200; Cleveley, 514; Ripon, 155; Tolmie, 1,800; Milder (Winnamatta), 624; Sugar Hill, 4,200; Bays, 660; Green Hill, 7,200; Pines, 1,200.

SOUTH AUSTRALIA



**TOTALS**

Year	Area	Stocks					Wool	Butter	Meat
		Wool	Butter	Meat	Wool	Butter			
1938-39	4,622,780	16,417	1,740,200	1,740,200	170,200	20,200	20,200	20,200	
1937-38	4,622,780	16,417	1,740,200	1,740,200	170,200	20,200	20,200	20,200	
1936-37	4,622,780	16,417	1,740,200	1,740,200	170,200	20,200	20,200	20,200	
1935-36	4,622,780	16,417	1,740,200	1,740,200	170,200	20,200	20,200	20,200	
1934-35	4,622,780	16,417	1,740,200	1,740,200	170,200	20,200	20,200	20,200	

Showing Location of Butter and Cheese Factories, e.g., Orbest; and Statistics of Wool, Work, Live Stock, and Poultry in each District for 5 years, and Agricultural, Dairying, and Pastoral Statistics in detail, for the Season 1938-39.



**PART X.****PRODUCTION.****LAND SETTLEMENT, ETC.**

The total area of the State is 56,245,760 acres. On 31st December, 1938, this comprised :—

	Acres.
Lands alienated in fee-simple .. ..	27,403,171
Lands in process of alienation .. ..	5,277,346
Crown lands .. ..	23,565,243
	<hr/>
Total .. ..	56,245,760
	<hr/>

The Crown lands comprise—

Permanent forests (under Forests Act) ..	4,121,582
Timber reserves (under Forests Act) ..	723,975
State Forests and Timber reserves (under Land Act) .. .. .	330,027
Water reserves .. .. .	313,295
Reserves for Agricultural Colleges, &c. ..	88,649
Reserves in the Mallee .. .. .	410,000
Other reserves .. .. .	475,308
Roads .. .. .	1,794,218
Water frontages, beds of rivers, lakes, &c.; unsold land in cities, towns, and boroughs..	4,362,028
Land in occupation under—	
Perpetual leases .. .. .	81,332
Other leases and licences .. .. .	28,724
Temporary grazing licences .. .. .	7,992,248
Unoccupied .. .. .	2,843,857
	<hr/>
Total .. .. .	23,565,243
	<hr/>

In the following table are shown the area of Crown lands sold absolutely and conditionally, and the area of lands alienated in fee-simple during the last six years.

A portion of the area conditionally sold reverts to the Crown each year in consequence of the non-fulfilment of conditions by the selectors. The lands alienated each year include areas selected in previous years.

VICTORIA—ALIENATION OF CROWN LANDS, 1933  
TO 1938.

Year.	Area of Crown Lands Sold.			Crown Lands alienated in Fee-simple.	
	Absolutely, at Auction, &c.	Conditionally to Selectors.	Total.	Area.	Purchase Money.
	Acres.	Acres.	Acres.	Acres.	£
1933 ..	3,907	57,111	61,018	69,357	73,580
1934 ..	4,661	68,726	73,387	143,851	119,219
1935 ..	4,545	44,324	48,869	288,443	199,339
1936 ..	5,290	34,440	39,730	108,011	88,937
1937 ..	5,472	51,636	57,108	115,572	153,350
1938 ..	7,882	64,003	71,885	231,318	214,420

From the period of the first settlement of the State to the end of 1938 the amount realized by the sale of Crown lands was £36,528,877. Payment of a considerable portion of this amount extended over a series of years without interest, upon very easy terms.

Amount realized by sale of Crown lands.

Lands remaining for disposal.

The next table shows the whole of the unalienated lands of the Crown remaining for disposal:—

VICTORIA—CROWN LANDS REMAINING FOR DISPOSAL ON 31st DECEMBER, 1938.

Location.	Classification.						Total.
	Agricultural and Grazing.					Auri-ferous.	
	First.	Second.	Third.	Fourth.	Pastoral.		
County.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Anglesey .. .. .	69	2,550	63,730	1,235	..	2,000	69,584
Buln Buln .. .. .	7,492	40,869	53,626	..	..	..	101,987
Bogong .. .. .	..	9,752	186,347	5,000	170,700	83,747	455,546
Benambra .. .. .	87	..	259,030	2,778	243,600	87,890	593,385
Bourke .. .. .	12	96	25	..	..	..	133
Bendigo .. .. .	76	452	3,076	..	..	3,073	6,677
Borung .. .. .	..	342	40,315	..	..	2,985	43,642
Croajingolong .. .. .	2,125	1,487	542,748	25,900	772,910	13,800	1,358,970
Dargo .. .. .	..	..	96,970	..	431,160	70,000	598,130
Delatite .. .. .	165	14,094	80,810	9,989	130,600	60,000	295,658
Dalhousie .. .. .	20	499	1,202	..	..	443	2,164
Dundas .. .. .	..	..	62,859	4,700	15,754	..	83,313
Evelyn .. .. .	19	235	10,111	..	..	1,521	11,886
Follett .. .. .	..	..	114,250	2,530	29,136	..	145,916
Gladstone .. .. .	591	1,224	2,171	2,508	..	8,715	15,209
Grant .. .. .	40	276	2,768	..	..	6,524	9,608
Grenville .. .. .	33	1,037	295	..	..	5,125	6,490
Heytesbury .. .. .	..	935	120,792	..	..	..	121,727
Kara Kara .. .. .	106	181	1,738	..	..	2,756	4,781
Karkaroc .. .. .	..	39	..	..	..	..	39
Lowan .. .. .	..	654	130,684	22,475	9,000	..	162,813
Moira .. .. .	500	..	5,089	712	..	1,200	7,501
Mormington .. .. .	33	855	11,870	..	..	..	12,758
Normanby .. .. .	..	..	99,759	..	..	..	99,759
Polwarth .. .. .	12,610	14,550	22,626	..	..	..	49,786
Rodney .. .. .	180	180	..	..	..	1,860	2,220
Ripon .. .. .	20	400	22,746	..	..	2,350	25,516
Tambo .. .. .	..	..	201,999	..	371,000	900	573,899
Tanjil .. .. .	..	..	101,632	..	361,400	67,000	530,032
Talbot .. .. .	117	1,112	146	..	..	20,541	21,916
Tatchera .. .. .	235	70	..	..	..	..	305
Villiers .. .. .	..	..	1,285	..	..	..	1,285
Wonnangatta .. .. .	..	..	147,850	..	846,400	..	994,250
Total .. .. .	24,530	91,889	2,388,549	77,827	3,381,660	442,430	6,406,885
Throughout the State	Swamp or reclaimed lands .. .. .						2,968
The "north-western portion of the State	Lands which may be sold by auction .. .. .						5,329
	Mallee lands available for selection .. .. .						30,116
	Mallee lands (such as are suitable to be eventually classified for selection) .. .. .						4,390,807
Total area remaining for disposal .. .. .							10,836,105

Temporary occupancy of much of the land included in the above statement has been granted to approved applicants under grazing licences.

The "Torrens System", whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system has been the means of simplifying procedure in connexion with the transfer of land

Transfer of Land Act.

and thereby reducing the cost of dealing in real estate. It gives a title to the transferee free of any latent defect and the Crown grant issues through the Titles Office. In order to bring under the Transfer of Land Act land that was parted with prior to 1862 (5,142,321 acres), application must be made accompanied by strict proofs of the applicant's interest in the property.

During 1938 there were submitted 240 such applications in respect of land amounting in area to 11,327 acres, and in value to £345,143; while the land actually brought under the Act as a result of such applications was 9,408 acres valued at £352,403. Up to the end of 1938 there had been brought under the Act 3,270,809 acres valued at £73,040,414. The area of the land still under the Old Law System at the end of 1938 was 1,871,512 acres. A summary of dealings under the Transfer of Land Acts will be found on page 216.

In granting an application to have land brought under the *Transfer of Land Act* 1928, the Commissioner of Titles is required to issue a perfect Title save as to any circumstances of which he has had notice. To assure and indemnify the Government in a case where the Supreme Court or some higher Tribunal has decided that some person other than the applicant has an interest in the property, and it has consequently been found necessary to compensate such other person, there has been constituted an Assurance Fund which is built up of contributions of  $\frac{1}{4}$ d in the £ on the value of the land covered by the application. During 1938-39 receipts of the Fund comprised contributions £2,420, and interest on stock £3,269. No claims were made on the Fund during the year, but the sum of £5,095 was paid out in accordance with section 3 of the *Special Funds Act* 1920 to provide for the interest on loan moneys expended on University buildings. The balance at the credit of the Assurance Fund on 30th June, 1939, was £115,216. The amount paid up to 30th June, 1939, as compensation and for judgments recovered, including costs, was £10,286.

#### CLOSER SETTLEMENT AND DISCHARGED SOLDIERS' SETTLEMENT.

The first estate acquired for closer settlement in Victoria was purchased in 1900 under authority of the *Land Act* 1898 which empowered the Government to purchase by agreement private lands for this purpose. Under this Act five estates totalling 33,660 acres were acquired. In 1904, a Closer Settlement Act was passed and a Board appointed to administer it, with authority to acquire land by agreement, or, where necessary, compulsorily.

In 1906 the State Rivers and Water Supply Commission, established under the *Water Act* 1905, came into operation, and in 1909 closer settlement in irrigation areas commenced. Administration of these areas was placed under the direct control of the Water Supply Commissioners by the *Closer Settlement Act* 1912.

Up to 30th June, 1917, the area acquired totalled 571,156 acres and the area settled, 507,500 acres. In that year the first Discharged Soldiers' Settlement Act was passed and thereafter the settlement of discharged soldiers which commenced on 14th August, 1917, was given precedence by the Government. At 30th June, 1932, the net area acquired for soldier settlement was 2,270,333 acres (2,179,091 acres settled), and for civilian settlers 1,094,415 acres (1,058,360 acres settled). Thus, of the land acquired for closer and soldier settlement, 84 per cent. has been settled since 1917.

The unstable conditions subsequent to 1917 proved most unfavorable to successful settlement, and the consequent loss to the settlers and to the State has been severe. Measures which were taken to improve conditions of the soldier settlers include the appointment by the Victorian Government of a Royal Commission in 1925, the establishment of inquiry boards in 1926 and 1927, and the appointment by the Commonwealth Government of Mr. Justice Pike in 1927 to inquire into soldier settlement in all the States. Finally, in 1932, an Act of the Victorian Parliament was passed giving effect to recommendations made for the relief of settlers. This amending Act, "The Closer Settlement Act 1932, No. 4091," was assented to on 29th December, 1932. Under its provisions a Closer Settlement Commission of five members superseded the Closer Settlement Board, and assumed the powers and obligations of the State Rivers and Water Supply Commissioners in respect of the settlement and occupation of irrigable lands. Provision was made for the consolidation into one debt of the liabilities of each settler at 30th June, 1932. The unpaid balance on account of land improvements and all arrears of interest were thereby brought together into one account. The Commission was further empowered to adjust, during the period of five years commencing on 1st July, 1932, the annual payment due by the settlers on account of the consolidated debt. In making any adjustment the Commission was required to take into consideration (a) ruling prices for farm products, (b) seasonal conditions, (c) requirements for maintenance of the settler and his family, (d) the means and ability of the settler to make any adjusted payment, (e) efforts made by the settler to meet his liability, and (f) any other factors which in the opinion of the Commission were proper to be considered. The reductions made under these provisions amounted to £923,848 or 43.9 per cent. of the total instalments due in 1932-33, £979,047 or 52.5 per cent. in 1933-34, £914,344 or 56.8 per cent. in 1934-35, £748,903 or 47.8 per cent. in 1935-36 and £714,582 or 45.5 per cent. in 1936-37—a total benefit to the settlers over the five-year period of £4,280,724.

At the end of the period of five years aforementioned, provision was made for the assessment by the Commission of the liabilities of settlers on account of land and advances, and for the writing off of the difference between the amount of the revaluation of the land and improvements and the sum of the capital value at which the land was

sold and the amount of unpaid advances for improvements and arrears of interest. Discretionary power to reduce the amount to be written off was given to the Commission if it were satisfied that the value of the land and improvements had been adversely affected by the failure of the settler to work the land or to maintain the improvements in a proper manner. To enable the revaluation of holdings and the readjustment of settlers' liabilities to be completed in accordance with the findings of the Commission, its term of office was extended to 31st August, 1938.

From the inception of Closer Settlement (in 1904) and of Soldier Settlement (in 1917) to 30th June, 1938, the approximate total cost of such settlement was £70,000,000. Concessions given to settlers, bad debts written off, adjustment of settlers' annual payments and revaluations of holdings &c. have resulted in a loss to the State of £31,408,357, the details of which are given hereunder.

VICTORIA—CLOSER AND SOLDIER SETTLEMENT.  
FINANCIAL POSITION AFTER ADJUSTMENT OF DEBTS.

	Discharged Soldiers' Settlement.	Closer Settlement.	Total.
	£	£	£
Expenditure by State—			
Loan proceeds .. .. .	25,983,086	13,700,396	39,683,482
Interest on loans, &c. .. .. .	17,642,199	8,583,913	26,226,112
Costs of administration .. .. .	2,306,044	1,269,297	3,575,341
Total .. .. .	45,931,329	23,553,606	69,484,935
Payments by settlers and others .. .. .	13,275,840	10,516,737	23,792,577
Value of remaining assets (after allowing for sundry creditors) .. .. .	10,944,025	3,339,976	14,284,001
Loss (as per analysis hereunder) .. .. .	21,711,464	9,696,893	31,408,357
Total .. .. .	45,931,329	23,553,606	69,484,935
<i>Analysis of Loss.</i>			
1. Concessions to Discharged Soldiers .. .. .	4,033,889	..	4,033,889
2. Reduction in valuation of land and im- provements (under earlier Acts) .. .. .	247,180	200,532	447,712
3. Adjustment of annual instalments (section 31, Act 4091) .. .. .	2,734,752	1,545,820	4,280,572
4. Adjustment of Debts—Farmers Debts Adjustment Act and section 32, Act 4091 .. .. .	6,338,999	3,712,619	10,051,618
5. Bad debts, &c. .. .. .	4,077,791	2,878,338	6,956,129
6. Depreciation and miscellaneous losses (including loss on land account) .. .. .	1,972,809	427,101	2,399,910
7. Costs of administration not charged to settlers .. .. .	2,306,044	932,483	3,238,527
Total .. .. .	21,711,464	9,696,893	31,408,357

**Dissolution of  
the Closer  
Settlement  
Commission.**

The *Closer Settlement Act 1938* which was passed in December, 1938, provided that the Closer Settlement Commission be dissolved and cease to exist, that the Board of Land and Works be deemed to be the successor in law of the Commission and that the Act be administered in the Department of Crown Lands and Survey.

Statements of the activities of the Commission appear in previous issues of the *Year-Book*.

### WATERWORKS.

All Victorian waterworks are controlled by official bodies, either State or local. The following table shows State expenditure on works under the control of the State Rivers and Water Supply Commission, as well as grants and loans to local bodies. In addition to free grants to local bodies, large sums have been written off their liabilities. The following information has been taken from the Annual Report of the State Rivers and Water Supply Commission.

#### VICTORIA—STATE EXPENDITURE AND LOAN LIABILITY ON WATERWORKS\* TO 30TH JUNE, 1939.

Description of Works.	Capital Expenditure to 30th June, 1939.	Loan Redemption Paid.	Loan Liability at 30th June, 1939.
	£	£	£
Free Headworks .. .. .	1,226,812	491	1,226,321
Capital Works and Charges not apportionable to Districts .. .. .	1,625,171	319,953	1,305,218
Headworks Costs apportioned to Districts .. .. .	10,397,069	63,429	10,333,640
Irrigation and Water Supply Districts (exclusive of Headworks Costs) .. .. .	5,511,762	78,015	5,433,747
Urban Divisions of Irrigation Districts .. .. .	63,266	1,240	62,026
Waterworks Districts (exclusive of Headworks Costs) .. .. .	2,761,132	44,269	2,716,863
Urban Districts of Waterworks Districts (exclusive of Headworks Costs) .. .. .	2,261,919	24,280	2,237,639
Flood Protection and Drainage Districts .. .. .	375,905	5,611	370,294
Waterworks Trusts and Local Governing Bodies .. .. .	3,793,702	627,153	3,166,549
<b>TOTAL .. .. .</b>	<b>28,016,738</b>	<b>1,164,441</b>	<b>26,852,297†</b>

\* Excluding Melbourne and Metropolitan Board of Works, Geelong Waterworks and Sewerage Trust, and the Ballarat Water Commission, particulars of which appear in part "Local Government" of this issue.

† The net loan liability of the State after deducting the amount in the National Debt Sinking Fund (£1,243,147) was £25,609,150.

## IRRIGATION AND WATER SUPPLY DEVELOPMENT.

Prior to 1905 the management of irrigation in Victoria was in the hands of various Irrigation Trusts, which were financed by the State. These Trusts drifted into financial difficulties and the State was compelled to assume control. In the year mentioned, by the authority of Parliament, the State Rivers and Water Supply Commission was constituted and entrusted with the management of all irrigation works, except those controlled by the First Mildura Trust. This authority is embodied in the *Water Act 1928*—which consolidates the Water Acts of 1915, 1916, and 1918, and the *Ballarat Water Commissioners Act 1921*.

The particulars in the following statement, while not covering the whole of the activities of the State Rivers and Water Supply Commission, furnish a general idea of the development of water conservation and distribution, and of drainage and flood protection in districts under its administration:—

VICTORIA—WATER CONSERVATION AND DISTRIBUTION :  
DRAINAGE AND FLOOD PROTECTION DISTRICTS.

—	At 30th June, 1907.	At 30th June, 1939.
Area of State artificially supplied with water (acres)	10,800,000	15,083,000
Capacity of reservoirs .. (acre feet)	474,000	1,950,960
Irrigation Districts—		
Number of Districts administered .. ..	16	32
Number of Districts having Water Rights ..	Nil	27
Total of such Water Rights (acre feet)	Nil	457,853
Area under Irrigated Culture .. (acres)	108,000	515,357
Valuation for Rating purposes .. (£)	196,000	857,922
Rural Waterworks Districts (Domestic and Stock Supply)—		
Number of Districts administered ..	3	27
Valuation for Rating purposes .. (£)	125,000	1,563,574
Urban Districts—		
Number of Districts administered ..	1	88
Valuation for Rating purposes .. (£)	5,600	647,554
Coliban System (Urban, Rural, Irrigation and Mining Supplies)—		
Valuation for Urban Rating purposes (£)	At 30th June, 1910. 317,750	398,923
Flood Protection Districts—		
Number of Districts administered ..	..	4
Drainage Districts—		
Number of Districts administered ..	..	11
Valuation for Rating purposes .. (£)	..	361,283

## PROGRESS IN IRRIGATION DEVELOPMENT.

The area under irrigated culture for all kinds of crops has increased from 129,771 acres in 1909-10 to 515,357 acres in 1938-39. The latter area exceeds the average for the previous five years by 8,492 acres.

## VICTORIA—LANDS UNDER IRRIGATED CULTURE 1938-39.

District.	Area Irrigated.
	Acres.
Katandra .. .. .	4,891
North Shepparton .. .. .	10,484
Shepparton .. .. .	14,069
South Shepparton .. .. .	5,043
Rodney .. .. .	63,174
Stanhope .. .. .	12,200
Tongala .. .. .	20,797
Rochester .. .. .	48,265
Echuca North .. .. .	5,049
Dingee .. .. .	3,964
Calivil .. .. .	10,466
Tragowel Plains .. .. .	41,334
Deakin .. .. .	4,902
Boort .. .. .	15,929
Leitchville .. .. .	7,225
Cohuna .. .. .	41,367
Koondrook .. .. .	25,695
Swan Hill .. .. .	26,664
Third Lake .. .. .	2,855
Mystic Park .. .. .	4,173
Tresco .. .. .	1,139
Fish Point .. .. .	2,574
Kerang .. .. .	34,545
Dry Lake .. .. .	692
Kerang North-West Lakes .. .. .	3,450
Nyah .. .. .	2,987
Red Cliffs .. .. .	11,382
Merbein .. .. .	7,925
Campaspe .. .. .	558
Western Wimmera .. .. .	2,420
Wimmera United .. .. .	125
Bacchus Marsh .. .. .	1,221
Werribee .. .. .	7,207
Maffra-Sale .. .. .	24,259
Lands outside constituted Districts .. .. .	46,327
Total .. .. .	515,357

The subjoined table shows the total extent of irrigated land in the State in 1909-10 and in each of the five years, 1934-35 to 1938-39, and the purposes for which the land was utilized.

VICTORIA—IRRIGATED AREAS: HOW UTILIZED.

Crop.	1909-10.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	acres.	acres.	acres.	acres.	acres.	acres.
Cereals .. ..	23,715	63,225	39,835	38,328	65,466	84,379
Lucerne .. .	24,124	95,702	91,267	86,568	87,655	76,148
Sorghum and other annual fodders ..	8,094	25,605	20,776	19,753	26,548	26,942
Pastures .. ..	50,541	220,483	252,345	292,001	326,518	251,629
Vineyards and orchards	17,524	66,960	67,319	66,526	66,417	65,137
Fallow .. .	4,988	6,732	6,275	8,093	7,342	5,126
Miscellaneous ..	785	15,519	18,018	7,558	10,166	5,996
<b>Total ..</b>	<b>129,771</b>	<b>494,226</b>	<b>495,835</b>	<b>518,827</b>	<b>500,112</b>	<b>515,357</b>

NOTE.—8,000 acres, details of which are not available, were irrigated by private diversions in 1909-10, making a total area for that year of 137,771 acres.

Of the total area irrigated in 1938-39—515,357 acres—the percentages devoted to different purposes were as follow :—Pastures, 49; lucerne, 15; vineyards, orchards, and gardens, 13; cereals, 16; sorghum and other annual fodder crops, 5; fallows and miscellaneous, 2.

Progress in  
Irrigation  
Areas,  
1938-39.

Dairying is one of the principal industries in irrigation districts. Dairy herds grazed on irrigated pastures obtained prominent positions in the 1937-38 Standard Herd Test conducted by the Department of Agriculture.

The production of dried vine and tree fruits, of citrus, and of fruits for canning are established features in these districts. There has also been considerable expansion in market gardening and a development of the canning industry in relation thereto. The Victorian dried vine-fruit crop amounted to 43,960 tons. The production of citrus fruits in irrigation districts during the 1938-39 season amounted to 781,000 bushels—approximately 90 per cent. of the citrus production of the State.

The Victorian production of canned fruit in the season 1938-39 was approximately 1,919,800 cases, which was 71 per cent. of the Australian output in that season.

**Supply of water for domestic and stock purposes.**

Extensive schemes for the supply of water for domestic and stock purposes are under the control of the State Rivers and Water Supply Commission. Altogether, the area so supplied is approximately 23,567 square miles—about 27 per cent. of the total area of the State. The major portion of the area supplied is in the Mallee and Wimmera districts.

The number of country centres supplied with water for domestic use is—119 by the Commission, 113 by Waterworks Trusts, and 16 by Local Government bodies.

The estimated population in country centres supplied with water is 440,000 persons.

### STORAGE AND SUPPLY SCHEMES

**Total Water Storages in State.**

In 1902 the total capacity of storages in the State was 172,000 acre feet. The present capacity is 1,950,960 acre feet. The Hume Reservoir, designed to contain 2,000,000 acre feet (half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria) now has a capacity of 1,250,000 acre feet. When the final stage of this work has been constructed (involving a further approval of the interested State Governments), and the Yarrawonga Weir, the Glenmaggie, and other Reservoirs are completed, the combined storage capacity available to users in Victoria will be 2,390,100 acre feet.

EXISTING STORAGES.						Capacities in Acre Feet.
<i>Goulburn System—</i>						
Goulburn Weir	..	..	..	..	..	20,700
Waranga	..	..	..	..	..	333,400
Eildon	..	..	..	..	..	306,000
						660,100
<i>Murray-Loddon System—</i>						
Humé Reservoir (part of 2,000,000 acre feet—half share)						625,000
Yarrowonga Weir (half share of 100,000 acre feet)	..					50,000
Torrumbarry (half share of 26,000 acre feet)	..					13,000
Mildura (half share of 34,000 acre feet)	..	..				17,000
Wentworth (half share of 20,000 acre feet)	..	..				10,000
Euston Lock Weir (half share of 24,000 acre feet)	..					12,000
Kow Swamp	..	..	..	..	..	40,860
Laanecoorie	..	..	..	..	..	6,650
Kerang North-west Lakes	..	..	..	..	..	69,400
Lake Boga	..	..	..	..	..	29,650
						873,560
<i>Wimmera-Mallee System—</i>						
Fyans Lake	..	..	..	..	..	17,100
Lake Lonsdale	..	..	..	..	..	53,300
Wartook	..	..	..	..	..	23,800
Taylors Lake	..	..	..	..	..	30,000
Pine Lake	..	..	..	..	..	52,000
Green Lake	..	..	..	..	..	6,600
Dock Lake	..	..	..	..	..	4,800
Moorá	..	..	..	..	..	5,100
Lower Wimmera Weirs	..	..	..	..	..	2,870
Batyo Catyo (Avon Regulator)	..	..	..	..	..	5,000
Lake Whitton	..	..	..	..	..	1,300
Earthen Storages, Township Reservoirs, and Mallee Tanks						6,220
						208,190
<i>Maffra-Sale System—</i>						
Glenmaggie Reservoir (part of 150,000 acre feet)	..	..				104,500
<i>Coliban System—</i>						
Upper Coliban	..	..	..	..	..	25,700
Malmsbury (enlargement to 14,400 acre feet in progress)						12,300
Spring Gully	..	..	..	..	..	2,000
Subsidiary Reservoirs	..	..	..	..	..	4,600
						44,600
<i>Werribee System—</i>						
Pykes Creek	..	..	..	..	..	21,000
Melton	..	..	..	..	..	19,100
						40,100

EXISTING STORAGES—*continued.*

	Capacities in Acre Feet.
<i>Bellarine Peninsula System—</i>	
Wurdee Boluc .. .. .	10,000
Service Basins .. .. .	760
	10,760
<i>Mornington Peninsula System—</i>	
Lysterfield .. .. .	3,400
Beaconsfield, Frankston, and Mornington .. .. .	1,660
Service Basins .. .. .	200
	5,260
<i>Otway System—</i>	
Service Reservoirs .. .. .	1,080
<i>Miscellaneous—</i>	
Eppalock .. .. .	1,200
Wonthaggi .. .. .	1,550
Wonthaggi Service Basins .. .. .	10
Newstead .. .. .	30
Stratford Service Basins .. .. .	20
	2,810
Total capacity of existing Storages .. .. .	1,950,960

ADDITIONAL STORAGE BEING PROVIDED BY WORKS IN COURSE OF  
CONSTRUCTION.

<i>Coliban System—</i>	
Malmsbury Enlargement .. .. .	2,100
Lauriston .. .. .	16,000
<i>Mornington Peninsula System—</i>	
Bittern Reservoir .. .. .	480
Service Basin .. .. .	60
	18,640

FURTHER STORAGE WHICH COULD BE PROVIDED BY  
COMPLETION OF EXISTING WORKS.

<i>Maffra-Sale System—</i>	
Glenmaggie Reservoir (balance of 150,000 acre feet) ..	45,500
<i>Murray System—</i>	
Hume Reservoir, at junction with Mitta River (half share of balance of 2,000,000 acre feet) .. .. .	375,000
	420,500
Total capacity of storages when works are completed ..	2,390,100

Detailed descriptions of the various systems which have been instituted for irrigation and for supplying water for domestic and stock purposes appear in the *Year-Book* for 1928-29 (pp. 526 to 534).

## METEOROLOGY.

Particulars in regard to climate and weather conditions have been furnished by the Commonwealth Meteorologist, and are given in the following tables. In the first are shown the rainfall for each district and for the whole State for each of the years 1901 to 1939, together with the mean rainfall covering a period of 69 years.

## VICTORIA—RAINFALL—YEARLY RECORDS AND AVERAGES.

Year.	Districts.								Whole State.
	Mallee.	Wimmera.	North-ern.	North-Central.	North-Eastern.	Western.	Central.	Gipps-land.	
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
1901 ..	9.39	16.61	13.58	24.78	28.08	27.90	28.98	33.66	22.05
1902 ..	7.64	11.94	11.26	18.41	20.10	23.54	24.88	33.35	18.55
1903 ..	16.84	22.76	22.22	32.07	33.13	33.43	32.86	33.68	27.44
1904 ..	10.75	17.22	17.32	28.00	33.56	28.54	31.29	30.02	23.49
1905 ..	12.01	18.40	16.39	25.36	31.72	28.79	29.61	37.84	24.53
1906 ..	15.22	23.42	24.16	32.00	42.11	32.53	30.13	34.81	28.49
1907 ..	9.25	17.07	14.74	22.42	26.19	26.16	25.36	27.20	20.40
1908 ..	12.33	17.72	14.38	19.98	26.40	25.81	20.08	24.29	20.02
1909 ..	14.35	22.38	20.04	29.77	35.62	31.37	30.57	34.09	26.52
1910 ..	15.96	22.36	20.13	29.13	32.10	32.45	28.28	30.80	25.96
1911 ..	17.84	19.89	19.87	29.79	33.24	31.13	36.88	39.71	28.08
1912 ..	12.50	17.52	18.12	23.00	30.93	25.94	24.92	26.60	21.86
1913 ..	12.66	16.38	16.76	24.22	29.69	25.85	27.64	34.65	22.96
1914 ..	7.29	9.76	9.73	14.95	19.94	18.56	20.05	23.81	14.66
1915 ..	12.42	18.98	16.75	25.65	34.17	27.44	24.67	27.63	22.35
1916 ..	17.72	22.54	25.60	34.44	44.01	30.72	38.78	37.78	30.27
1917 ..	19.55	21.96	26.34	35.86	56.09	31.70	32.41	34.63	30.77
1918 ..	13.59	16.44	21.96	28.30	36.96	25.70	30.11	33.39	24.70
1919 ..	11.46	13.86	15.06	21.21	27.27	26.47	25.48	37.03	22.77
1920 ..	14.93	16.04	20.15	28.37	34.42	25.99	31.38	33.37	25.43
1921 ..	16.29	19.99	23.69	31.75	39.57	27.36	31.13	31.73	25.35
1922 ..	10.44	17.15	13.15	20.85	26.10	28.09	27.82	32.92	21.35
1923 ..	15.07	20.21	17.60	27.80	34.80	33.51	30.11	33.88	26.12
1924 ..	16.08	22.17	23.29	34.74	40.70	31.13	40.30	37.37	28.10
1925 ..	9.87	14.20	14.09	20.28	27.42	22.43	23.12	29.69	19.74
1926 ..	12.64	17.00	16.85	24.25	35.36	26.70	24.20	23.72	22.90
1927 ..	7.66	13.93	11.14	18.67	26.15	23.20	22.16	28.43	18.56
1928 ..	14.04	19.10	21.27	29.56	37.21	30.46	29.86	33.98	26.14
1929 ..	9.10	15.56	13.65	24.20	27.24	29.28	31.13	32.36	22.00
1930 ..	15.32	20.94	19.68	30.59	32.49	29.43	30.85	33.66	25.76
1931 ..	14.86	19.25	21.77	31.20	43.18	28.79	32.88	32.65	26.97
1932 ..	14.96	18.90	20.60	29.63	34.33	31.85	32.91	34.19	26.34
1933 ..	14.13	20.96	20.25	31.09	32.09	26.87	27.56	30.65	24.47
1934 ..	13.21	16.64	21.01	28.57	42.81	29.20	35.60	43.39	27.60
1935 ..	10.84	17.71	19.53	29.14	35.86	30.49	34.23	42.53	26.63
1936 ..	14.39	19.41	19.50	28.47	35.52	26.91	30.24	36.38	25.63
1937 ..	12.69	17.19	13.70	20.08	26.25	26.39	25.20	28.33	21.02
1938 ..	6.30	11.39	8.66	15.62	20.49	22.63	20.47	26.39	16.28
1939 ..	15.32	20.33	27.72	37.83	53.05	32.94	38.10	38.16	31.37
Means for 69 years	13.25	18.47	18.65	27.11	33.63	28.23	29.81	34.48	24.72

The wettest portion of the State is the Cape Otway Forest, which is closely followed by the South Gippsland district and the Latrobe and Thomson Basin. The lowest rainfall occurs in the Mallee district, where the average is 13.25 inches per annum, as compared with 24.72 inches for the whole State.

The averages of the climatic elements for the seasons in Melbourne deduced from all available official records are given below.

#### AVERAGES OF CLIMATIC ELEMENTS IN MELBOURNE.

Meteorological Elements.	Spring.	Summer.	Autumn.	Winter.
Mean pressure of air in inches .. ..	29.973	29.921	30.079	30.079
Monthly range of pressure of air—Inches	.886	.763	.813	.975
Mean temperature of air in shade—°Fahr.	57.8	66.6	59.4	50.0
Mean daily range of temperature of air in shade—°Fahr. .. ..	18.7	21.0	17.4	14.0
Mean relative humidity. Saturation=100	65	60	69	75
Mean rainfall in inches .. ..	7.20	5.97	6.55	5.83
Mean number of days of rain ..	38	25	34	43
Mean amount of spontaneous evaporation in inches .. ..	10.25	17.18	7.93	3.72
Mean daily amount of cloudiness—Scale 0 to 10 .. ..	6.0	5.2	5.9	6.4
Mean number of days of fog .. ..	1	1	7	12

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1938 and for the last 83 years, as well as the extremes between which the yearly average values of such elements have oscillated in the latter period.

YEARLY AVERAGES AND EXTREMES OF CLIMATIC  
ELEMENTS IN MELBOURNE.

Meteorological Elements	Yearly Averages and Extremes.			
	Year 1938.	Average for 83 Years.	Extremes between which the Yearly Average Values have oscillated in 83 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ..	30·037	30·013	30·106	29·945
Highest " " " " ..	30·700	30·607	30·770	30·488
Lowest " " " " ..	29·129	29·252	29·495	28·942
Range (inches) .. ..	1·571	1·357	1·719	1·074
Mean temperature of air in shade (°Fahr.) .. ..	59·5	58·5	59·9	57·3
Mean daily maximum .. (°Fahr.)	69·4	67·4	69·4	65·4
Mean daily minimum .. ..	49·6	49·6	51·2	47·2
Absolute maximum .. ..	103·0	104·9	111·2	96·6
Absolute minimum .. ..	29·5	31·0	34·2	27·0
Mean daily range .. ..	19·7	17·8	20·4	15·0
Absolute annual range .. ..	73·5	73·9	82·6	66·0
Solar Radiation (mean maxima) ..	106·9	117·0	127·6	105·6
Terrestrial Radiation (mean minima) .. .. (°Fahr.)	43·9	43·9	46·8	39·5
Rainfall (in inches) .. ..	17·63	25·55	38·04	15·61
Number of wet days .. ..	131	140	187	102
Year's amount of free evaporation (in inches) .. ..	41·71	39·08	45·66	31·59
Percentage of humidity (saturation =100) .. ..	61	67	76	61
Cloudiness (scale 10 = overcast, 0 = clear) .. ..	5·8	5·9	6·4	4·8
Number of days of fog .. ..	26	21	50	5

An estimate of the areas of the State, in square miles, subject to different degrees of rainfall is contained in the following statement:—

VICTORIA—DISTRIBUTION OF AVERAGE RAINFALL.

Rainfall.						Area.
Inches.						Square Miles.
Under 15 ..	..	..	..	..	..	18,701
15 to 20 ..	..	..	..	..	..	13,800
20 to 25 ..	..	..	..	..	..	13,551
25 to 30 ..	..	..	..	..	..	14,528
30 to 40 ..	..	..	..	..	..	15,802
40 to 50 ..	..	..	..	..	..	6,671
50 to 60 ..	..	..	..	..	..	2,660
Over 60 ..	..	..	..	..	..	2,171

## AGRICULTURAL RESEARCH AND EDUCATION.

**Department of Agriculture.** This Department is controlled by a Minister of the Crown, under whom there is a large staff of experts with the Director of Agriculture as permanent head. These officers are actively engaged in supervising all matters relating to the primary industries of the State, and in giving advice to those engaged therein. The Department publishes a monthly journal.

**Government Experimental Farms.** Research and experimental work are conducted at the State Research Farm at Werribee, the Mallee Research Station at Walpeup, the Horticultural Research Station at Tatura, the Rutherglen State Farm, the Longerenong Agricultural College, the Dookie Agricultural College, and at the School of Primary Agriculture, Burnley. In addition, there are 130 selected farms throughout the State on which experiments and demonstrations are conducted (including 80 pasture plots conducted in conjunction with the Victorian Pasture Improvement League).

At the State Research Farm, Werribee, experiments are undertaken for the improvement of wheat and other cereals, grasses, clovers, and various economic plants, and investigations made into the methods and problems relating to irrigated agriculture, and the breeding and feeding of dairy cattle, horses, sheep and poultry. A School of Dairy Technology has been established for the higher training of dairy factory operatives and research and investigation into problems arising in the manufacture of dairy produce.

Work at the Rutherglen Farm, which serves as a research station for the North-East, includes various aspects of cereal growing and pasture improvement. It was here that the initial experiments were conducted (1911-1918) which resulted in the widespread adoption of the topdressing of pastures with phosphates. The Mallee Research Station was established in 1932. In addition to cereal and grazing investigations, an important feature of the work at this station is research concerning various grasses with the view to producing a pasture which will thrive under Mallee conditions. Special attention is being paid to the problem of sand drift. At Longerenong and Dookie experiments are conducted on wheat and oat cultivation for Wimmera and north-eastern conditions respectively. At the School of Primary Agriculture, Burnley, in addition to instruction in and study of horticultural problems, research work on the breeding and selection of grasses and clovers is carried on; a Plant Research Laboratory mainly devoted to plant pathological and entomological research has also been established.

The Horticultural Research Station at Tatura was recently established as a research centre for the purpose of improving varieties of fruits. Officers are now engaged in the study of irrigation and soil fertility in the Goulburn Valley in relation to the production of canning fruits.

The Government experimental plots on selected farms embrace investigations into pasture improvement, grazing trials, and the cultivation of wheat, oats, barley, potatoes, tobacco, maize, broom millet, and vegetables.

The pasture experiments are largely responsible for recent rapid advances made in pasture improvement throughout Victoria. During the season 1938-39, 3,974,938 acres were topdressed and resulted in an estimated increase in carrying capacity of about 50 per cent. above pastures not similarly treated.

**Agricultural Colleges.** An Act for the establishment of Agricultural Colleges was passed in 1884, and 14,458 acres, comprising 5,955 acres at Dookie, 2,386 acres at Longerenong, 2,500 acres at Gunyah Gunyah, 2,800 acres at Olangolah, and 817 acres at Bullarto, were reserved as sites for colleges and experimental farms. The areas at Dookie and Longerenong are being used for the purpose for which they were reserved, but the other three are devoted to other uses. The fee for students in residence at the agricultural colleges is £50 per annum for maintenance, including stationery and medical and other charges. No charge is made for instruction. Accommodation is provided at Dookie for 100 and at Longerenong for 50 students.

**Experimental Farms and Agricultural Colleges.** Various particulars relating to the State Experimental Farms and Agricultural Colleges are embodied in the next statement:—

### VICTORIA—GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1938-39.

Particulars.	Burnley School of Primary Agriculture, &c.	Central Research Farm, Werribee.	Rutherglen.		Mallee Research Station, Walpeup.	Horticultural Research Station, Tatura.	Dookie Agricultural College.	Longerenong Agricultural College.
			State Farm.	Viticultural Station.				
Area under crop ..	acres. 12	acres. 930	acres. 160	acres. 104	acres. 448	acres. 45	acres. 938	acres. 1,007
Other arable land ..	15	1,181	667	44	297	10	1,232	1,045
Balance of area ..	6	100	293	50	1,183	49	3,756	334
Total area of farm ..	33	2,211	1,120	198	1,928	104	5,926	2,386
Value of produce for year	£ 800	£ 7,444	£ 2,568	£ 419	£ 360	£ ..	£ 9,250	£ 5,250
Receipts—								
Government Grant	3,601	13,293	1,288	2,629	2,013	1,490	10,615	9,552
Council of Agricultural Education Contribution								
Other ..	1,215	7,454	3,166	737	867	..	9,745	6,130
Total receipts ..	4,816	20,747	4,454	3,366	2,880	1,490	20,360	15,682
Total expenditure ..	3,601	13,293	4,446	2,629	2,013	1,490	20,360	15,682
Number of students ..	76	14	..	..	..	..	80	40

**Inspection of  
Orchards,  
Nurseries, &c.**

The orchards, nurseries, and gardens of the State are systematically inspected by officers of the Horticultural Division of the Department of Agriculture. Advice is given on the control of pests and diseases when detected, and action is taken where necessary to enforce its compliance.

All plant material entering Victoria, whether from other Australian States or overseas, is subject to strict inspection and measures are taken when necessary to either free such material of disease or have it destroyed.

**Melbourne  
University  
School of  
Agriculture.**

Melbourne University has a well-equipped School of Agriculture, for the maintenance of which a special grant is provided by the State. This School affords opportunity for the training of students in science as applied to practical agriculture and kindred industries. A large number of graduates of this school is employed, mostly in the Victorian Department of Agriculture, on field advisory work and laboratory investigations. The course occupies four years. The first is devoted to pure science; during the second the students are in residence at the State Research Farm, Werribee, engaged in practical farming with lectures on preparatory subjects, and the remaining two years are devoted to a more specialized study of agriculture and allied subjects on a scientific basis.

**Commonwealth  
Council of  
Scientific and  
Industrial  
Research**

One of the principal functions of the Council is to initiate and carry out scientific researches in connexion with primary and secondary industries. The main branches of the work of the Council are in relation to plant, soil and entomological problems, animal nutrition and diseases, forest products, food preservation and transport, and fisheries. In addition, facilities are now being made available to the Council to enable it to extend its activities to the field of the secondary industries. In this work, attention will first be given to the establishment of—(i) an Information Section, (ii) a National Standards Laboratory, (iii) an Aeronautical Laboratory (in which engineering research other than that required by the aeronautical industry could be undertaken), and (iv) the development of laboratories for general secondary industry research.

State Committees have been formed whose main function is to advise the Council as to matters that may affect their respective States.

The headquarters of the Council are located at 314 Albert-street, East Melbourne. Two of the Council's Divisions—the Division of Forest Products and the Division of Animal Health and Nutrition—also have their headquarters in Victoria. Researches into timber seasoning, preservation, identification, mechanics, physics, chemistry, and general utilization are carried out by the former Division. The

Victorian work of the Division of Animal Health and Nutrition is concentrated mainly on problems of cattle diseases, e.g., pleuropneumonia, mastitis, and bovine haematuria.

At Merbein a station has been established for the purpose of conducting research into the problems associated with the dried vine-fruits industry.

### AGRICULTURE.

In all divisions of the State there are areas suitable for cultivation. The area cultivated in 1938-39 was 7,562,524 acres, as compared with 7,266,910 acres in the previous season, and an annual average of 7,862,470 acres for the seasons 1931-35, 7,616,031 acres for the seasons 1925-30, 6,446,389 acres for the seasons 1915-25, 5,032,359 acres for the seasons 1905-15, and 3,547,111 acres for the seasons 1895-1905. Notwithstanding the large increase in the area cultivated since 1915, there has been considerable growth in the dairying and pastoral industries.

The following table shows the area under cultivation from period to period during the last 84 years:—

#### VICTORIA—ACREAGE CULTIVATED ANNUALLY, 1855 TO 1939.

Period or Year (ended March).	Annual average area in each quinquennium, 1855 to 1925, and actual area each year 1926-1939, under—		
	Crop.	Fallow.	Total Cultivation.
	acres.	acres.	acres.
1855-65 .. .. .	325,676	12,146	337,822
1865-75 .. .. .	624,377	57,274	681,651
1875-85 .. .. .	1,306,920	137,536	1,444,456
1885-95 .. .. .	2,109,326	364,282	2,473,608
1895-1905 .. .. .	3,022,914	524,197	3,547,111
1905-15 .. .. .	3,756,211	1,276,148	5,032,359
1915-25 .. .. .	4,594,244	1,852,145	6,446,389
1926 .. .. .	4,433,492	2,457,136	6,890,628
1927 .. .. .	4,735,173	2,569,021	7,304,194
1928 .. .. .	4,942,258	2,692,044	7,634,302
1929 .. .. .	5,505,651	2,683,462	8,189,113
1930 .. .. .	5,579,258	2,482,662	8,061,920
1931 .. .. .	6,715,660	2,590,629	9,306,289
1932 .. .. .	5,407,109	2,145,819	7,552,928
1933 .. .. .	5,115,745	2,633,287	7,749,032
1934 .. .. .	5,266,913	2,543,043	7,809,953
1935 .. .. .	4,677,683	2,216,464	6,894,147
1936 .. .. .	4,438,761	2,358,777	6,797,538
1937 .. .. .	4,407,312	2,483,163	6,890,475
1938 .. .. .	4,662,354	2,604,556	7,266,910
1939 .. .. .	5,019,299	2,543,225	7,562,524

The decrease in the area under crop in recent years has been due mainly to the reduced acreage sown to wheat for grain.

Land occupied in different districts.

The following tables give information relating to land occupied in each district during the season 1938-39 :—

VICTORIA—LAND IN OCCUPATION IN EACH DISTRICT, SEASON 1938-39.

(Areas of 1 acre and upwards.)

Districts.	Total Area of Districts.	Number of Occupiers.	Acres Occupied.				Total.
			For Agricultural Purposes.	For Pasture.		Unproductive.	
				Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
	Acres.						
Central ..	4,065,280	16,647	376,355	469,005	1,674,934	282,168	2,802,462
North-Central ..	2,929,920	5,042	135,899	67,221	1,900,762	111,024	2,214,906
Western ..	8,775,040	12,241	351,188	1,314,737	4,799,530	482,383	6,947,838
Wimmera ..	7,394,560	6,045	2,096,466	178,685	3,650,613	556,021	6,481,785
Mallee ..	10,784,000	6,969	2,888,443	22,177	3,713,685	332,741	6,957,046
Northern ..	6,337,280	11,320	1,426,687	225,737	3,768,516	88,630	5,509,570
North-Eastern ..	7,220,480	5,265	140,882	130,182	3,880,685	418,051	4,569,800
Gippsland ..	8,739,200	8,923	146,604	676,134	2,302,770	2,181,794	5,307,302
Total ..	56,245,769	72,452	7,562,524	3,083,878	25,691,495	4,452,812	40,790,709
PERCENTAGE OF ABOVE TO AREA OCCUPIED.							
Central ..	..	..	13.43	16.74	59.76	10.07	100.00
North-Central ..	..	..	6.14	3.03	85.82	5.01	100.00
Western ..	..	..	5.06	18.92	69.08	6.94	100.00
Wimmera ..	..	..	32.34	2.76	56.32	8.58	100.00
Mallee ..	..	..	41.52	.32	53.38	4.78	100.00
Northern ..	..	..	25.89	4.10	68.40	1.61	100.00
North-Eastern ..	..	..	3.08	2.85	84.92	9.15	100.00
Gippsland ..	..	..	2.76	12.74	43.39	41.11	100.00
State ..	..	..	18.54	7.56	62.98	10.92	100.00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.							
Central ..	7.23	22.98	4.98	15.21	6.52	6.34	6.87
North-Central ..	5.21	6.96	1.80	2.18	7.40	2.49	5.43
Western ..	15.60	16.89	4.64	42.63	18.68	10.83	17.03
Wimmera ..	13.14	8.34	27.72	5.79	14.21	12.49	15.89
Mallee ..	19.17	9.62	38.19	.72	14.45	7.47	17.06
Northern ..	11.27	15.62	18.87	7.32	14.67	1.99	13.51
North-Eastern ..	12.84	7.27	1.86	4.22	15.11	9.39	11.20
Gippsland ..	15.54	12.32	1.94	21.93	8.96	49.00	13.01
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be seen from these tables that the proportion of cultivation to land occupied is much larger in the Wimmera, Mallee, and Northern than in other districts. Of the occupied land in each of these districts, 32 per cent. in the Wimmera, 42 per cent. in the Mallee, and 26 per cent. in the Northern districts were used for agriculture in 1938-39.

In that year the area cultivated in these three districts was nearly 85 per cent. of the total cultivation in Victoria. In the North-Central, Western, and North-Eastern districts, the land occupied is largely devoted to grazing. Gippsland, Western, and Central are the chief dairying districts, and contain 80 per cent. of the sown pastures of the State.

To illustrate the uses to which the land was applied in 1925, 1929, 1934, and 1938, various percentages, relating to holdings of different sizes of privately-owned land and Crown land held in conjunction therewith, are given for those years in the succeeding table, which also shows the live stock, reduced to their equivalent in sheep, carried on the holdings :—

VICTORIA—SIZE OF HOLDINGS AND HOW UTILIZED,  
1925, 1929, 1934, AND 1938.

Size of Holdings of Privately-owned Land. (In Acres).	Year.	Percentage in each Division to Total of—					Live Stock Grazed reduced to equivalent in Sheep.
		Holdings.	Area Occupied.	Area under Cultivation.	Area used for Pasture, &c.	Equivalent in Sheep Grazed.	
1 and under 50 ..	1925	27.92	1.62	1.87	1.56	4.05	1,303,611
	1929	26.77	1.28	1.55	1.20	2.96	966,721
	1934	25.99	1.41	1.54	1.38	3.32	1,322,414
	1938	25.88	1.20	1.50	1.13	2.87	1,154,251
	1925	11.64	2.35	2.33	2.36	5.16	1,660,520
50 and under 100 ..	1929	11.34	1.89	2.03	1.86	4.50	1,452,634
	1934	11.38	1.94	1.98	1.94	4.83	1,927,965
	1938	11.15	1.77	1.71	1.79	4.56	1,832,951
	1925	36.01	22.54	23.25	22.37	31.94	10,279,013
100 and under 500 ..	1929	35.14	20.50	18.35	21.09	30.20	9,860,967
	1934	35.77	19.81	18.23	20.22	31.33	12,497,181
	1938	36.23	19.74	16.86	20.39	32.09	12,910,179
	1925	15.84	27.19	40.43	24.03	20.26	6,518,684
500 and under 1,000 ..	1929	16.84	27.21	41.40	23.25	20.50	6,691,162
	1934	16.45	26.50	40.90	22.75	20.30	8,097,164
	1938	15.27	24.29	34.17	22.04	19.88	7,998,647
	1925	8.12	36.10	30.57	37.41	28.30	9,108,435
1,000 and under 5,000 ..	1929	9.37	38.58	35.07	39.56	30.93	10,096,032
	1934	9.88	39.64	35.94	40.60	30.14	12,025,865
	1938	10.89	41.78	43.76	41.33	30.14	12,123,812
	1925	.34	5.73	1.30	6.79	5.56	1,789,811
5,000 and under 10,000 ..	1929	.40	6.04	1.20	7.39	6.32	2,064,255
	1934	.40	5.99	1.10	7.26	5.67	2,262,059
	1938	.43	6.02	1.53	7.04	5.84	2,350,437
	1925	.11	3.53	.24	4.32	3.74	1,201,688
10,000 and under 20,000	1929	.12	3.45	.35	4.31	3.20	1,046,067
	1934	.11	2.99	.26	3.70	2.85	1,138,940
	1938	.12	3.27	.37	3.94	2.75	1,107,610
	1925	.02	.84	.01	1.16	.99	317,652
20,000 and upwards ..	1929	.02	1.05	.05	1.34	1.44	469,930
	1934	.02	1.72	.05	2.15	1.56	622,381
	1938	.03	1.93	.10	2.34	1.87	750,543
	1925						32,179,414
Total ..	1929	100.00	100.00	100.00	100.00	100.00	32,647,768
	1934						39,893,969
	1938						40,228,430

In the above table horses and cattle have been reduced to an equivalent in sheep on the assumption that one head of either will

eat as much as ten sheep. The numbers of live stock held in March, 1938, on holdings of various sizes will be found on page 472.

Dairying is carried on principally on small holdings and, in conjunction therewith, pig farming is often practised as a profitable sideline. In 1938, 77 per cent. of the dairy cows and 81 per cent. of the pigs were on holdings of less than 500 acres.

Information relating to land occupied and cultivation thereon was collected in March, 1938. The land privately owned was summarized according to different sized holdings and, where Crown lands were held in conjunction therewith, these lands were, regardless of size, scheduled with the holdings to which they were attached. The particulars relating to these holdings are given in the following table :—

VICTORIA—SIZE OF HOLDINGS SHOWING AREAS UNDER CULTIVATION AND PASTURE, MARCH, 1938.

Size of Holdings. (In Acres.)	Privately-owned Land.			Crown Land held in conjunction with that privately owned.	Total Area Occupied.	Area under—	
	Number of Holdings.	Area Occupied.	Average Size of Holding.			Cultiva- tion.	Pasture, Ac.
		acres.	acres.	acres.	acres.	acres.	acres.
1 and under 50 ..	18,588	363,003	20	100,420	463,423	107,248	356,175
50 and under 100 ..	8,007	576,809	72	106,469	683,278	122,389	560,889
100 and under 500 ..	26,023	6,366,019	245	1,250,031	7,616,050	1,207,256	6,408,794
500 and under 1,000	10,969	7,719,795	704	1,653,569	9,373,364	2,446,004	6,927,360
1,000 and under 5,000	7,823	13,365,684	1,708	2,753,762	16,119,446	3,133,027	12,986,419
5,000 and under 10,000	310	2,078,770	6,706	242,252	2,321,022	109,745	2,211,277
10,000 and under 20,000	85	1,119,830	13,174	143,272	1,263,102	26,323	1,236,779
20,000 and upwards ..	19	565,139	29,744	178,222	743,361	6,839	736,522
Total Privately- owned Land ..	71,824	32,155,049	448	6,427,907	38,583,046	7,158,831	31,424,215
Crown Land not held in conjunction with that privately owned ..	968	..	..	1,805,096	1,805,096	108,079	1,697,017
Grand Total ..	72,792	32,155,049	..	8,233,093	40,388,142	7,266,910	33,121,232

Particulars of the size of holdings and cultivation thereon, together with the particulars of the total holdings in which only Crown land was held, are given in the following table :—

Size of  
holdings in  
1925, 1929,  
1934, and  
1938.

VICTORIA—SIZE OF HOLDINGS AND CULTIVATION  
THEREON, 1925, 1929, 1934, AND 1938.

Size of Holdings. (In Acres.)	Privately-owned Land.			Crown Land held in conjunc- tion with that privately owned.	Total Area Occupied.	Area under—	
	Year.	Number of Hold- ings.	Area Occupied.			Cultiva- tion.	Pasture, &c.
			acres.	acres.	acres.	acres.	acres.
1 and under 50	1925	22,083	405,655	178,977	584,632	129,732	454,900
	1929	19,791	374,677	102,430	477,107	126,435	350,672
	1934	19,318	374,948	153,033	527,981	119,076	408,905
	1938	18,588	363,003	100,420	463,423	107,248	356,175
50 and under 100	1925	9,206	658,278	191,047	849,325	161,488	687,837
	1929	8,388	601,533	105,603	707,136	165,172	541,964
	1934	8,475	610,113	118,175	728,288	153,217	575,071
	1938	8,007	576,809	106,469	683,278	122,389	560,889
100 and under 500	1925	28,482	6,977,490	1,153,583	8,131,073	1,613,388	6,517,685
	1929	25,979	6,384,766	1,270,651	7,655,417	1,497,695	6,157,722
	1934	26,635	6,499,014	922,328	7,421,442	1,408,012	6,013,430
	1938	26,023	6,366,019	1,250,031	7,616,050	1,207,256	6,408,794
500 and under 1,000	1925	12,534	8,774,932	1,033,245	9,808,177	2,805,966	7,002,211
	1929	12,449	8,828,038	1,336,491	10,164,529	3,377,341	6,787,188
	1934	12,245	8,680,358	1,244,542	9,924,900	3,159,356	6,765,544
	1938	10,969	7,719,795	1,653,569	9,373,364	2,446,004	6,927,360
1,000 and under 5,000	1925	6,420	10,933,319	2,086,875	13,020,194	2,121,423	10,898,771
	1929	6,929	11,858,819	2,550,602	14,409,421	2,860,939	11,548,482
	1934	7,357	12,524,655	2,323,211	14,847,866	2,775,863	12,072,003
	1938	7,823	13,365,684	2,753,762	16,119,446	3,133,027	12,986,419
5,000 and under 10,000	1925	273	1,863,708	198,969	2,062,677	90,274	1,977,403
	1929	297	2,047,281	207,774	2,255,055	97,542	2,157,513
	1934	298	2,013,454	230,549	2,244,003	84,681	2,159,322
	1938	310	2,078,770	242,252	2,321,022	109,745	2,211,277
10,000 and under 20,000	1925	91	1,240,151	33,452	1,273,603	16,610	1,256,993
	1929	90	1,196,469	90,838	1,287,307	28,915	1,258,392
	1934	81	1,105,170	16,609	1,121,779	20,390	1,101,389
	1938	85	1,119,830	143,272	1,263,102	26,323	1,236,779
20,000 and upwards	1925	13	336,791	1,417	338,208	1,033	337,175
	1929	15	390,376	2,519	393,395	3,788	389,607
	1934	16	456,842	187,103	643,946	3,660	640,286
	1938	19	565,139	178,222	743,361	6,839	736,522
Total of privately- owned land	1925	79,102	31,195,324	4,877,565	36,072,889	6,939,914	29,132,975
	1929	75,938	31,682,459	5,666,908	37,349,367	8,157,827	29,191,540
	1934	74,455	32,264,555	5,195,650	37,460,205	7,724,255	29,735,950
	1938	71,824	32,155,049	6,427,997	38,583,046	7,158,831	31,424,215
Crown Land not held in conjunction with that privately- owned	1925	935	..	733,355	733,355	36,800	696,555
	1929	974	..	1,021,435	1,021,435	159,575	861,860
	1934	931	..	1,317,813	1,317,813	85,701	1,232,112
	1938	968	..	1,805,096	1,805,096	108,079	1,697,017
Grand Total	1925	80,037	31,195,324	5,610,920	36,806,244	6,976,714	29,829,530
	1929	74,912	31,682,459	6,688,343	38,370,802	8,317,402	30,053,400
	1934	75,386	32,264,555	6,513,463	38,778,018	7,809,956	30,968,062
	1938	72,792	32,155,049	8,233,093	40,388,142	7,266,910	33,121,232

The number of holdings of privately-owned land of over 10,000 acres was 104 in 1938, 97 in 1934, 105 in 1929, 104 in 1925, 152 in 1919, 151 in 1913, 175 in 1910, and 195 in 1906, and the aggregate areas comprised therein in the corresponding years were 1,684,969 acres, 1,562,013 acres, 1,587,345 acres, 1,576,942 acres, 2,638,307 acres, 2,652,966 acres, 3,298,227 acres, and 4,134,067 acres. The reduction in the period of thirty-two years between 1906 and 1938 was equivalent to 47 per cent. in the number, and 62 per cent. in the acreage of such estates. Most of this reduction took place between the years 1906 and 1913, and 1919 and 1925, the periods of active Closer Settlement and of Soldier Settlement respectively.

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay. The following table shows, in respect of these products, the annual average area, production, and yield per acre during each decennium, 1855 to 1925, and the actual area, production and yield per acre for each of the thirteen seasons, 1926-1939.

**Principal Crops (Area, Production, and Average Yield).**

VICTORIA—ACREAGE, PRODUCTION, AND AVERAGE YIELD OF FIVE PRINCIPAL CROPS, 1855 TO 1939.

Period or Season.	Wheat.*	Oats.*	Barley.*	Potatoes.	Hay.
ANNUAL AREA.					
	acres.	acres.	acres.	acres.	acres
1855-65 ..	119,001	83,296	4,843	24,123	80,117
1865-75 ..	278,077	129,384	19,262	36,744	117,393
1875-85 ..	776,031	147,343	41,188	39,089	226,775
1885-95 ..	1,236,501	210,901	64,310	48,009	437,087
1895-1905 ..	1,898,280	340,957	52,829	45,243	540,472
1905-15 ..	2,190,336	390,642	60,378	56,272	848,587
1915-25 ..	2,633,945	428,372	84,205	61,195	1,122,978
1925-26 ..	2,513,494	437,696	103,395	63,369	1,013,613
1926-27 ..	2,915,315	303,424	88,896	66,185	1,080,993
1927-28 ..	3,064,172	529,392	76,768	77,649	908,804
1928-29 ..	3,718,904	347,021	75,451	68,412	1,005,063
1929-30 ..	3,566,135	630,234	97,678	58,789	865,015
1930-31 ..	4,600,200	371,024	87,518	67,590	1,277,398
1931-32 ..	3,565,872	439,626	66,381	69,929	955,839
1932-33 ..	3,230,955	368,846	93,555	69,783	1,014,523
1933-34 ..	3,052,931	575,976	106,339	60,856	1,196,259
1934-35 ..	2,458,783	506,638	87,599	54,214	1,261,552
1935-36 ..	2,323,753	505,623	116,371	44,287	1,140,361
1936-37 ..	2,393,827	381,069	100,003	45,627	1,181,612
1937-38 ..	2,686,057	394,436	139,777	41,105	1,079,039
1938-39 ..	2,748,362	657,999	175,891	34,396	1,104,558

\* For Grain.

VICTORIA—ACREAGE, PRODUCTION, AND AVERAGE YIELD OF FIVE  
PRINCIPAL CROPS, 1855 TO 1939—*continued.*

Period or Season.	Wheat.*	Oats.*	Barley.*	Potatoes.	Hay.
ANNUAL PRODUCTION.					
	bushels.	bushels.	bushels.	tons.	tons.
1855-65 ..	2,198,874	2,068,648	103,575	62,723	111,806
1865-75 ..	4,385,814	2,636,747	390,337	111,800	153,852
1875-85 ..	8,593,308	3,297,468	799,938	135,614	276,771
1885-95 ..	12,268,905	4,649,393	1,187,907	170,905	547,092
1895-1905 ..	14,032,145	6,649,453	947,580	134,357	672,982
1905-15 ..	22,906,743	7,342,468	1,243,442	158,445	1,084,726
1915-25 ..	39,171,358	7,965,864	1,923,654	169,864	1,511,298
1925-26 ..	29,255,534	4,998,165	1,774,963	163,729	929,068
1926-27 ..	46,886,020	4,884,006	1,920,722	162,909	1,387,971
1927-28 ..	26,160,814	4,682,724	1,552,109	230,348	1,001,251
1928-29 ..	46,818,833	5,602,409	1,556,118	140,158	1,267,437
1929-30 ..	25,412,587	5,058,541	2,183,325	171,747	963,089
1930-31 ..	53,814,369	6,893,827	1,983,130	173,341	1,605,900
1931-32 ..	41,955,856	6,450,281	1,256,678	206,489	1,069,276
1932-33 ..	47,843,129	6,363,853	1,995,446	182,471	1,386,028
1933-34 ..	42,613,106	6,778,754	1,888,981	142,132	1,353,796
1934-35 ..	25,850,528	5,218,787	1,609,518	109,329	1,461,264
1935-36 ..	37,552,062	6,365,056	2,314,427	104,125	1,346,953
1936-37 ..	42,844,816	6,107,885	2,143,109	196,623	1,403,049
1937-38 ..	48,173,191	5,327,199	2,708,519	134,712	1,244,935
1938-39 ..	18,104,369	2,909,260	1,671,809	81,415	892,975

\* For Grain.

VICTORIA—ACREAGE, PRODUCTION, AND AVERAGE YIELD OF FIVE  
PRINCIPAL CROPS, 1855 TO 1939—*continued.*

Period or Season.	Wheat.*	Oats.*	Barley.*	Potatoes.	Hay.
AVERAGE ANNUAL YIELD PER ACRE.					
	bushels.	bushels.	bushels.	tons.	tons.
1855-65 ..	18·48	24·83	21·39	2·60	1·40
1865-75 ..	15·77	20·38	20·27	3·04	1·31
1875-85 ..	11·07	22·38	19·42	3·47	1·22
1885-95 ..	9·92	22·05	18·46	3·56	1·21
1895-1905 ..	7·39	19·50	17·94	2·97	1·25
1905-15 ..	10·46	18·79	20·59	2·82	1·28
1915-25 ..	14·87	18·60	22·84	2·78	1·35
1925-26 ..	11·64	11·42	17·17	2·54	0·92
1926-27 ..	16·08	16·10	21·61	2·46	1·29
1927-28 ..	8·54	8·85	20·22	2·97	1·10
1928-29 ..	12·59	16·14	20·62	2·05	1·26
1929-30 ..	7·13	8·03	22·35	2·92	1·11
1930-31 ..	11·70	18·58	22·66	2·56	1·26
1931-32 ..	11·77	14·67	18·93	2·95	1·12
1932-33 ..	14·81	17·25	21·33	2·61	1·33
1933-34 ..	13·96	12·89	17·76	2·34	1·13
1934-35 ..	10·51	10·36	18·37	2·02	1·16
1935-36 ..	16·16	12·59	19·89	2·35	1·18
1936-37 ..	17·90	16·03	21·43	4·31	1·19
1937-38 ..	17·93	13·51	19·38	3·28	1·15
1938-39 ..	6·59	4·42	9·50	2·37	0·81

\* For grain.

**Area Cultivated  
1938-39.**

A summary of the area under cultivation in each County

**VICTORIA—AREA UNDER CULTIVATION**

Districts and Counties.	Grain Crops.					Potatoes.	Onions.	Hay (Wheaten, Oaten, Lucerne, Grass, etc.).
	Wheat.	Oats.	Barley.	Maize.	Peas.			
	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
<b>Central District—</b>								
Bourke .. ..	4,471	6,483	5,745	19	282	3,504	578	58,125
Grant .. ..	11,496	7,244	24,326	329	1,911	6,206	1,070	55,197
Mornington ..	216	179	376	1,521	111	3,885	223	25,094
Evelyn .. ..	57	50	161	..	17	1,428	..	5,292
<b>North Central District—</b>								
Anglesey .. ..	490	58	96	..	93	353	..	5,454
Dalhousie ..	829	1,290	176	..	76	2,514	..	12,727
Talbot .. ..	13,276	8,534	1,894	..	425	5,634	..	50,276
<b>Western District—</b>								
Grenville .. ..	4,945	6,423	4,110	..	216	816	987	26,478
Polwarth .. ..	31	1,641	1,037	..	201	1,077	825	10,046
Heytesbury ..	..	44	154	..	27	205	6	12,245
Hampden .. ..	6,157	5,587	1,413	..	5	139	76	20,608
Rippon .. ..	19,504	18,970	968	..	16	612	..	23,286
Villiers .. ..	1,054	4,019	1,464	..	158	3,052	923	20,273
Normanby ..	552	2,232	1,343	..	297	498	..	23,743
Dundas .. ..	1,480	7,340	626	..	96	26	1	23,919
Follett .. ..	225	672	144	..	90	70	..	2,991
<b>Wimmera District—</b>								
Lowan .. ..	201,592	38,178	21,482	..	85	..	..	77,143
Borong .. ..	483,262	49,595	24,672	13	109	60	1	79,646
Kara Kara ..	150,944	33,808	2,602	..	5	11	..	32,386
<b>Mallee District—</b>								
Millewa .. ..	101,892	16,044	30	..	2	1	..	4,335
Weeah .. ..	168,513	30,861	11,822	..	..	..	..	40,800
Karkaroc .. ..	670,920	164,107	26,617	3	..	8	1	53,207
Tatchera .. ..	394,993	98,531	4,457	27	..	7	1	44,127
<b>Northern District—</b>								
Gunbower .. ..	21,273	4,395	6,411	..	..	1	..	27,789
Gladstone ..	109,604	50,323	5,836	..	..	2	1	28,758
Bendigo .. ..	93,515	29,209	3,365	..	5	..	..	43,594
Rodney .. ..	66,843	18,740	11,600	..	..	4	2	50,586
Moira .. ..	196,615	43,464	2,689	5	10	9	1	117,770
<b>North Eastern District—</b>								
Delatite .. ..	2,469	3,001	472	1,197	48	578	..	25,425
Bogong .. ..	16,755	4,775	697	773	17	262	1	37,504
Benambra .. ..	87	292	354	290	18	16	..	9,224
Wonnangatta ..	..	20	..	83	25	9	..	170
<b>Gippsland District—</b>								
Croajingolong ..	5	35	50	2,469	189	75	..	743
Tambo .. ..	17	13	101	2,969	58	64	..	1,389
Dargo .. ..	55	288	317	3,848	48	94	..	1,710
Tanjil .. ..	3,930	1,287	6,991	4,619	95	196	2	17,747
Buln Buln .. ..	295	267	1,293	227	324	2,980	199	35,751
<b>Total for State ..</b>	<b>2,748,362</b>	<b>657,999</b>	<b>175,891</b>	<b>18,485</b>	<b>5,029</b>	<b>34,396</b>	<b>4,898</b>	<b>1,104,558</b>

of the State for the season 1938-39 is given in the following table :—

FOR THE SEASON 1938-39.

Green Forage.	Grass and Clover for Seed.	Tobacco.	Vines.	Flax.	Market Gardens.	Orchards.	All Other Crops.	Total Area under Crops.	Land in Fallow.	Total Area under Cultivation.
Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
5,222	..	..	..	..	7,127	11,197	1,534	104,287	26,914	131,201
4,087	9	..	14	13	2,372	1,512	345	116,131	32,101	148,232
14,450	166	..	..	142	3,678	13,025	1,521	64,587	11,110	75,697
1,485	..	..	..	..	1,870	7,686	453	18,499	2,726	21,225
814	..	..	..	..	115	32	18	7,586	506	8,092
1,072	61	..	35	..	10	56	48	18,894	1,374	20,268
1,974	2,162	..	26	58	21	3,374	76	87,730	19,809	107,539
625	198	..	1	15	54	361	35	45,264	12,890	58,154
2,182	1,926	..	..	568	251	228	69	20,082	1,314	21,396
1,762	41	..	..	..	11	99	41	14,635	2,669	17,304
564	450	..	..	..	49	23	21	35,092	7,594	42,686
630	20	..	24	110	..	19	9	64,168	24,444	88,612
1,767	610	..	..	8	84	15	342	33,769	2,857	36,626
2,838	106	..	..	13	580	878	248	32,328	6,309	38,637
1,679	1,274	..	..	89	29	15	96	36,670	5,355	42,025
896	99	..	..	..	..	63	18	5,268	480	5,748
441	165	..	23	..	7	345	474	339,935	320,153	560,088
921	..	12	840	..	221	1,882	331	641,565	511,677	1,153,242
194	..	..	49	..	..	387	..	220,386	162,750	383,136
..	..	..	30	..	..	32	72	122,438	47,050	169,488
1,350	..	..	..	..	..	..	622	253,968	147,562	401,530
586	..	..	28,788	..	148	1,764	108	946,257	505,421	1,451,678
7,053	..	..	6,718	..	107	1,385	222	557,628	308,119	865,747
12,936	..	55	19	..	269	925	358	74,431	20,031	94,462
903	..	..	12	..	85	316	..	195,840	102,993	298,833
997	52	9	98	..	506	2,529	12	173,891	81,639	255,530
2,837	..	..	337	..	384	10,963	35	162,331	41,634	203,965
1,533	..	66	779	..	978	9,443	120	373,482	200,415	573,897
1,392	81	1,014	72	..	48	527	389	36,713	5,830	42,543
735	..	1,396	4,571	..	163	1,120	1,180	69,849	15,856	85,905
880	..	..	..	..	2	15	119	11,297	864	12,161
16	..	..	..	..	..	0	14	343	30	373
379	..	..	..	..	91	15	269	4,320	213	4,533
1,155	..	..	..	..	506	127	190	6,589	785	7,374
1,700	..	..	..	..	648	119	436	9,263	634	9,897
9,334	..	7	..	83	296	225	4,739	49,551	3,579	53,130
21,407	114	..	..	259	349	592	75	64,132	7,538	71,670
108,796	7,534	2,559	42,436	1,358	21,059	71,300	14,639	5,019,299	2,543,225	7,562,524

**Yields of  
Principal Crops.**

The table which follows shows the yields, in Counties,

### VICTORIA—YIELDS OF PRINCIPAL

Districts and Counties.	Grain Crops.					Potatoes.
	Wheat.	Oats.	Barley.	Maize.	Peas.	
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Tons.
<b>Central District—</b>						
Bourke .. .. .	57,780	130,805	78,054	F	1,785	9,416
Grant .. .. .	155,686	137,313	401,408	4,500	12,588	14,865
Mornington .. .	4,548	2,615	6,737	11,693	1,839	6,668
Evelyn .. .. .	1,096	902	4,226	..	277	4,192
<b>North Central District—</b>						
Anglesey .. .. .	4,914	329	1,115	100	710	901
Dalhousie .. .	10,654	22,777	2,078	..	313	6,144
Talbot .. .. .	109,178	113,098	28,508	..	3,224	14,714
<b>Western District—</b>						
Grenville .. ..	76,832	125,141	57,978	..	1,595	1,757
Polwarth .. ..	379	29,691	20,557	..	2,134	3,356
Heytesbury .. .	..	622	3,756	..	256	458
Hampden .. ..	105,615	109,266	25,551	..	45	195
Ripon .. .. .	373,788	319,855	12,096	..	124	1,174
Villiers .. ..	17,703	82,045	42,213	..	1,899	4,145
Normanby .. .	10,100	53,946	30,873	..	4,822	1,185
Dundas .. ..	22,408	110,455	11,976	..	972	29
Follett .. .. .	3,919	9,114	3,901	..	271	119
<b>Wimmera District—</b>						
Lowan .. .. .	2,507,471	360,070	259,288	..	241	..
Borong .. .. .	5,115,822	150,923	115,905	4	60	94
Kara Kara .. .	1,265,036	144,791	14,799	..	60	15
<b>Mallee District—</b>						
Millewa .. .. .	97,080	6,671	..	..	361	2
Weeah .. .. .	1,157,026	113,344	78,782	..	..	..
Karkaroc .. .	2,609,725	111,009	97,866	50	..	9
Tatchera .. .	972,394	26,097	14,237	1,075	..	16
<b>Northern District—</b>						
Gunbower .. .	41,372	20,962	86,332	..	..	2
Gladstone .. .	678,518	126,031	35,679	..	..	3
Bendigo .. ..	314,308	52,788	11,947	..	12	..
Rodney .. .. .	242,118	40,915	76,162	..	..	7
Moira .. .. .	1,714,029	318,943	23,255	F	319	6
<b>North Eastern District—</b>						
Delatite .. ..	56,068	57,082	11,876	9,660	415	1,499
Bogong .. .. .	331,771	103,469	13,026	10,002	295	763
Benambra .. .	1,527	4,645	6,211	3,323	277	31
Wonnangatta ..	..	308	..	251	94	F
<b>Gippsland District—</b>						
Croajingolong ..	47	354	26	80,070	2,706	142
Tambo .. .. .	157	154	1,350	113,742	211	117
Dargo .. .. .	1,061	2,245	5,167	90,043	214	176
Tanjil .. .. .	41,316	17,245	72,637	88,592	1,092	430
Buln Buln .. .	2,923	3,240	16,237	3,473	4,121	8,785
<b>Total for State ..</b>	<b>18,104,369</b>	<b>2,909,260</b>	<b>1,671,809</b>	<b>416,578</b>	<b>43,332</b>	<b>81,415</b>

NOTE.—The letter "F" signifies that the crop was a failure.

of the principal crops for the season, 1938-39.

CROPS FOR THE SEASON, 1938-39.

Onions.	Hay (Wheaten, Oaten, Lucerne, Grass. etc.)	Grass and Clover for Seed.	Tobacco.	Wine Made.	Dried Vine-Fruits.		
					Raisins.	Sultanas.	Currants.
Tons.	Tons.	Bushels.	cwt.	Gallons.	cwt.	cwt.	cwt.
2,879	58,100	..	..	} 825,056	..	..	..
1,206	57,231	F	..		..	..	..
188	26,018	294	..		..	..	..
..	6,381	..	..		..	..	..
..	5,024	..	..		..	..	..
..	11,898	54	..		..	..	..
..	48,272	2,929	..		..	..	..
1,432	28,007	335	..		..	..	..
1,351	11,052	5,087	..		..	..	..
9	13,743	22	..		..	..	..
109	21,928	310	..		..	..	..
..	26,740	18	..		..	..	..
2,732	25,851	4,340	..		..	..	..
..	30,404	750	..		..	..	..
F	27,585	18,905	..		..	..	..
..	3,442	531	..		..	..	..
..	70,003	696	..		..	..	..
..	48,134	..	31		..	..	98
..	20,408	..	..		..	115	182
..	1,072	..	..		..	..	..
..	18,565	..	..		..	100	75
3	16,510	..	..		..	91,873	488,099
4	14,926	..	..		..	10,143	82,766
..	22,205	..	370		..	..	..
..	15,069	..	..		..	..	..
..	15,560	89	49		..	..	14
..	33,553	..	..		..	..	59
F	66,843	..	308		..	..	3
..	30,749	F	2,119	..	..	..	
..	47,599	..	3,543	..	..	..	
..	11,639	..	..	..	..	..	
..	186	..	..	..	..	..	
..	1,304	..	..	..	..	..	
..	1,344	..	..	..	..	..	
..	1,624	..	..	..	..	..	
..	16,886	..	12	..	..	..	
1	37,120	827	..	..	..	..	
482	..	..	..	..	..	..	
10,404	892,975	35,217	6,432	825,056	102,016	571,156	206,022

NOTE.—The letter "F" signifies that the crop was a failure.

Area, Yield  
and Gross  
Value of Crops,  
Season 1938-39.

The following table shows the area under, the yield from, and the gross value of each of the principal crops in Victoria for the season 1938-39.

VICTORIA—AREA, YIELD, AND GROSS VALUE OF CROPS,  
1938-39.

Crop.	Area.	Yield.	Gross Value.*
	acres.		£
Wheat .. .. .	2,748,362	18,104,369 bushels	2,891,200†
Oats .. .. .	657,999	2,909,260 "	509,121
Barley, Malting (2 row)	150,984	1,411,139 "	235,190
" Other (6 row) ..	24,907	260,670 "	36,928
Maize .. .. .	18,485	416,578 "	107,466
Rye .. .. .	1,109	4,735 "	1,184
Hay, Wheaten .. ..	258,839	194,759 tons	809,765
" Oaten .. .. .	722,528	561,922 "	2,361,455
" Lucerne, &c. .. .	36,838	45,905 "	228,384
" Other (Grass) ..	86,353	90,389 "	253,245
Straw .. .. .		21,087 "	57,759
Grass Seed .. .. .	7,534	35,217 bushels	22,451
Canary Seed .. .. .	1,878	6,020 "	3,461
Beans for grain .. .	640	3,419 "	6,581
Peas for grain .. .	5,029	43,332 "	18,958
Green Fodder .. ..	108,796		295,934
Potatoes .. .. .	34,396	81,415 tons	1,095,032
Onions .. .. .	4,898	10,404 "	197,676
Sugar Beet .. .. .	4,268	13,454 "	26,908
		of beet valued at factory at £26,908	
		(Sugar extracted amounted to 1,507 tons from 13,454 tons of beet)	
Turnips, Beet, &c., for fodder	817	2,093 "	8,895
Mangolds .. .. .	376	3,537 "	7,074
Tobacco .. .. .	2,559	6,432 cwt.	59,620
Hops .. .. .	135	742 "	8,316
Broom Millet .. ..	624	1,940 "	708
Chicory .. .. .	314	3,180 "	6,145
Flax .. .. .	1,358	202 tons (dried)	8,484
		950 "	4,750
		of straw valued at mills at £4,750	
		Products obtained were—	
		960 cwt. seed	
		1,080 cwt. fibre	
		1,740 cwt. tow	
Orchards, Productive ..	58,134		1,789,575
" Unproductive ..	13,166		
Grapes, Table .. ..	1,497	4,089 tons	65,429
" Wine .. .. .	6,281	5,593 "	32,871
		valued at winery at £32,871. Wine made amounted to 825,056 gallons	
" Drying .. .. .	31,862	175,706 "	1,790,596
		Producing—	
		28,558 tons of sultanas	
		5,101 tons of raisins	
		10,301 tons of currants	
Vines, Unproductive ..	2,796		
Market Gardens .. ..	21,059		1,158,245
Pumpkins .. .. .	1,429	5,129 tons	30,774
Other Crops .. .. .	3,049		248,661
Total Crops .. .. .	5,019,299		14,378,841

\* The gross value is based on the wholesale price realized in the principal markets. The places where primary products are absorbed locally or where they become raw material for a secondary industry are presumed to be the principal markets.

† Includes bounties to necessitous farmers £200,000, and amount allocated from Flour Tax £315,002.

The following table gives the annual value of each of the five principal crops, based upon prices realized at country railway stations, also the value of each crop per acre for each of the five seasons, 1934-35 to 1938-39.

## VICTORIA—VALUES OF FIVE PRINCIPAL CROPS.

Season.	Annual Value of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	£	£	£	£	£
1934-35 .. ..	4,422,091*	524,879	200,927	711,263	3,145,257
1935-36 .. ..	6,975,305*	609,985	281,591	616,326	2,963,105
1936-37 .. ..	10,573,533	725,311	412,188	533,350	3,712,145
1937-38 .. ..	8,381,235	799,080	448,798	667,947	4,979,740
1938-39 .. ..	2,423,468*	460,633	239,461	865,034	3,352,862
	Annual Value Per Acre of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1934-35 .. ..	1 16 0	1 0 9	2 5 11	13 2 5	2 9 10
1935-36 .. ..	3 0 0	1 4 2	2 8 5	13 18 4	2 12 0
1936-37 .. ..	4 8 4	1 18 1	4 2 5	11 13 9	3 2 10
1937-38 .. ..	3 2 5	2 0 6	3 4 3	16 5 0	4 12 4
1938-39 .. ..	0 17 8	0 14 0	1 7 3	25 3 0	3 0 9

\* Includes bounties, &c.

## THE GRAIN ELEVATOR SYSTEM FOR THE BULK HANDLING OF WHEAT IN VICTORIA.

The *Grain Elevator Act* 1934 provided for the handling of grain in bulk, for wheat within defined areas to be delivered to elevators, and for the constitution of the Grain Elevators Board. It also empowered the Board to borrow money to the extent that the money owing at any one time shall not exceed £2,000,000. Amending legislation passed in 1940 increased the borrowing powers to £2,500,000.

The bulk handling scheme will be completed in two sections, is estimated to cost £2,482,387 and provides for the erection, at country railway stations, of 140 elevators with individual capacities of seven sizes ranging from 65,000 to 300,000 bushels, which will serve terminal elevators at Geelong and Williamstown of 2,250,000 bushels and 2,600,000 bushels capacity respectively. (The capacity of the latter terminal was increased from 2,000,000 bushels because of the desirability of having additional storage available in war time.) These terminals are designed to receive wheat from railway trucks at the rate of 20,000 bushels per hour and to load into ships at 64,000 bushels per hour. When the whole system is completed the storage capacity will amount to 23,000,000 bushels.

The first section of the scheme, which embraces the western portion of the State bounded on the east by the Melbourne-Mildura railway line, came into operation at the beginning of the 1939-40 season when 48 country elevators with a storage capacity of 5,385,000 bushels, the Geelong terminal elevator with a capacity of 2,250,000 bushels, and 6 private elevators with a capacity of 980,000 bushels which were leased by the Board at country stations, were opened for the receipt of wheat in bulk. The receipts for the season amounted to 10,782,190 bushels.

The terminal at Geelong, although brought into operation before the final stages of construction work were completed, functioned satisfactorily. Shipments of up to 8,314 tons of bulk wheat were loaded in 22 hours. The results of all operations during the season are regarded as satisfactory and the change from bag to bulk handling was effected with very little inconvenience and in most cases at no expense to growers. Although growers were required by the Act to deliver only 75 per cent. of their wheat through the system, in many cases they delivered almost 100 per cent.

Construction of elevators at country stations included in the first section of the scheme is proceeding and it is expected that the whole of this section serving the Geelong terminal will be in operation for the 1940-41 harvest. At the Williamstown terminal the construction of the foundations have been completed and tenders for the construction of the superstructure have been invited. Plans for the construction of elevators at 61 country stations serving this terminal are well advanced and it is expected that tenders for this second portion of the system will be invited in the near future.

**Wheat growing in counties.**

The principal wheat growing areas are in the Wimmera, Mallee, and Northern districts. In the season 1938-39 these districts were responsible for 92 per cent. of the total wheat production of the State. Although other districts provide only small proportions of the total area, they are not to be regarded as unsuitable for wheat growing, as their average yield per acre is usually greater than in the areas mentioned. The yield in 1938-39, because of prevailing drought conditions, was only 18,104,369 bushels, or an average yield per acre of 6.59 bushels, in comparison with an average of 15.26 bushels over the five-year period 1933-34 to 1937-38. Other droughts occurred in Victoria during the seasons 1914-15 and 1919-20, when average yields per acre were 1.38 bushels and 7.75 bushels respectively. The area sown and the production of wheat for grain in different counties for each of the three seasons, 1937-39, are shown in the following table :—

**VICTORIA—WHEAT AREAS AND YIELDS IN COUNTIES FOR THE THREE SEASONS, 1937-1939.**

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1937.	1938.	1939.	1937.	1938.	1939.	1937.	1938.	1939.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
<b>Central—</b>									
Bourke ..	5,883	7,083	4,471	111,301	142,009	57,780	18·92	20·05	12·92
Grant ..	12,701	16,494	11,496	243,416	336,710	155,686	19·17	20·41	13·54
Mornington ..	846	1,306	216	17,286	21,784	4,548	20·43	16·68	21·06
Evelyn ..	58	73	57	1,505	1,499	1,096	25·95	20·53	19·23
<b>Total ..</b>	<b>19,488</b>	<b>24,956</b>	<b>16,240</b>	<b>373,508</b>	<b>502,002</b>	<b>219,110</b>	<b>19·17</b>	<b>20·12</b>	<b>13·49</b>
<b>North-Central—</b>									
Anglesey ..	892	774	490	11,950	15,982	4,914	13·40	20·65	10·03
Dalhousie ..	1,408	1,808	829	28,806	31,809	10,654	20·46	17·59	12·85
Talbot ..	14,913	18,989	13,276	302,288	428,247	109,178	20·27	22·55	8·22
<b>Total ..</b>	<b>17,213</b>	<b>21,571</b>	<b>14,595</b>	<b>343,044</b>	<b>476,038</b>	<b>124,746</b>	<b>19·93</b>	<b>22·07</b>	<b>8·55</b>
<b>Western—</b>									
Grenville ..	5,050	6,199	4,945	97,223	143,912	76,832	19·25	23·22	15·54
Polwarth ..	64	132	31	1,740	2,962	379	27·19	22·44	12·23
Heytesbury ..									
Hampden ..	4,247	6,636	6,157	109,251	167,400	105,615	25·72	25·23	17·15
Ripon ..	15,015	22,084	19,504	372,566	645,431	373,788	24·81	29·23	19·16
Villiers ..	395	985	1,054	8,145	21,493	17,703	20·62	21·82	16·80
Normanby ..	745	832	552	16,034	18,470	10,100	21·52	22·20	18·30
Dundas ..	1,502	2,341	1,480	32,782	49,958	22,408	21·83	21·34	15·14
Follett ..	204	253	225	3,242	3,749	3,919	15·89	14·82	17·42
<b>Total ..</b>	<b>27,222</b>	<b>39,462</b>	<b>33,948</b>	<b>640,983</b>	<b>1,053,375</b>	<b>610,744</b>	<b>23·55</b>	<b>26·69</b>	<b>17·99</b>
<b>Wimmera—</b>									
Lowan ..	188,189	209,577	201,592	4,141,453	5,012,598	2,507,471	22·01	23·92	12·44
Borong ..	447,352	487,656	483,262	10,918,772	12,515,822	5,115,822	24·41	25·67	10·59
Kara Kara ..	120,718	141,964	150,944	2,793,668	3,121,252	1,265,036	23·14	21·99	8·38
<b>Total ..</b>	<b>756,259</b>	<b>839,197</b>	<b>835,798</b>	<b>17,853,893</b>	<b>20,649,672</b>	<b>8,888,329</b>	<b>23·61</b>	<b>24·61</b>	<b>10·63</b>

VICTORIA—WHEAT AREAS AND YIELDS IN COUNTIES FOR THE THREE SEASONS, 1937-1939—*continued.*

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1937.	1938.	1939.	1937.	1938.	1939.	1937.	1938.	1939.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
<b>Mallee—</b>									
Millewa ..	108,157	103,065	101,892	778,783	996,211	97,080	7·20	9·67	·95
Weeah ..	156,334	164,848	168,513	1,731,578	2,101,828	1,157,026	11·08	12·75	6·87
Karkaroo ..	547,534	603,073	670,920	7,260,385	8,424,302	2,609,725	13·26	13·97	3·89
Tatchera ..	310,487	344,178	394,993	4,794,018	3,894,548	972,394	15·44	11·32	2·46
Total ..	1,122,512	1,215,164	1,336,318	14,564,764	15,416,889	4,836,225	12·98	12·69	3·62
<b>Northern—</b>									
Gunbower ..	16,274	20,118	21,273	266,391	217,030	41,372	16·37	10·79	1·94
Gladstone ..	83,442	103,527	109,604	1,601,750	2,000,698	678,518	19·20	19·33	6·19
Bendigo ..	77,904	94,764	93,515	1,486,805	1,548,645	314,308	19·09	16·34	3·36
Rodney ..	49,942	64,279	66,843	1,086,309	1,111,147	242,118	21·75	17·29	3·62
Molra ..	198,199	230,278	196,615	4,156,295	4,404,390	1,714,029	20·97	19·13	8·72
Total ..	425,761	512,966	487,850	8,597,550	9,281,910	2,990,345	20·19	18·09	6·13
<b>North-Eastern—</b>									
Delatite ..	2,388	3,157	2,469	46,769	76,552	56,068	19·59	24·25	22·71
Bogong ..	19,220	25,300	16,755	360,456	633,909	331,771	18·75	25·06	19·80
Benambra ..	189	255	87	3,182	4,881	1,527	16·84	19·14	17·55
Wonnangatta ..	..	..	..	..	..	..	..	..	..
Total ..	21,797	28,712	19,311	410,407	715,342	389,366	18·83	24·91	20·16
<b>Gippsland—</b>									
Croajingolong ..	..	9	5	..	107	47	..	11·89	9·40
Tambo ..	5	40	17	90	587	157	18·00	14·68	9·24
Dargo ..	78	141	55	747	2,901	1,061	9·58	20·57	19·29
Tanjil ..	3,129	3,434	3,930	54,096	65,971	41,316	17·29	19·21	10·51
Buln Buln ..	363	405	295	5,734	8,397	2,923	15·80	20·73	9·91
Total ..	3,575	4,029	4,302	60,667	77,963	45,504	16·97	19·35	10·58
Total (State)	2,393,827	2,686,057	2,748,362	42,844,816	48,173,191	18,104,369	17·90	17·93	6·59

The production of wheat in the other Australian States in 1938-39 was as follows:—New South Wales, 59,898,000 bushels; South Australia, 31,674,000 bushels; Western Australia, 36,844,000 bushels; Queensland, 8,584,000 bushels; and Tasmania, 205,000 bushels. The total production for the Commonwealth was 155,369,000 bushels.

**Monthly Rainfall and Average Yields of Wheat 1928 to 1939.** In the following table the average yield per acre in each of the main wheat growing counties for the years 1928 to 1939 is shown in conjunction with the approximate mean rainfall recorded each month. The rainfall during the growing season is shown separately to indicate its effect on wheat production. While the table is useful as a general reference in respect of the relationship of wheat yields to rainfall, it should be remembered that temperatures, winds, and other factors such as the extent to which fallowing, rotational cropping, and fertilizing are practised have also considerable effect on average yields, as do also the varieties of wheat used.

# VICTORIA—RAINFALL AND AVERAGE WHEAT YIELD PER ACRE IN WHEAT-GROWING COUNTIES FOR THE YEARS 1928 TO 1939.

County and Year.	Approximate Mean Rainfall each Month.											Total for Year.	Total Wheat-growing-Period.	Average Wheat Yield per Acre.	
	Jan.	Feb.	Mar.	April.	May.	Wheat-growing Months.									Dec.
	Points.	Points.	Points.	Points.	Points.	June.	July.	Aug.	Sept.	Oct.	Nov.				Points.
<b>Lowan—</b>															
1928 .. ..	152	279	89	170	164	199	216	51	228	361	47	16	1,972	1,102	20·40
1929 .. ..	89	70	89	179	131	271	172	175	140	115	61	262	1,754	934	18·27
1930 .. ..	1	117	20	139	98	31	303	294	218	253	147	462	2,083	1,246	19·16
1931 .. ..	44	4	94	222	256	364	226	233	167	25	79	29	1,743	1,034	16·15
1932 .. ..	1	263	186	248	105	258	232	232	126	146	58	83	1,938	1,052	17·59
1933 .. ..	137	2	82	135	367	104	92	194	286	82	337	225	2,043	1,095	17·01
1934 .. ..	36	37	39	203	5	79	149	190	229	362	267	38	1,634	1,276	15·35
1935 .. ..	64	10	167	129	158	232	288	237	239	92	97	72	1,785	1,185	20·12
1936 .. ..	161	11	68	42	157	287	401	260	98	220	34	265	2,004	1,300	22·01
1937 .. ..	226	87	114	55	155	93	107	256	205	152	43	247	1,740	856	23·92
1938 .. ..	119	152	33	236	27	212	189	88	78	27	80	20	1,261	674	12·44
1939 .. ..	161	123	28	187	201	194	122	389	126	115	253	50	1,949	1,199	20·05
<b>Borung—</b>															
1928 .. ..	198	373	245	114	107	202	148	27	183	298	16	17	1,928	874	18·16
1929 .. ..	59	90	85	164	84	197	96	143	85	112	64	219	1,398	697	7·23
1930 .. ..	1	106	23	99	150	41	263	290	124	367	147	475	2,086	1,232	13·74
1931 .. ..	40	5	179	291	249	432	162	155	145	31	196	60	1,945	1,121	16·44
1932 .. ..	1	245	197	291	105	199	211	231	97	144	67	80	1,868	949	21·63
1933 .. ..	178	..	71	127	281	113	188	186	270	87	219	299	2,019	1,063	20·78
1934 .. ..	55	95	20	168	5	50	172	171	171	360	345	32	1,644	1,269	17·60
1935 .. ..	36	26	118	147	92	144	299	201	281	136	48	71	1,599	1,109	23·29
1936 .. ..	224	5	45	29	215	190	471	219	55	180	28	268	1,929	1,143	24·41
1937 .. ..	193	99	87	21	114	128	77	187	145	291	42	278	1,662	870	25·67
1938 .. ..	168	89	13	132	38	183	211	62	42	15	59	7	1,019	572	10·59
1939 .. ..	97	208	12	261	267	172	120	308	95	76	273	25	1,914	1,044	18·01
<b>Kara Kara—</b>															
1928 .. ..	260	375	210	98	109	220	166	35	177	276	13	19	1,988	887	17·82
1929 .. ..	57	139	80	160	73	194	86	156	82	128	78	167	1,400	724	5·95
1930 .. ..	1	131	31	79	191	56	250	283	116	372	97	546	2,153	1,174	10·85
1931 .. ..	23	8	218	246	303	461	191	144	160	34	210	35	2,033	1,200	13·45
1932 .. ..	1	189	256	346	98	242	222	294	94	120	56	89	2,007	1,028	18·17
1933 .. ..	160	..	53	132	261	120	277	175	245	104	295	424	2,246	1,216	19·25
1934 .. ..	66	159	20	163	1	51	206	187	167	395	307	50	1,772	1,313	15·53
1935 .. ..	76	43	113	212	98	142	377	189	294	226	37	71	1,878	1,265	25·08
1936 .. ..	227	3	21	46	151	168	500	252	47	199	36	269	1,919	1,202	23·14
1937 .. ..	222	95	42	19	129	98	76	229	135	332	26	258	1,661	896	21·99
1938 .. ..	132	86	13	123	28	225	201	68	37	16	55	4	988	602	8·38
1939 .. ..	93	293	32	518	279	191	118	323	107	88	280	25	2,347	1,107	22·91

Production.

VICTORIA—RAINFALL AND AVERAGE WHEAT YIELD PER ACRE IN WHEAT-GROWING COUNTIES FOR THE YEARS 1928 TO 1939—*continued.*

County and Year.	Approximate Mean Rainfall each Month.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.	
	Wheat-growing Months.										Nov.	Dec.				
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.						
Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Bushels.	
Millewa—																
1928 .. ..	36	441	106	36	47	170	88	13	68	68	3	25	1,101	454	3 43	
1929 .. ..	12	193	33	16	13	36	37	43	61	25	94	288	851	215	0 02	
1930 .. ..	15	47	115	39	142	4	129	209	74	259	68	208	1,309	817	11 06	
1931 .. ..	25	2	128	202	150	287	92	61	154	69	106	80	1,306	813	8 32	
1932 .. ..	17	220	1	110	151	233	98	215	59	45	22	81	1,382	801	12 05	
1933 .. ..	153	1	19	21	114	23	121	144	143	59	213	142	1,153	604	5 76	
1934 .. ..	57	61	56	48	..	31	71	63	84	289	146	29	935	538	1 23	
1935 .. ..	51	5	74	110	40	02	100	71	121	130	4	59	827	524	3 23	
1936 .. ..	426	16	43	58	114	64	245	55	19	74	12	162	1,288	571	7 20	
1937 .. ..	196	10	47	30	71	185	68	191	36	163	30	127	1,154	714	9 67	
1938 .. ..	122	37	2	63	34	26	186	45	5	29	10	..	559	325	0 95	
1939 .. ..	6	367	37	34	126	118	69	154	67	87	259	1	1,325	621	9 20	
Weeah—																
1928 .. ..	110	253	122	117	73	184	99	29	101	204	1	22	1,315	690	8 26	
1929 .. ..	24	39	45	49	50	97	46	80	56	32	67	191	776	361	2 49	
1930 .. ..	1	39	29	56	158	16	181	181	73	359	76	332	1,501	968	10 10	
1931 .. ..	28	..	96	151	180	280	90	105	181	39	100	20	1,270	875	9 84	
1932 .. ..	7	292	139	143	104	192	148	200	64	80	15	88	1,472	788	9 36	
1933 .. ..	141	..	45	48	192	33	122	147	150	68	127	185	1,258	712	8 36	
1934 .. ..	69	64	34	95	..	31	105	105	114	323	191	32	1,163	678	6 52	
1935 .. ..	26	2	67	98	72	121	142	114	138	183	31	52	1,046	770	10 03	
1936 .. ..	431	11	50	64	101	122	334	95	24	160	18	207	1,617	836	11 08	
1937 .. ..	139	43	101	11	63	135	92	211	63	215	36	196	1,305	779	12 75	
1938 .. ..	123	85	..	158	6	85	189	57	10	7	44	8	772	354	6 87	
1939 .. ..	32	214	6	103	119	131	77	187	36	27	221	5	1,158	577	7 71	
Karkaroc—																
1928 .. ..	111	295	152	89	57	156	88	23	108	145	3	15	1,242	577	7 79	
1929 .. ..	21	69	34	109	30	76	29	81	52	31	79	191	802	299	2 26	
1930 .. ..	5	22	44	31	188	11	142	172	59	317	79	370	1,440	889	8 06	
1931 .. ..	26	2	163	255	230	324	110	51	152	62	90	4	1,469	929	9 37	
1932 .. ..	5	259	137	157	97	205	125	186	80	64	16	84	1,415	757	10 30	
1933 .. ..	117	..	27	33	154	40	200	134	148	66	168	252	1,339	742	8 96	
1934 .. ..	41	144	46	100	1	41	111	78	100	305	214	16	1,197	636	5 75	
1935 .. ..	38	9	70	93	46	107	136	74	145	173	18	69	978	681	9 65	
1936 .. ..	315	4	23	54	120	132	329	93	25	128	11	186	1,420	827	13 26	
1937 .. ..	179	36	55	12	83	175	62	179	41	285	26	176	1,309	825	13 97	
1938 .. ..	102	49	4	60	20	78	175	61	6	25	17	1	598	365	3 89	
1939 .. ..	24	375	34	135	169	149	85	173	59	45	234	2	1,484	680	12 93	

VICTORIA—RAINFALL AND AVERAGE WHEAT YIELD PER ACRE IN WHEAT-GROWING COUNTIES FOR THE YEARS 1928 TO 1939—*continued.*

Approximate Mean Rainfall each Month.

County and Year.	Wheat-growing Months.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.		
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.					
	Points.	Po.nts.	Points.														
<b>Tatchera—</b>																	
1928 .. ..	312	329	172	93	72	170	84	30	109	179	9	15	1,574	644	8·84		
1929 .. ..	17	111	79	130	33	100	28	101	61	71	60	180	971	394	2·30		
1930 .. ..	1	35	56	27	186	20	144	149	76	319	76	527	1,616	894	7·79		
1931 .. ..	43	1	176	294	315	319	97	37	139	69	86	2	1,578	976	10·23		
1932 .. ..	1	250	167	243	97	185	160	222	111	69	29	89	1,623	844	13·02		
1933 .. ..	121	1	37	29	153	97	235	138	181	84	119	316	1,511	888	11·25		
1934 .. ..	47	226	40	135	..	43	120	116	89	323	266	29	1,434	691	6·42		
1935 .. ..	73	59	60	150	41	90	194	66	202	287	29	41	1,292	880	12·39		
1936 .. ..	210	10	6	43	138	144	393	113	25	142	8	189	1,421	955	15·44		
1937 .. ..	156	43	14	11	82	128	46	148	38	302	11	91	1,070	744	11·32		
1938 .. ..	100	49	1	42	17	117	165	68	5	15	13	1	593	387	2·46		
1939 .. ..	19	394	34	165	247	154	99	178	87	54	220	4	1,655	819	17·03		
<b>Gunbower—</b>																	
1928 .. ..	500	291	236	93	109	196	88	33	99	212	8	7	1,872	737	9·84		
1929 .. ..	19	103	50	187	37	124	21	140	100	124	41	160	1,106	546	7·21		
1930 .. ..	..	15	94	27	211	37	132	160	79	262	64	617	1,698	881	7·74		
1931 .. ..	48	1	172	290	237	297	104	45	108	96	106	..	1,504	887	11·84		
1932 .. ..	1	199	213	254	123	200	195	229	84	94	67	97	1,756	925	14·48		
1933 .. ..	91	..	72	30	157	183	236	199	193	109	186	286	1,742	1,077	14·82		
1934 .. ..	110	261	51	153	..	54	149	166	83	314	261	51	1,653	766	8·59		
1935 .. ..	87	121	68	190	69	109	250	89	240	254	30	79	1,586	1,011	17·45		
1936 .. ..	168	24	12	83	121	164	431	162	38	158	16	271	1,648	1,074	16·37		
1937 .. ..	138	46	5	44	89	95	44	158	77	215	11	79	1,001	678	10·79		
1938 .. ..	104	66	1	39	17	157	184	60	9	6	27	1	671	433	1·94		
1939 .. ..	12	400	85	200	192	176	105	203	96	94	235	8	1,806	866	18·14		
<b>Gladstone</b>																	
1928 .. ..	364	326	237	90	122	221	138	32	146	255	10	20	1,961	914	15·24		
1929 .. ..	44	118	39	126	50	177	42	144	72	118	70	145	1,145	603	5·60		
1930 .. ..	..	91	100	59	282	46	204	229	95	338	106	622	2,172	1,194	13·94		
1931 .. ..	37	5	198	305	367	427	169	108	164	32	237	28	2,077	1,267	9·91		
1932 .. ..	2	186	291	364	127	222	222	283	109	106	60	91	2,063	1,069	14·99		
1933 .. ..	153	..	44	103	226	145	315	200	236	105	259	419	2,205	1,227	17·01		
1934 .. ..	79	188	22	173	..	60	223	156	142	416	293	53	1,805	997	12·06		
1935 .. ..	90	62	87	185	92	146	371	161	275	247	22	73	1,811	1,292	22·29		
1936 .. ..	196	5	13	44	157	143	548	191	40	194	24	207	1,762	1,273	19·20		
1937 .. ..	209	75	27	34	103	93	57	196	103	333	21	193	1,444	885	19·33		
1938 .. ..	103	56	8	91	30	193	211	72	25	13	39	4	845	544	6·19		
1939 .. ..	72	350	38	431	293	208	127	272	97	76	303	15	2,282	1,073	20·05		

*Production.*

VICTORIA—RAINFALL AND AVERAGE WHEAT YIELD PER ACRE IN WHEAT-GROWING COUNTIES FOR THE YEARS 1928 TO 1939—*continued.*

County and Year.	Approximate Mean Rainfall each Month.												Total for Year.	Total Wheat-growing Period.	Average Wheat Yield per Acre.
	Wheat-growing Months.														
	Jan.	Feb.	Mar.	April.	May.	June.	July.	Aug.	Sept.	Oct.	Nov.	Dec.			
Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Points.	Bushels.
<b>Bendigo—</b>															
1928 .. .. .	552	283	321	76	141	258	106	32	127	227	28	36	2,187	891	15·66
1929 .. .. .	33	152	17	216	41	148	21	159	60	94	66	129	1,136	523	8·47
1930 .. .. .	..	68	90	42	292	34	173	193	85	321	101	613	2,012	1,098	15·30
1931 .. .. .	48	4	311	295	325	437	194	99	155	63	187	1	2,119	1,273	10·89
1932 .. .. .	2	151	306	370	121	222	205	286	104	122	37	100	2,026	1,060	16·44
1933 .. .. .	173	..	74	43	200	185	327	228	205	106	249	311	2,101	1,251	17·13
1934 .. .. .	128	184	28	127	2	64	169	136	94	390	292	66	1,680	855	10·60
1935 .. .. .	120	116	66	237	63	114	335	119	259	308	34	66	1,837	1,198	19·84
1936 .. .. .	127	19	10	78	164	147	454	177	40	192	29	261	1,698	1,174	19·09
1937 .. .. .	128	93	8	111	116	94	61	176	97	192	13	99	1,188	736	16·34
1938 .. .. .	98	63	6	54	30	208	188	49	10	7	35	2	750	492	3·36
1939 .. .. .	55	400	109	412	221	231	104	261	93	106	244	17	2,253	1,016	18·46
<b>Rodney—</b>															
1928 .. .. .	384	471	343	138	178	294	129	37	123	253	9	24	2,383	1,014	16·66
1929 .. .. .	33	125	47	392	58	131	24	165	91	72	79	183	1,400	541	13·05
1930 .. .. .	..	44	94	41	258	22	170	218	117	323	102	528	1,917	1,108	15·69
1931 .. .. .	44	6	304	287	291	434	187	111	151	127	170	1	2,113	1,301	12·33
1932 .. .. .	1	63	298	415	69	277	217	265	160	119	54	66	2,004	1,107	16·66
1933 .. .. .	89	..	104	13	210	209	303	170	226	171	134	228	1,857	1,289	18·46
1934 .. .. .	290	265	58	151	1	65	181	186	102	403	332	122	2,156	938	12·74
1935 .. .. .	107	173	78	346	63	138	324	142	301	270	35	45	2,022	1,238	21·37
1936 .. .. .	182	28	6	176	86	179	451	225	67	217	49	281	1,947	1,225	21·75
1937 .. .. .	164	73	19	51	159	131	78	163	107	203	14	94	1,256	841	17·29
1938 .. .. .	120	104	5	55	32	275	151	80	14	10	30	2	878	562	3·62
1939 .. .. .	45	481	212	621	200	311	139	388	132	153	236	25	2,943	1,323	17·30
<b>Moira—</b>															
1928 .. .. .	270	417	320	140	173	226	150	46	96	234	8	18	2,098	925	14·76
1929 .. .. .	30	119	125	352	87	123	39	159	136	99	75	162	1,506	643	16·16
1930 .. .. .	..	26	65	65	224	30	146	242	105	335	111	511	1,860	1,082	14·28
1931 .. .. .	70	19	334	268	378	487	188	128	152	178	189	6	2,397	1,511	15·43
1932 .. .. .	2	59	278	369	39	242	236	280	192	115	105	90	2,007	1,104	18·91
1933 .. .. .	93	2	70	37	194	202	247	163	261	149	142	296	1,856	1,216	17·83
1934 .. .. .	431	221	163	218	..	77	207	234	118	436	391	140	2,636	1,072	14·29
1935 .. .. .	115	133	106	380	57	153	300	160	253	316	24	113	2,110	1,239	22·67
1936 .. .. .	165	36	23	228	81	256	454	271	79	191	50	256	2,090	1,332	20·97
1937 .. .. .	206	68	33	58	145	148	91	204	121	278	43	102	1,497	987	19·13
1938 .. .. .	96	71	3	83	54	292	170	149	27	13	9	3	970	705	8·72
1939 .. .. .	22	548	297	676	120	401	165	459	150	271	221	20	3,350	1,566	12·94

WHEAT GROWING IN CONJUNCTION WITH SHEEP-GRAZING AND DAIRYING.

For the season 1935-36, statistics showing the extent to which mixed farming was practised in conjunction with wheat growing were compiled in respect of each State in the Commonwealth. The tabulations were prepared by the Commonwealth Statistician from data prepared by each State.

An analysis of the tables for the State of Victoria for that season discloses that wheat for grain was grown on 13,780 holdings. The total area of these holdings was 12,482,336 acres, and the area actually sown with wheat for grain 2,323,753 acres. On 9,974 holdings, or 72·4 per cent. of the total growing wheat for grain, there were 4,841,152 sheep, or 27·7 per cent. of the State's total of 17,457,291 sheep at 1st March, 1936.

On 11,787 of the holdings growing wheat for grain, or 85·5 per cent. of the total, there were 109,049 dairy cows at 1st March, 1936. Pigs numbering 41,100 were held on 5,482 holdings which also grew wheat for grain.

The following table shows the total area of holdings growing wheat for grain with particulars of wheat growing, sheep, dairy cattle, and pigs thereon.

VICTORIA—HOLDINGS GROWING WHEAT FOR GRAIN TOGETHER WITH SHEEP, DAIRY CATTLE, AND PIGS THEREON, SEASON 1935-36.

Area under Wheat for Grain.	Holdings.		Wheat.	Sheep.		Dairy Cows.		Pigs.	
	Growing Wheat Grain.	Total Area.	Total Area.	Holdings With.	Total.	Holdings With.	Total.	Holdings With.	Total.
Acres.	No.	Acres.	Acres.	No.	No.	No.	No.	No.	No.
1- 19	1,729	1,011,373	15,444	1,182	650,532	1,630	28,705	876	11,918
20- 49	1,472	949,722	46,690	1,065	562,368	1,264	16,964	593	6,344
50- 99	1,820	1,285,193	126,973	1,317	702,466	1,487	15,611	658	5,374
100- 149	1,850	1,443,355	218,237	1,369	645,561	1,537	12,363	670	4,549
150- 199	1,542	1,264,846	258,255	1,120	458,689	1,275	8,301	527	2,371
200- 249	1,886	1,799,769	401,202	1,311	513,366	1,559	9,267	688	3,172
250- 299	989	1,055,702	261,950	631	290,706	847	4,867	387	1,773
300- 349	1,080	1,261,622	334,376	773	327,333	926	4,997	457	2,590
350- 399	399	497,697	145,424	299	117,130	354	2,061	176	796
400- 499	560	865,676	238,013	436	227,660	490	3,134	251	1,327
500- 599	241	451,036	125,985	213	136,400	218	1,263	101	474
600- 699	125	312,496	77,504	116	111,546	118	851	59	286
700- 799	39	106,965	27,990	36	37,469	37	279	19	44
800- 899	16	50,307	13,020	15	14,304	14	103	5	14
900- 999	14	41,369	12,790	13	14,083	13	79	7	20
1,000-1,249	16	73,746	17,030	16	28,107	16	146	7	46
1,250-1,499	1	5,632	1,270	1	1,532	1	24	1	2
1,500-1,749	1	5,800	1,600	1	1,300	1	34	..	..
Total ..	13,780	12,482,336	2,323,753	9,974	4,841,152	11,787	109,049	5,482	41,100

An analysis of the wheat productivity of each State was also made by the Commonwealth Statistician from data prepared by the State Statisticians. In respect of the State of Victoria the analysis shows

that, although the average yield per acre for the State was 16.16 bushels, there were 2,607 holdings upon which 566,678 acres were sown with wheat for grain and from which yields of less than nine bushels per acre were obtained.

The following table shows the complete Victorian wheat production in bag series per acre for the season 1935-36 :—

VICTORIA—WHEAT PRODUCTION PER ACRE 1935-36.

Production Series (Bushels per Acre).	Wheat (for Grain) Production in Series.			
	Holdings.	Area Grain.	Production.	Production.
	No.	Acres.	Bushels.	Bags.
Under 3 .. ..	739	184,450	270,891	88,526
3 and under 6 .. ..	797	171,639	753,265	246,165
6 .. 9 .. ..	1,071	210,589	1,549,059	506,228
9 .. 12 .. ..	1,253	228,869	2,397,195	783,397
12 .. 15 .. ..	1,472	248,603	3,328,454	1,087,730
15 .. 18 .. ..	1,856	275,197	4,519,868	1,477,081
18 .. 21 .. ..	1,865	266,811	5,231,646	1,709,688
21 .. 24 .. ..	1,550	235,821	5,315,204	1,736,995
24 .. 27 .. ..	1,477	228,024	5,827,043	1,904,262
27 .. 30 .. ..	808	140,029	3,993,835	1,305,175
30 .. 33 .. ..	635	100,468	3,147,335	1,028,541
33 .. 36 .. ..	128	17,346	604,102	197,419
36 .. 39 .. ..	96	12,615	470,266	153,682
39 .. 42 .. ..	19	2,035	83,260	27,209
42 .. 45 .. ..	6	467	20,358	6,653
45 .. 48 .. ..	6	385	18,253	5,965
48 and over .. ..	2	405	22,032	7,200
Total .. ..	13,780	2,323,753	37,552,066	12,271,916

Particulars of wheat productivity and of mixed farming associated with wheat growing in respect of any county or district in Victoria for the season 1935-36 may be obtained upon application to the Victorian Government Statist.

**Varieties of Wheat.**

The following statement shows the areas under the principal varieties of wheat, including wheat for hay, for the seasons 1936-37 to 1938-39. The varieties are tabulated in order of popularity for the last-mentioned season. The percentages shown indicate the fluctuation which has taken place amongst the popular varieties.

Over 100 varieties of wheat were sown. The number which was tried in the Mallee greatly exceeded that experimented with in any other district. A more extended list showing the area and percentage of each variety, and the ten principal varieties grown in the wheat-growing districts, can be obtained on application to the Government Statist.

**VICTORIA—VARIETIES OF WHEAT SOWN IN EACH OF THE SEASONS, 1936-37, 1937-38, AND 1938-39.**

Variety (in order of popularity, Season 1938-39).	1936-37.		1937-38.		1938-39.	
	Area Sown.	Percentage of total Area Sown.	Area Sown.	Percentage of total Area Sown.	Area Sown.	Percentage of total Area Sown.
	Acres.		Acres.		Acres.	
Ghurka .. .. .	1,113,780	45·15	1,250,623	45·05	1,436,646	47·78
Ranee (incl. 4H) .. .. .	550,301	22·31	573,268	20·65	612,733	20·38
Dundee .. .. .	69,523	2·82	249,342	8·98	319,291	10·62
Free Gallipoli .. .. .	363,530	14·74	323,001	11·63	252,758	8·41
Bencubbin .. .. .	30,439	1·23	63,820	2·30	87,194	2·90
Sepoy .. .. .	79,027	3·20	61,827	2·23	59,425	1·98
Bobin .. .. .	17,908	·73	31,279	1·13	35,305	1·17
Rajah .. .. .	37,331	1·51	36,011	1·30	34,225	1·14
Nabawa .. .. .	37,380	1·52	25,901	·93	20,355	·68
Major .. .. .	21,165	·86	23,497	·85	18,247	·61
Nizam .. .. .	13,567	·55	13,576	·49	14,005	·47
Mac's White .. .. .	12,203	·49	11,335	·41	13,873	·46
Turvey .. .. .	12,007	·49	13,516	·49	11,258	·37
Baldmin .. .. .	2,422	·10	5,310	·19	10,322	·34
Federation .. .. .	16,888	·68	12,085	·44	10,054	·33
Waratah .. .. .	12,568	·51	11,140	·40	9,154	·30
Baringa .. .. .	5,789	·24	10,120	·36	7,695	·26
Warden .. .. .	8,707	·35	7,005	·25	7,076	·24
Mogul .. .. .	5,123	·21	6,412	·23	5,616	·19
Ford .. .. .	2,513	·10	2,745	·10	3,151	·10
C.M.G. .. .. .	1,744	·07	2,502	·09	3,145	·10
Ghuyas .. .. .	4,147	·17	2,840	·10	2,740	·09
Sword .. .. .	2,914	·12	3,066	·11	2,554	·09
Bena .. .. .	4,781	·19	3,778	·14	2,403	·08
Currawa .. .. .	7,589	·31	3,727	·13	2,321	·08
Other Varieties .. .. .	33,128	1·35	28,575	1·02	25,655	·83
Total .. .. .	2,466,664	100·00	2,776,301	100·00	3,007,201	100·00

The most interesting feature of the above statement is the rise and fall in popularity of certain varieties. For the season 1938-39, increased areas were sown with Ghurka, Dundee, Bencubbin, and Bobin as compared with 1936-37, while decreases took place in respect of Free Gallipoli, Nabawa, and Sepoy.

Many changes have also taken place in the leading varieties of wheat in other Australian wheat-growing States during recent years. In New South Wales, Ford and Nabawa occupied very minor positions on the list in 1929, but have now risen to first and third places respectively. Dundee now occupies second place in that State. On the other hand, Nabawa, which was the leading variety with 47 per cent. of the total area sown in Western Australia in 1929, has declined to seventh place on the list, with only 4.77 per cent. of the area sown in 1938. In South Australia the area sown with the varieties Rancee, Nabawa, and Sword was only 3.72 per cent. of the total area sown in 1929, but the area now sown with these varieties amounts to 41.73 per cent. of the total area sown. Free Gallipoli became the leading variety in Victoria in 1929-30, and continued as such until the season 1934-35, when it was superseded by Ghurka.

PRINCIPAL VARIETIES OF WHEAT SOWN IN AUSTRALIAN STATES, 1938-39.

New South Wales.		Victoria.		South Australia.		Western Australia.	
Variety.	Percentage of Total Area.	Variety.	Percentage of Total Area.	Variety.	Percentage of Total Area.	Variety.	Percentage of Total Area.
Ford ..	19.41	Ghurka ..	47.78	Rancee ..	23.13	Bencubbin ..	36.69
Dundee ..	15.94	Rancee ..	20.38	Nabawa ..	9.87	Glueclub ..	13.87
Nabawa ..	14.60	Dundee ..	10.62	Bencubbin ..	8.77	Merredin ..	8.61
Bencubbin ..	14.57	Free Gallipoli ..	8.41	Sword ..	8.73	Gluyas Early ..	5.76
Waratah ..	5.59	Bencubbin ..	2.90	Dundee ..	8.27	Totadgin ..	5.71
Baringa ..	5.21	Sepoy ..	1.98	Waratah ..	5.29	Noongaar ..	5.48
Rancee ..	4.02	Bobin ..	1.17	Gluyas ..	5.05	Nabawa ..	4.77
All Other ..	20.66	All Other ..	6.76	All Other ..	30.89	All Other ..	19.11
Total ..	100.00	Total ..	100.00	Total ..	100.00	Total ..	100.00

VICTORIA—DISTRICT PERCENTAGE OF TOTAL AREA UNDER WHEAT, AND ESTIMATED QUANTITY OF SEED AND FERTILIZERS USED PER ACRE 1937-38.

District.	Percentage (according to acreage) of total area in the State.	Weight per acre of—	
		Seed Sown.	Fertilizers Used.
Central ..	1.08	lb. 95	lb. 103
North-Central ..	.96	103	109
Western ..	1.50	89	139
Wimmera ..	31.12	75	87
Mallee ..	44.41	58	62
Northern ..	19.67	71	84
North-Eastern ..	1.10	75	101
Gippsland ..	.16	83	105
Total State ..	100.00	67	77

The rate of sowing for the season 1937-38 in the principal wheat-growing counties, ranged from 44 lb. of seed per acre in the County of Millewa to 88 lb. in Ripon. Manure used varied from 40 lb. per acre in Millewa to 133 lb. in Ripon. On 52,983 acres sown to wheat, of which 41,773 acres were in the Mallee district, no manure at all was used. Superphosphates used on wheat areas in the season 1938-39 amounted to 92,266 tons, the value of which at country railway stations was £373,700.

**Fallow.** The large area of land fallowed for the next season's cropping operations is a feature of the three wheat-growing districts. Of the 2,543,225 acres in fallow during the season 1938-39, 1,008,152 were in the Mallee, 894,580 in the Wimmera, and 446,712 in the Northern districts. The total area of fallow in these three districts—2,349,444 acres—represented 92 per cent of the land fallowed in the State.

The following table shows the acreage in fallow in various years, together with the area sown to wheat in each succeeding season :—

#### VICTORIA—LAND IN FALLOW AND WHEAT SOWN.

Season.		Land in Fallow.	Season.		Area Sown to Wheat.
		acres.			acres.
1901-02	.. ..	681,778	1902-03	.. ..	2,155,928
1911-12	.. ..	1,469,608	1912-13	.. ..	2,471,586
1921-22	.. ..	2,052,964	1922-23	.. ..	2,857,533
1927-28	.. ..	2,692,044	1928-29	.. ..	3,854,622
1928-29	.. ..	2,683,462	1929-30	.. ..	3,731,699
1929-30	.. ..	2,482,662	1930-31	.. ..	4,788,560
1930-31	.. ..	2,590,629	1931-32	.. ..	3,705,555
1931-32	.. ..	2,145,819	1932-33	.. ..	3,320,504
1932-33	.. ..	2,633,287	1933-34	.. ..	3,208,619
1933-34	.. ..	2,543,043	1934-35	.. ..	2,576,019
1934-35	.. ..	2,216,464	1935-36	.. ..	2,401,548
1935-36	.. ..	2,358,777	1936-37	.. ..	2,466,664
1936-37	.. ..	2,483,163	1937-38	.. ..	2,776,301
1937-38	.. ..	2,604,556	1938-39	.. ..	3,007,201
1938-39	.. ..	2,543,225	1939-40	.. ..	2,923,027
1939-40	.. ..	2,377,405			

**Wheat standard.** The weight of an imperial bushel of wheat is 60 lb., but the actual weight of a bushel of Victorian wheat of fair average quality standard is determined annually by the Chamber of Commerce.

The following table shows the standard determined in Victoria for each of the ten seasons, 1930-31 to 1939-40 :—

Season.			Weight of Bushel of Wheat, f.a.q.	Season.			Weight of Bushel of Wheat, f.a.q.
			lb.				lb.
1930-31	..	..	58½	1935-36	..	..	63½
1931-32	..	..	62¾	1936-37	..	..	62
1932-33	..	..	62	1937-38	..	..	63½
1933-34	..	..	60	1938-39	..	..	64½
1934-35	..	..	60	1939-40	..	..	63½

Farmers growing Wheat for Grain.

The following statement shows the number of farmers engaged in the growing of wheat for grain.

VICTORIA—NUMBER OF FARMERS WHO PLANTED TWENTY OR MORE ACRES OF WHEAT FOR GRAIN, SEASONS 1933-34 TO 1938-39.

1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
14,319	12,582	12,051	12,090	12,936	12,305

It is estimated that about 14,500,000 bushels of wheat per annum are required locally for food and seed. The stocks of wheat and flour in the State at 31st October in each of the five years, 1935-1939, were as follow :—

VICTORIA—STOCKS OF WHEAT AND FLOUR.

At 31st October—				Quantity in Bushels.		
				Wheat.	Flour (equivalent in Wheat).	Total.
1935	..	..	..	5,840,992	1,253,637	7,094,629
1936	..	..	..	4,923,693	1,853,528	6,777,221
1937	..	..	..	6,990,373	1,295,631	8,286,004
1938	..	..	..	5,809,493	1,131,963	6,941,456
1939 (estimated)	..	..	..	5,290,000	1,313,000	6,603,000

Oats. Oats are grown in Victoria mainly as a hay crop. The area harvested (season 1938-39) for hay was 722,528 acres, and for grain 657,999 acres, which produced 561,922 tons of hay, and 2,909,260 bushels of grain respectively. About 47 per cent. of the area for grain is in the Mallee district, but the area for hay is spread over all districts. More than 60 varieties of oats are generally sown, but Algerian, with nearly 88 per cent. of the area, is predominately the most popular variety.

**Hay.** Of the total area under hay in 1938-39, as shown in the table on page 439, 722,528 acres under oats produced 561,922 tons, 258,839 acres under wheat produced 194,759 tons, 36,838 acres under lucerne, &c., produced 45,905 tons, and 86,353 acres under grass produced 90,389 tons; the yields per acre of these kinds of hay were .78, .75, 1.25, and 1.05 tons respectively. The quantity of straw recorded for the season 1938-39 was 21,087 tons.

**Barley.** The area under barley for grain in 1938-39 was 175,891 acres, of which 150,984 were under malting (2 row), and 24,907 under feed (6 row) barley. Although barley is grown generally throughout the State, 97,097 acres, or 55 per cent. of the total area for the season 1938-39, were sown in the counties of Grant, Lowan, Borung and Karkaroc. The average yield per acre in Grant was 16.50 bushels. The figures in the subjoined table show the acreage, production, and yield per acre, for each of the five years 1934-35 to 1938-39 :—

VICTORIA—BARLEY PRODUCTION, 1934-35 TO 1938-39.

Year ended March—	Area under Crop.		Produce.		Average per Acre.		
	Malting (2 row).	Other (6 row).	Malting (2 row).	Other (6 row).	Malting (2 row).	Other (6 row).	Total.
	acres	acres	bushels.	bushels.	bushels.	bushels.	bushels.
1935 ..	70 962	16 637	1,275,037	334,481	17·97	20·11	18·37
1936 ..	98,799	17,572	1,944,237	370,190	19·68	21·07	19·89
1937 ..	83,802	16,201	1,782,931	350,178	21·28	22·23	21·43
1938 ..	113,598	26,179	2,122,035	586,484	18 68	22·40	19·38
1939 ..	150,984	24,907	1,411,139	260,670	9·35	10·47	9·50

**Maize.** Maize for grain is cultivated mainly in Gippsland, but two or three thousand acres are regularly grown in the Mornington and the North-Eastern districts. It is grown in Victoria both for grain and for green fodder. The areas for 1938-39 were 18,485 acres for grain, and 26,114 acres for fodder. The area, production and average yield for each of the five seasons, 1934-35 to 1938-39, are given in the following table :—

VICTORIA—MAIZE PRODUCTION, 1934-35 TO 1938-39.

Season.	For Green Fodder.	For Grain.		
		Area.	Production.	Yield per acre.
	acres.	acres.	bushels.	bushels.
1934-35 .. ..	24 904	18,727	719,360	38·41
1935-36 .. ..	26 971	20 377	638,643	31·34
1936-37 .. ..	26,543	20,115	794,506	39·50
1937-38 .. ..	25,211	20,879	783 835	37·54
1938-39 .. ..	26,114	18,485	416,578	22·54

The annual average yield of the last five seasons was 34·01 bushels per acre, as compared with 45·0 in 1910-15, and 65·4 in 1900-05. The relatively light yield per acre for the latest five-year period was probably due to the cultivation of new areas, which are less fertile than the rich river flats upon which this cereal was grown exclusively in earlier periods.

**Potatoes.** Victoria is the largest potato-producing State in the Commonwealth. Out of a total area of 114,000 acres planted in 1937-38 to potatoes, 41,100 acres were grown in this State.

The cultivation of the potato crop in Victoria is confined mainly to the central highlands, the South-western district and the Gippsland district. These districts are favoured with good average rainfall, varying from 30 to 50 inches per annum, which is fairly well distributed throughout the year.

The following table shows the area, yield and value of potatoes for each of the five seasons, 1934-35 to 1938-39 :—

VICTORIA—POTATO PRODUCTION, 1934-35 TO 1938-39.

Season.	Area.	Production.	Average Yield.	Gross Value.
	acres.	tons.	tons.	£
1934-35 ..	54,214	103,329	2·02	956,629
1935-36 ..	44,287	104,125	2·35	826,492
1936-37 ..	45,627	196,623*	4·31	614,447
1937-38 ..	41,105	134,712*	3·28	801,536
1938-39 ..	34,396	81,415*	2·37	1,095,032

\* Includes amounts held on farms for seed, stock feed, &c., as follow:—46,732 tons in 1936-37; 33,153 tons in 1937-38, and 18,380 tons in 1938-39.

**Onions.** Onions are grown in nearly every county south of the Dividing Range. The returns for last season show that in Grenville the yield was 1,432 tons from 987 acres; in Villiers, 2,732 tons from 923 acres; in Polwarth 1,351 tons from 825 acres; in Grant 1,206 tons from 1,070 acres; in Bourke 2,879 tons from 578 acres; in Buln Buln 482 tons from 199 acres; and in Mornington 188 tons from 223 acres. The following statement shows the area, yield and value for each of the last five years :—

VICTORIA—ONION PRODUCTION, 1934-35 TO 1938-39.

Season—	Area.	Production.	Average Yield.	Gross Value.
	acres.	tons.	tons.	£
1934-35 .. ..	5,928	36,187	6·10	260,094
1935-36 .. ..	5,441	26,143	4·80	235,287
1936-37 .. ..	5,969	46,130	7·73	184,099
1937-38 .. ..	6,036	45,583	7·55	188,620
1938-39 .. ..	4,898	10,404	2·12	197,676

Wholesale prices of agricultural and pastoral products.

The prices which appear below are the average prices realized for the marketed produce of the seasons enumerated. Average prices, representing the mean of prices ruling each month and not taking into account the quantities sold during each month, are shown on pages 489 and 490.

VICTORIA—AVERAGE WHOLESALE PRICES REALIZED FOR AGRICULTURAL AND PASTORAL PRODUCE, 1929-30 TO 1938-39.

Average Prices Realized for Produce of Season—	Wheat.	Oats.	Barley (Malting).	Maize.	Potatoes.	Onions.	Wool. (Clipped, and on Skins.)
	per bushel. s. d.	per bushel. s. d.	per bushel. s. d.	per bushel. s. d.	per ton. s. d.	per ton. s. d.	per lb. s. d.
1929-30 ..	4 4	3 4	3 9	5 5	115 0	62 0	0 10 30
1930-31 ..	2 6	1 9½	2 6	3 9	72 0	53 0	0 8 65
1931-32 ..	3 2½	2 0	3 0½	4 3	92 0	237 0	0 8 76
1932-33 ..	2 10¾	1 11	2 6	4 7½	85 0	65 0	0 8 11
1933-34 ..	2 11½	2 2½	2 7	3 6	106 0	85 0	1 2 71
1934-35 ..	3 3½	2 3½	2 10½	4 4	175 0	143 9	0 9 52
1935-36 ..	4 1	2 2½	2 9½	5 1	158 9	180 0	1 1 96
1936-37 ..	5 5½	2 8	4 3½	5 6	72 6	146 0	1 4 39
1937-38 ..	4 1	3 3½	3 10	4 11½	145 0	109 6	1 0 77
1938-39 ..	2 7½	3 6	3 4	5 3¾	289 0	380 0	0 10 59

Vine Production.

The production of dried vine-fruits for the season 1938-39 amounted to 43,960, as compared with a record production of 57,452 tons for the previous season. This far exceeds the requirements for home consumption. Exports of Victorian produce to the United Kingdom, Canada, New Zealand, and other countries for the season 1938-39 amounted to 33,402 tons.

Australian production of dried vine-fruits for the season 1938-39 amounted to approximately 72,000 tons, of which the Victorian portion represented over 61 per cent.

Particulars of vine production for the five seasons 1934-35 to 1938-39 are given in the following table:—

VICTORIA—VINE PRODUCTION, 1934-35 TO 1938-39.

Season.	Number of Growers.	Area.		Produce.				
		Bearing.	Not Bearing.	Grapes gathered.	Wine made.	Dried Fruits.		
						Raisins.		Currants.
		acres.	acres.	cwt.	gallons.	cwt.	cwt.	
1934-35 .	2,509	37,592	3,583	3,239,660	1,276,176	78,532	514,209	176,023
1935-36..	2,512	37,851	3,230	3,463,202	1,683,049	92,481	617,237	88,414
1936-37..	2,458	38,329	3,566	3,903,430	1,818,917	90,243	655,090	152,202
1937-38..	2,438	38,645	3,238	4,897,257	1,433,637	106,501	863,579	178,960
1938-39..	2,424	39,640	2,796	3,707,783	825,056	102,016	571,156	206,022

Of the total quantity of grapes gathered in 1938-39, it is estimated that 111,869 cwt. were used for making wine and spirits, 3,514,128 cwt. for raisins and currants, and 81,786 cwt. for table consumption.

Of the dried fruit, 91,873 cwt. of lexias, 488,199 cwt. of sultanas, and 193,496 cwt. of currants were produced in the Mildura shire, and 9,664 cwt. of lexias, 82,586 cwt. of sultanas, and 11,974 cwt. of currants in the Swan Hill Shire.

**Tobacco.** The imposition of emergency tariff rates about 1931 greatly stimulated the growing of tobacco in Victoria and, as a result, the area planted increased in the 1932-33 season to 13,418 acres. Due, however, to economic circumstances and to disease in the crops, the acreage subsequently declined. The 1938-39 crop amounted to 6,432 cwt., which was obtained from 2,559 acres.

The following table furnishes details of the area, production, and average yield in each of the five seasons, 1934-35 to 1938-39 :—

VICTORIA—TOBACCO PRODUCTION, 1934-35 TO 1938-39.

Season—		Area.	Production.	Produce per Acre.	Gross Value.
		acres.	cwt. (dry).	cwt. (dry).	£
1934-35	.. ..	4,765	13,405	2·81	135,433
1935-36	.. ..	5,840	25,706	4·40	231,114
1936-37	.. ..	5,492	15,658	2·85	138,965
1937-38	.. ..	4,736	20,860	4·40	185,808
1938-39	.. ..	2,559	6,432	2·51	59,620

**Flax.** The production of flax is confined mainly to the Central, Western and Gippsland Districts. Although the acreage sown is steadily increasing, production is insufficient to supply local requirements.

The following table shows the area under flax, the quantity of straw delivered at flax mills, and the produce obtained therefrom for each of the last five seasons, and also the Australian imports of certain flax products for each of the years ended 30th June, 1935, to 1939 :—

VICTORIAN FLAX PRODUCTION AND AUSTRALIAN IMPORTS OF FLAX PRODUCTS, 1934-35 TO 1938-39.

Season.	Area.*	Straw delivered at Mills.	Produce Obtained.		Australian Imports (year ended 30th June).		
			Fibre.	Linseed.	Fibre.	Linseed.	Linseed Oil.
	acres.	tons.	cwt.	cwt.	cwt.	cwt.	gallons.
1934-35	.. 769	995	680	2,660	103	752,501	252,730
1935-36	.. 1,068	1,468	1,049	3,811	2,980	711,010	298,035
1936-37	.. 912	952	848	2,130	9,913	680,054	223,570
1937-38	.. 1,086	1,705	2,401	2,981	3,958	577,447	150,828
1938-39	.. 1,260	950	1,080	900	3,286	635,196	188,629

\* Excludes area under New Zealand Flax, the acreage of which was 81 in 1937-38 and 98 in 1938-39.

**Orchards.** The extent of cultivation of each important class of fruit on holdings of one acre and upwards during the seasons 1934-35 and 1937-38 is shown in the following table:—

**VICTORIA—FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS, 1934-35 AND 1937-38.**

Fruit.	Number of Trees, Plants, &c.					
	1934-35.			1937-38.		
	Bearing.	Not Bearing.	Total.	Bearing.	Not Bearing.	Total.
Apples .. ..	2,385,315	510,281	2,895,596	2,295,155	400,777	2,695,932
Pears .. ..	848,066	238,747	1,086,813	908,593	289,965	1,198,558
Quinces .. ..	57,659	13,951	71,610	52,306	13,280	65,586
Plums .. ..	277,492	70,477	347,969	248,536	65,846	314,382
Prunes .. ..	62,621	1,873	64,494	47,087	3,396	50,483
Cherries .. ..	73,383	64,217	137,600	76,188	54,274	130,462
Peaches .. ..	842,985	314,466	1,157,451	921,630	427,769	1,349,399
Apricots .. ..	329,415	51,337	380,752	317,656	95,463	413,119
Nectarines .. ..	13,787	4,454	18,241	14,888	6,993	21,381
Oranges .. ..	435,739	64,477	500,216	365,948	50,424	416,372
Lemons .. ..	123,405	37,658	161,063	107,369	46,202	153,571
Loquats .. ..	3,101	744	3,845	1,913	527	2,445
Figs .. ..	25,528	9,829	35,357	25,131	8,531	33,662
Persimmons .. ..	699	39	738	432	19	451
<b>Total Large Fruits</b>	<b>5,479,195</b>	<b>1,382,550</b>	<b>6,861,745</b>	<b>5,382,537</b>	<b>1,463,466</b>	<b>6,846,003</b>
Raspberries .. ..	337,000	..	337,000	322,572	..	322,572
Loganberries .. ..	146,266	..	146,266	108,845	..	108,845
Strawberries .. ..	4,565,409	..	4,565,409	4,777,003	..	4,777,003
Gooseberries .. ..	169,848	23,264	193,112	137,633	7,685	145,318
Mulberries .. ..	716	105	821	659	62	721
Currants (Red, White, and Black) .. ..	30,179	11,788	41,967	18,014	2,773	20,787
Olives .. ..	3,866	42	3,908	2,498	234	2,732
Passion-fruit .. ..	82,115	37,824	119,939	100,530	44,700	145,230
Almonds .. ..	28,278	8,660	36,938	30,195	10,670	40,865
Walnuts .. ..	7,766	3,039	10,805	7,965	2,067	10,032
Filberts .. ..	1,943	164	2,107	1,924	78	2,002
Chestnuts .. ..	607	260	867	569	257	826
<b>Total Nuts</b>	<b>38,594</b>	<b>12,123</b>	<b>50,717</b>	<b>40,653</b>	<b>13,072</b>	<b>53,725</b>

The principal fruits grown in the State are apples, pears, peaches, and citrus. The excess of production over consumption was exported both overseas and interstate. The apple and pear crops for the season 1938-39 amounted to 1,574,916 and 1,204,340 bushels respectively, and from this production there were exported to the United Kingdom and Continental ports 254,000

**Fruit growing  
1933-34 to  
1938-39.**

cases of apples and 312,000 cases of pears. A considerable quantity of apricots, peaches, and pears is grown, mostly in irrigated areas, for canning purposes. The total output of canned apricots, peaches and pears for the 1939 season was 1,919,793 cases. This output represented about 71 per cent. of the total Australian pack. In addition to the fruits shown in the subjoined table, large quantities of melons, rhubarb, and tomatoes were produced in orchards, the following being the quantities recorded for 1938-39:—Melons, 12,657 cwt.; rhubarb, 31,404 dozen bundles; tomatoes, 363,258 bushels. The gross value of all fruit grown in the season 1938-39 was £1,789,575 as compared with £1,938,367 in 1937-38.

## VICTORIA—FRUIT GROWING, 1933-34 TO 1938-39.

	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of Growers ..	6,930	6,685	6,712	6,621	6,514	6,476
	acres.	acres.	acres.	acres.	acres.	acres.
Area .. ..	75,134	74,763	74,006	75,169	75,067	71,300
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
Kind of Fruit—						
Apples .. ..	2,418,430	2,085,081	2,417,425	2,878,327	2,454,471	1,574,916
Pears .. ..	1,005,775	1,021,780	1,492,062	1,657,763	1,527,032	1,204,340
Quinces .. ..	54,836	42,452	55,454	45,116	52,733	45,415
Apricots .. ..	368,673	260,161	350,793	179,824	409,417	251,028
Cherries .. ..	42,347	30,712	41,509	39,509	41,987	40,888
Nectarines .. ..	14,490	13,610	9,013	12,681	17,134	18,371
Peaches .. ..	970,541	1,173,031	915,811	1,269,716	1,695,094	1,653,792
Plums .. ..	197,017	194,843	149,791	215,424	190,320	106,650
Prunes .. ..	70,019	70,968	63,626	70,024	58,967	39,597
Lemons .. ..	208,546	220,737	205,089	181,920	187,828	162,428
Oranges .. ..	658,461	639,325	618,290	580,526	691,563	700,990
Figs .. ..	19,184	16,228	15,755	20,260	19,528	15,019
Passion Fruit .. ..	29,514	22,326	21,410	26,635	33,290	21,094
Other Large Fruits ..	4,264	4,460	4,831	4,821	3,455	2,737
	cwt.	cwt.	cwt.	cwt.	cwt.	cwt.
Blackberries .. ..	1,322	968	993	924	1,019	315
Cape Gooseberries .. ..	179	74	135	150	112	167
Currants .. ..	328	350	314	283	233	171
Gooseberries .. ..	5,597	4,620	3,130	4,131	3,786	2,762
Loganberries .. ..	4,164	3,064	2,510	2,961	2,825	1,290
Mulberries .. ..	37	39	22	24	37	17
Raspberries .. ..	3,608	2,521	2,380	2,816	3,166	1,520
Strawberries .. ..	8,488	7,700	5,183	6,488	6,711	2,772
	lb.	lb.	lb.	lb.	lb.	lb.
Almonds .. ..	102,250	94,808	89,568	129,551	171,617	98,498
Chestnuts .. ..	34,143	24,507	39,843	17,355	19,362	21,954
Filberts .. ..	868	1,178	1,296	793	1,203	518
Walnuts .. ..	56,919	37,928	56,859	42,481	71,346	74,807

**Dried fruit  
(exclusive of  
Rasins and  
Currants).**

The production of the various kinds of dried tree-fruits for each of the last five seasons is shown in the following statement. Particulars in respect of dried vine-fruits appear on page 463.

VICTORIA—DRIED TREE-FRUIT, 1934-35 TO 1938-39.

Year ended June—	Apples.	Apricots.	Figs.	Nectarines.	Peaches.	Pears.	Prunes.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.	lb.	lb.
1935 ..	3,301	116,007	6,239	379	165,363	22,773	571,715	885,777
1936 ..	5,219	113,600	7,281	384	73,780	51,652	851,192	1,103,108
1937 ..	1,529	32,495	5,287	1,232	96,862	58,564	1,023,484	1,219,453
1938 ..	4,012	81,474	10,822	1,392	197,667	60,269	817,320	1,172,956
1939 ..	1,283	54,995	2,436	690	158,505	39,499	603,650	861,058

**Market  
gardens.**

The area under market gardens in the season 1938-39 was 21,059 acres. As agricultural statistics are collected only in respect of areas of one acre and over, they do not provide a complete census of vegetable growing. In respect of operations conducted on a commercial basis, however, they give reliable information. These gardens are generally situated near large centres of population, and the producers are able to dispose of the bulk of their goods with a minimum loss from waste, &c. The total value of production of market gardens, on the basis of £50 per acre, which is regarded as a fair average return, would be approximately £1,053,000. This does not include crops of one acre and over of potatoes or onions, such crops being tabulated under their respective heads in the returns relating to agriculture.

**Minor Crops.**

The following is a return of the minor crops of the State for the last two seasons. Details respecting each of these crops may be viewed at the office of the Government Statist.

## VICTORIA—MINOR CROPS, 1937-38 AND 1938-39.

Crop.	1937-38.		1938-39.	
	Area.	Produce.	Area.	Produce.
	Acres.		Acres.	
Rye for grain ..	1,051	10,291 bushels	1,109	4,735 bushels
Peas for grain ..	6,465	126,228 bushels	5,029	43,332 bushels
Beans for grain ..	1,829	12,309 bushels	640	3,419 bushels
Grass and clover seeds	9,358	72,397 bushels	7,534	35,217 bushels
Millet—Broom ..	768	{ 3,614 cwt. fibre 3,409 cwt. seed	624	{ 3,176 cwt. fibre 1,934 cwt. seed
Sugar Beet ..	4,046	{ 48,594 tons beet producing 5,625 tons of sugar	4,268	{ 13,454 tons beet producing 1,507 tons of sugar
Hops ..	142	1,405 cwt.	135	742 cwt.
Chicory ..	294	352 tons	314	202 tons
Garlic ..	50	77 tons	51	44 tons
Sunflowers ..	265	2,643 cwt.	229	1,841 cwt.
Flowers ..	1,234	..	1,224	..
Nurseries ..	951	..	1,229	..
Mangel-wurzels ..	532	7,277 tons	376	3,537 tons
Beet, Carrots, &c. ..	454	3,148 tons	817	2,093 tons
Green Forage ..	121,839	..	108,796	..
Pumpkins ..	1,431	6,038 tons	1,429	5,129 tons
Canary Seed ..	1,329	4,543 cwt.	1,878	3,010 cwt.

**Fertilizers.**

The fertilizer mainly used on wheat areas is "Superphosphate 22 per cent". It is also used on 90 per cent. of the oat areas fertilized. The following table shows the number of holdings upon which fertilizers were applied and the quantities used in the various seasons.

## VICTORIA—ARTIFICIAL FERTILIZERS USED.

Season.	Number of Holdings.	Area Fertilized.		Quantity Used.
		Acres.	Tons.	Tons.
1901-02	11,439	556,777	23,535	
1911-12	26,159	2,676,408	82,581	
1921-22	37,835	3,848,184	150,012	
1931-32	38,844	3,927,208	163,234	
1934-35	43,482	4,939,170	211,657	
1935-36	{ Crops .. Pastures ..	{ 35,224 21,300	{ 3,596,925 2,048,389	{ 146,740 105,157
1936-37	{ Crops .. Pastures ..	{ 36,238 25,817	{ 3,709,563 2,911,181	{ 157,865 148,981
1937-38	{ Crops .. Pastures ..	{ 36,784 28,690	{ 4,061,488 3,700,131	{ 174,485 189,796
1938-39	{ Crops .. Pastures ..	{ 36,174 29,290	{ 4,427,573 3,974,938	{ 184,866 210,297

Machinery used on Holdings.

A comparison of the numbers of farming implements in use on rural holdings in Victoria in recent years is shown in the following table. Increases in the numbers of engines, milking plants, shearing plants and tractors are particularly noticeable. No compilation of machinery was made for the year 1938, except in respect of tractors which numbered 7,593.

VICTORIA—MACHINERY IN USE ON RURAL HOLDINGS.

Year.	Chaff-cutters.	Cream Separators.	Cultivators.	Engines.	Graders.	Grain Drills.	Harrows.	Harvesters.
	No.	No.	No.	No.	No.	No.	No.	No.
1934 ..	26,244	47,681	39,001	25,645	5,728	27,674	55,798	11,047
1936 ..	26,325	47,672	37,971	27,436	5,610	27,206	55,770	10,521
1937 ..	26,185	47,719	37,979	28,693	5,519	27,216	55,612	10,522
1938 ..	..	..	..	..	..	..	..	..
1939 ..	25,710	46,380	37,307	31,182	5,362	26,958	54,610	10,013

Year.	Headers.	Milking Plants.	Ploughs.	Reapers and Binders.	Shearing Plants.	Strippers.	Threshing Machine.	Tractors.
	No.	No.	No.	No.	No.	No.	No.	No.
1934 ..	6,959	4,353	79,583	23,211	4,057	1,926	511	5,373
1936 ..	6,725	4,994	78,353	22,787	4,386	1,823	538	5,727
1937 ..	6,888	5,702	77,961	22,517	4,430	1,671	498	6,270
1938 ..	..	..	..	..	..	..	..	7,593
1939 ..	7,010	7,419	76,079	22,005	4,954	1,568	467	8,802

Persons employed on Rural Holdings.

Information is collected annually as to the number of persons ordinarily engaged in farm work on rural holdings of one acre or more. Persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are excluded from the tabulation. In respect of female employees, it is evident that numbers of occupiers misinterpret the questions and wrongly include those who, though they may give some assistance out-doors, are primarily engaged in domestic duties. Particulars for the years, 1934-35 to 1938-39 are as follow:—

VICTORIA—PERSONS ENGAGED ON RURAL HOLDINGS, INCLUDING WORKING PROPRIETORS, ETC., BUT EXCLUDING CASUAL AND SEASONAL WORKERS, 1934-35 TO 1938-39.

Year ending March.	Males.	Females.	Total.
	No.	No.	No.
1935 ..	102,100	10,048	112,148
1936 ..	101,016	8,842	109,858
1937 ..	100,381	8,672	109,053
1938 ..	100,338	8,296	108,634
1939 ..	100,155	8,026	108,181

Rates of  
Wages—  
Rural  
Holdings.

In the next return will be found particulars of the rates of wages paid (with rations) upon rural holdings during 1938-39. The information has been furnished by the occupiers of holdings.

VICTORIA—RATES OF WAGES ON RURAL HOLDINGS,  
1938-39.

Occupations.	Prevailing Rate.	Range.
Ploughmen .. ..	40s. per week ..	20s. to 67s. per week
Farm labourers .. ..	38s. per week ..	20s. to 67s. per week
Threshing machine hands ..	1s. 1d. per hour	9d. to 1s. 6d. per hour
Harvest hands .. ..	10s. per day ..	7s. to 15s. per day
Milkers .. ..	29s. per week ..	15s. to 50s. per week
Maize pickers (without rations)	9d. per bag of cobs	6d. to 1s. 3d. per bag of cobs
Married couples .. ..	56s. 6d. per week	40s. to 80s. per week
Female servants .. ..	22s. per week ..	15s. to 45s. per week
Shearers, hand (without rations)	36s. per 100 sheep	30s. to 50s. per 100 sheep
,, machine (without rations)	37s. per 100 sheep	30s. to 50s. per 100 sheep
Gardeners, market .. ..	48s. per week ..	30s. to 60s. per week
,, orchard .. ..	54s. per week ..	35s. to 75s. per week
Vineyard hands .. ..	60s. per week ..	40s. to 75s. per week

Financial  
Assistance to  
Primary  
Producers.

In recent years legislative provision has been made by both the Commonwealth and State Parliaments for granting financial relief to primary producers. These provisions have been described in previous issues of the *Year-Book*. The Commonwealth Parliament has provided further financial assistance of the following nature :—

- (a) The payment to each primary producer, on furnishing satisfactory evidence in support of his claim, of a subsidy of 10s. for each ton (up to ten tons) of artificial manure used by him during the year ending 30th June, 1939, in the production of primary produce other than wheat.

- (b) The payment of the following bounties to growers of citrus fruits in respect of such fruits exported from the Commonwealth in accordance with the prescribed conditions.

Two shillings for each large export case of oranges, grape fruit and lemons, and 1s. 4d. for each bushel case (Australian and Standard) of oranges, lemons, grape fruit and mandarins exported to destinations other than New Zealand during each of the years 1938, 1939, and 1940. Provided that the bounty shall not be payable in respect of navel oranges exported to the United Kingdom and the Continent of Europe after 31st July, and to all other destinations after 31st August of each year.

### PASTORAL AND DAIRYING INDUSTRIES.

**Live Stock.** The pastoral and dairying industries have always been important sources of wealth to the State, and their increasing values in recent years indicate that both pastures and stock are, on the whole, steadily improving. The next table, which shows the numbers of horses, dairy cows, other cattle, sheep and pigs, illustrates the progress of stock breeding in Victoria.

LIVE STOCK IN VICTORIA, 1861 TO 1939.

At 1st March—	Horses (including Foals).	Cattle—		Sheep.	Pigs.
		Dairy Cows.	Other.		
	number.	number.	number.	number.	number.
1861 .. ..	76,536	197,332	525,000	5,780,896	61,259
1871 .. ..	209,025	212,193	564,534	10,477,976	180,109
1881 .. ..	275,516	329,198	957,069	10,360,285	241,936
1891 .. ..	436,469	395,192	1,387,689	12,692,843	282,457
1901 .. ..	392,237	521,612	1,080,772	10,841,790	350,370
1911 .. ..	472,080	668,777	878,792	12,882,665	333,281
1921 .. ..	487,503	620,005	955,154	12,171,084	175,275
1931 .. ..	379,872	669,132	760,788	16,477,995	281,245
1935 .. ..	357,877	951,849	1,133,231	16,783,631	265,006
1936 .. ..	356,106	987,676	1,103,570	17,457,291	314,301
1937 .. ..	357,158	968,555	1,037,204	17,663,103	318,673
1938 .. ..	359,106	952,906	927,523	18,863,467	285,259
1939 .. ..	343,828	889,259	808,036	17,007,352	252,462

For the purpose of showing the varying extent of pastoral pursuits in Victoria, as indicated by the number of live stock grazed, it is necessary to express the various kinds of live stock in common terms.

An arbitrary equivalent of ten sheep to each head of the larger kinds of live stock has, therefore, been taken and the total live stock grazed expressed as sheep :—

VICTORIA—LIVE STOCK GRAZED, 1861-1939.

Year.			Equivalent in Sheep of Live Stock Grazed.	Year.			Equivalent in Sheep of Live Stock Grazed.
			No.				No.
1861	..	..	13,769,576	1931	..	..	34,575,915
1871	..	..	20,335,496	1935	..	..	41,213,201
1881	..	..	25,978,115	1936	..	..	41,930,811
1891	..	..	34,886,313	1937	..	..	41,292,273
1901	..	..	30,788,000	1938	..	..	41,258,817
1911	..	..	33,079,155	1939	..	..	37,418,582
1921	..	..	32,797,704				

When making comparisons of the figures in the foregoing table, consideration should be given to the varying acreage under cultivation as shown on page 434.

The next table shows the numbers of horses, cattle, sheep, and pigs on holdings of various sizes, and the total numbers on Crown lands that are not held conjointly with privately-owned land, at March, 1938.

VICTORIA—SIZE OF HOLDINGS AND NUMBERS OF LIVE STOCK THEREON, MARCH, 1938.

Size of Holdings. (In Acres.)	Numbers of Live Stock on Land Occupied.				
	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	Other Cattle.		
1 and under 50 ..	20,345	61,436	28,521	51,231	20,228
50 and under 100 ..	17,921	105,247	46,699	134,281	34,200
100 and under 500 ..	107,309	545,649	335,494	3,025,659	171,694
500 and under 1,000 ..	84,857	128,593	165,617	4,207,977	33,077
1,000 and under 5,000 ..	86,908	79,953	231,381	8,141.3 2	18,415
5,000 and under 10,000 ..	5,720	5,933	50,999	1,723,917	769
10,000 and under 20,000 ..	2,026	1,189	21,611	859,350	268
20,000 and upwards ..	3,090	185	21,920	498,593	1
Total on Privately-owned Land ..	328,176	928,185	902,242	18,642,400	278,652
On Crown Land not held in conjunction with privately-owned Land ..	3,181	5,242	8,598	148,194	1,758
In towns and travelling ..	27,749	19,479	16,683	72,873	4,849
Grand Total ..	359,106	952,906	927,523	18,863,467	285,259

The classification of holdings shown on pages 437 and 438 discloses that 63,587 persons holding up to 1,000 acres each of private land occupied in the aggregate 15,025,626 acres of such land, or 47 per cent. of the total area in occupation, as well as 3,110,489 acres of Crown land—a total of 18,136,115 acres. Of the privately-owned land and Crown land held in conjunction therewith, these occupiers controlled 54 per cent. of the total cultivation and 45 per cent. of the total pasture, and possessed 70 per cent. of the horses, 91 per cent. of the dairy cows, 64 per cent. of the other cattle, 93 per cent. of the pigs, and 40 per cent. of the sheep.

**Live stock in Australia.** In the following statement are given the numbers of horses, cattle, sheep and pigs in the various Australian States at March, 1939.

LIVE STOCK IN THE COMMONWEALTH, 1939.

State.	Horses.	Cattle.	Sheep.	Pigs.
	No.	No.	No.	No.
Victoria .. .. .	343,828	1,697,295	17,007,352	252,462
New South Wales .. .. .	548,355	2,811,884	48,876,663	377,344
Queensland .. .. .	445,296	6,097,089	23,158,569	325,326
South Australia .. .. .	195,834	318,897	9,936,586	71,292
Western Australia .. .. .	143,664	767,676	9,177,531	81,383
Tasmania .. .. .	31,600	254,000	2,500,000	43,500
Northern Territory .. .. .	31,700	892,000	25,000	400
Australian Capital Territory .. .. .	1,195	7,057	245,540	573
Total .. .. .	1,741,472	12,845,898	110,927,241	1,152,280

**Agriculture in Victoria and Great Britain.** The figures relating to agriculture and live stock in Victoria and Great Britain (England, Wales, and Scotland) in 1938 are, for comparative purposes, given in the table which follows:—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN.

	Victoria. (1938-39.)	Great Britain. (1937-38.)
Total area .. .. . acres	56,245,760	56,208,959
Wheat .. .. . bushels	18,104,369	73,136,000
Oats .. .. . "	2,909,260	95,312,000
Barley .. .. . "	1,671,809	40,365,000
Peas .. .. . "	43,332	1,126,000
Potatoes .. .. . tons	81,415	4,464,000
Turnips and Swedes .. .. . "	2,093*	10,605,000
Mangolds .. .. . "	3,537	3,689,000
Hay .. .. . "	892,975	5,302,000
Horses .. .. . No.	343,828	1,001,500
Cattle .. .. . "	1,697,295	8,030,000
Sheep .. .. . "	17,007,352	25,882,000
Pigs .. .. . "	252,462	3,821,650

\* Includes beet, carrots, and parsnips.

The next table contains particulars of the distribution of horses, cattle, sheep, and pigs on holdings in March, 1939.

**Distribution  
of Live Stock.**

VICTORIA—DISTRIBUTION OF LIVE STOCK, 1939.

Districts.	Number of—				
	Horses.	Dairy Cattle.	Other Cattle.	Sheep.	Pigs.
Central .. ..	67,275	177,398	121,742	1,474,964	42,477
North-Central ..	16,801	31,852	36,536	1,328,427	7,954
Western .. ..	46,453	245,102	203,260	5,915,487	49,256
Wimmera .. ..	44,353	22,126	15,385	2,451,232	5,238
Mallee .. ..	44,911	20,582	12,460	976,797	5,853
Northern .. ..	66,688	98,482	71,174	2,241,034	39,305
North-Eastern ..	25,399	86,932	148,466	1,438,862	24,974
Gippsland .. ..	31,948	206,785	199,013	1,180,549	77,405
Total .. ..	343,828	889,259	808,036	17,007,352	252,462

**Dairying.** The dairying industry is one of the principal sources of the wealth of the community. The gross value of dairy produce in the season 1938-39 was £12,682,076 as compared with £12,989,517 in 1937-38, £13,018,154 in 1936-37, £11,376,604 in 1935-36, and £9,368,531 in 1934-35. The following table shows the numbers of cowkeepers and cows and the total production of butter and cheese for each of the last five years.

## VICTORIA—DAIRYING, 1934-35 TO 1938-39.

As at 1st March—	Number of Cow-keepers.	Number of Dairy Cows.	Butter made.*	Cheese made.*
			lb.	lb.
1935 .. ..	58,639	951,849	147,651,179	10,095,139
1936 .. ..	58,259	987,676	148,132,507	10,973,804
1937 .. ..	57,723	968,555	154,194,197	13,350,124
1938 .. ..	57,129	952,906	141,321,445	16,466,038
1939 .. ..	55,812	889,259	130,573,918	19,554,061

\* Year ended 30th June.

## Numbers and Sizes of Dairy Herds.

The following table shows the number of dairy herds in Victoria, grouped, according to size, during each of the five years, 1935-39.

## VICTORIA—DAIRY HERDS, CONTAINING FIVE COWS OR MORE, GROUPED ACCORDING TO SIZE.

As at 1st March—	Number of Herds.							Total.
	5 to 9 cows.	10 to 14 cows.	15 to 19 cows.	20 to 29 cows.	30 to 49 cows.	50 to 99 cows.	100 and over	
1935 ..	11,694	6,438	4,030	6,143	6,134	3,136	553	38,128
1936 ..	11,403	6,274	4,002	5,984	6,473	3,480	614	38,230
1937 ..	11,245	6,053	3,773	5,580	6,315	3,516	641	37,123
1938 ..	10,553	5,655	3,453	5,153	6,253	3,637	669	35,373
1939 ..	10,048	4,965	3,048	4,647	5,750	3,465	599	32,522

The number of farmers with less than five cows was:—20,511 in 1935, 20,029 in 1936, 20,600 in 1937, 21,756 in 1938, and 23,290 in 1939. These were excluded from the foregoing table as they were considered too small to be classed as dairy herds.

**The Milk Board  
Act 1936.**

This Act extends the powers of the Milk Board by providing that the Board shall, in addition to determining the minimum prices to be paid to owners of dairy farms for milk for sale or distribution in the metropolis, also have power to determine the minimum prices to be paid for such milk to owners of milk depots and—in the case of sales other than sales by retail—to dairymen. A summary of the principal legislative provisions of this Act appears on pages 429 and 430 of the *Victorian Year-Book* for 1935-36.

**Butter and  
Cheese Made.**

The following statement shows the quantities of butter and cheese made in factories and on farms in each of the last five years.

## VICTORIA—BUTTER AND CHEESE MADE, 1935-1939.

Year Ending 30th June—	Butter.			Cheese.		
	In Factories.	On Farms.	Total.	In Factories.	On Farms.	Total.
	lb.	lb.	lb.	lb.	lb.	lb.
1935 .. ..	142,999,641	4,651,538	147,651,179	9,954,668	140,471	10,095,139
1936 .. ..	143,161,374	4,971,133	148,132,507	10,798,199	175,605	10,973,804
1937 .. ..	149,322,752	4,871,445	154,194,197	13,040,709	309,415	13,350,124
1938 .. ..	137,016,414	4,305,031	141,321,445	16,032,366	433,672	16,466,038
1939 .. ..	126,808,268	3,765,650	130,573,918	19,348,519	205,542	19,554,061

**Exports of  
Butter and  
Cheese.**

In 1938-39 oversea exports of butter from Victorian ports amounted to 65,462,195 lb., valued at £3,245,806. The quantity shipped to the United Kingdom was 60,060,900 lb., valued at £2,909,980. The quantity of cheese exported oversea amounted to 13,328,117 lb., valued at £450,012.

**Cream,  
Condensed  
Milk and  
Casein.**

The quantities of concentrated, condensed, powdered milk and casein made, together with quantities of cream sold, during the last five years, were as follows:—

**VICTORIA—MILK (CONCENTRATED, CONDENSED, AND POWDERED) AND CASEIN MADE AND CREAM SOLD, 1935-1939.**

Year Ended 30th June—	Cream Sold by Butter Factories.	Concentrated, Condensed, and Powdered Milk Made.	Casein Made.	Total Quantity of Milk Used for All Purposes.
	1,000 lb.	1,000 lb.	1,000 lb.	1,000 Gallons.
1935 .. ..	7,023	51,391	2,424	403,039
1936 .. ..	10,214	34,385	3,731	399,742
1937 .. ..	13,755	46,007	4,334	432,330
1938 .. ..	17,097	52,065	5,095	408,271
1939 .. ..	13,574	46,668	4,463	377,882

**Sheep.** The numbers of sheep in Victoria in various years since 1861 are shown in the table on page 471. Sheep are depastured in practically all districts of the State, but are relatively more numerous in the Wimmera, Western and Northern districts. The distribution of all live stock is shown in table on page 474.

Factors such as seasonal conditions, prices of wool, mutton and lamb and, to a lesser degree, wheat, affect the number of sheep in the State in any given year. In an adverse season flocks may be reduced by mortality due to lack of fodder or water, by the increase in the slaughtering of fat stock or by the decrease in lambing. Decreased imports from other States is another factor. In addition to the seasonal movements of sheep from New South Wales for agistment, there is a regular importation of sheep from that State, and to a lesser degree from South Australia, for slaughtering purposes.

**Flocks of Sheep  
in Districts.** The following table contains a classification of the flocks of sheep in each district of Victoria as at March, 1939. Sheep travelling on roads or located in cities or towns are excluded. The classification discloses that, although the four groups with sheep under 500 comprise 72·15 per cent. of the owners, the number of sheep in those groups was only 23·62 per cent. of the total sheep in the State.

## FLOCKS OF SHEEP IN

Size of Flock.	Total in Victoria.				Districts.			
	Flocks.		Sheep.		Central.		North-Central.	
	No.	Percentage to Total.	No.	Percentage to Total.	Flocks.	Sheep.	Flocks.	Sheep.
					No.	No.	No.	No.
Under 50 .. ..	5,295	16·43	112,737	·67	625	13,634	332	7,725
50 and under 100	3,376	10·47	240,384	1·42	449	32,333	274	19,507
100 .. 250	8,002	24·83	1,321,381	7·81	936	153,779	680	110,921
250 .. 500	6,581	20·42	2,320,931	13·72	692	246,059	578	201,488
500 .. 1,000	5,017	15·57	3,479,198	20·57	446	309,794	433	303,025
1,000 .. 2,000	2,588	8·03	3,504,747	20·72	187	251,571	228	307,342
2,000 .. 3,500	843	2·62	2,158,984	12·76	55	142,513	73	185,677
3,500 .. 5,000	206	·64	849,267	5·02	15	62,723	17	71,175
5,000 .. 7,500	166	·51	1,005,690	5·94	6	35,661	12	71,822
7,500 .. 10,000	72	·22	609,536	3·60	8	69,671	4	32,742
10,000 .. 15,000	58	·18	673,455	3·98	3	35,839	..	..
15,000 .. 20,000	11	·03	184,309	1·09	1	15,463	1	15,532
20,000 and over ..	17	·05	455,963	2·70	1	62,421	..	..
Totals .. ..	32,232	100·00	16,916,582	100·00	3,424	1,431,461	2,632	1,326,956

**Lambing.** Seasonal conditions also play a large part in determining the proportion of lambs dropped to ewes mated, and thus a wide variation from the average natural increase may be experienced in any particular season. The following table shows the percentage of lambs marked in each of the five years, 1934 to 1938.

## VICTORIA—LAMBING PERCENTAGE, 1934 TO 1938.

Year.	Proportion of Lambs Marked to Ewes Mated.
	%
1934 .. ..	82·3
1935 .. ..	83·4
1936 .. ..	76·5
1937 .. ..	83·5
1938 .. ..	68·1

VICTORIA AS AT MARCH, 1939.

Districts—continued.

Western.		Wimmera.		Mallee.		Northern.		North-Eastern.		Gippsland.	
Flocks.	Sheep.	Flocks.	Sheep.	Flocks.	Sheep.	Flocks.	Sheep.	Flocks.	Sheep.	Flocks.	Sheep.
No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.	No.
1,433	25,276	545	13,591	319	7,958	759	18,400	449	9,800	833	16,353
536	37,185	446	32,087	387	28,137	734	52,699	256	18,017	294	20,410
988	163,198	1,115	185,129	1,269	212,484	1,870	307,318	605	99,586	539	88,966
923	333,712	1,017	357,461	915	313,222	1,393	486,207	633	229,711	430	153,071
1,137	807,212	778	536,418	330	216,844	943	643,029	584	406,872	366	256,004
851	1,176,037	434	588,725	96	123,664	301	401,016	283	375,245	208	281,147
340	876,926	157	397,842	13	31,674	56	144,569	69	177,262	80	202,521
100	408,238	27	111,746	2	8,295	13	53,759	13	52,250	19	81,081
110	674,491	16	96,726	..	..	7	41,233	6	33,659	9	52,098
43	366,110	9	76,180	1	8,026	3	23,375	3	24,620	1	8,812
48	562,445	2	20,270	..	..	4	44,417	1	10,484	..	..
6	99,068	2	34,519	..	..	1	19,727	..	..	..	..
14	349,465	..	..	1	24,077	..	..	..	..	1	20,000
6,529	5,870,363	4,548	2,450,694	3,333	974,381	6,084	2,235,749	2,902	1,437,506	2,780	1,180,472

Although the principal breed of sheep in the State is the "Merino," the percentage of pure Merino sheep is only 39 as compared with 85 in New South Wales. Merino Comebacks, the progeny of Crossbred ewes mated to Merino rams, number 34 per cent., other crossbreeds 24 per cent. and other British and Australasian breeds 3 per cent. of the sheep of Victoria.

Australasian breeds are the Polwarth and the Corriedale. The Polwarth is a Merino-Lincoln cross (approximately three-quarters Merino and one-quarter Lincoln). It was evolved to meet the conditions of light wool growing localities found to be too wet and cold for the pure merino. The Corriedale was evolved by heavily culling the progeny of Lincoln rams and Merino ewes and by judicious mating over several years. The Corriedale is a dual purpose sheep, being favoured by many breeders both for lamb raising and for wool production.

The actual numbers of each breed of sheep are set out in the following table :—

## BREEDS OF SHEEP IN VICTORIA.

Breed of Sheep.	Year (as at 1st March).				
	1932.	1933.	1934.	1935.	1936.
Merino .. ..	6,044,998	6,500,372	6,625,544	6,551,084	6,808,054
Polwarth .. ..	171,508	181,486	199,155	235,509	244,733
Corriedale .. ..	64,830	115,323	124,850	145,948	153,698
Border Leicester .. ..	101,067	96,978	97,554	79,954	60,298
Lincoln .. ..	21,090	20,880	20,111	17,447	9,993
Leicester (England)	19,330	19,763	16,361	13,621	8,787
Dorset Horn .. ..	11,593	15,846	14,770	15,873	17,437
Southdown .. ..	11,249	12,189	12,861	15,941	19,699
Romney Marsh .. ..	11,921	14,018	10,704	10,677	8,166
Shropshire .. ..	7,834	7,207	9,415	6,411	6,038
Other Pure Breeds .. ..	4,375	5,384	4,490	5,663	5,116
Merino Comebacks .. ..	5,980,989	6,343,174	6,027,398	5,612,233	5,863,083
Other Crossbreeds .. ..	3,896,731	4,150,351	3,978,303	4,020,233	4,193,963
Total Sheep (exclusive of those travelling and in cities) .. ..	16,347,515	17,482,971	17,141,516	16,730,594	17,399,065

Rams, Ewes,  
&c., in  
Counties at  
March, 1939.

The following table sets out the numbers of rams, ewes, wethers and lambs depastured in each county of the State as at March, 1939.

## RAMS, EWES, ETC., IN EACH COUNTY OF VICTORIA AS AT MARCH, 1939.

County.	One Year Old and Upwards.			Under One Year.	Total Sheep and Lambs.
	Rams.	Ewes.	Wethers.	Lambs.	
	Number.	Number.	Number.	Number.	Number.
Bourke .. ..	5,212	215,683	99,316	62,785	382,996
Grant .. ..	7,981	386,128	190,713	131,831	716,653
Mornington .. ..	3,659	159,425	34,384	60,305	257,773
Evelyn .. ..	1,417	42,011	14,878	15,733	74,039
Anglesey .. ..	4,321	203,371	195,487	64,816	467,995
Dalhousie .. ..	6,226	248,123	101,969	58,332	414,650
Talbot .. ..	6,906	282,505	73,574	81,326	444,311
Grenville .. ..	7,364	312,075	192,059	116,926	628,424
Polwarth .. ..	2,304	92,020	38,820	36,705	169,849
Heytesbury .. ..	979	41,992	7,792	15,611	66,374
Hampden .. ..	12,496	498,547	225,041	216,093	952,177
Ripon .. ..	10,674	433,992	253,909	173,788	872,363
Villiers .. ..	10,526	483,939	329,686	250,054	1,074,205
Normanby .. ..	5,939	335,573	306,388	146,460	794,360
Dundas .. ..	7,001	402,861	424,713	164,438	999,013
Follett .. ..	1,743	89,076	197,229	34,550	322,598
Lowan .. ..	10,152	469,660	432,296	214,677	1,126,785
Borong .. ..	9,490	424,022	226,612	144,500	804,624
Kara Kara .. ..	7,487	276,636	138,006	97,156	519,285
Millewa .. ..	1,458	74,890	11,577	18,802	106,727
Weeah .. ..	1,869	98,746	15,897	25,643	142,155
Karkaroc .. ..	5,552	286,330	26,547	65,094	383,523
Tatchera .. ..	5,625	259,272	19,927	57,152	341,976
Gunbower .. ..	5,368	232,553	32,269	72,735	342,925
Gladstone .. ..	5,415	237,395	78,455	69,688	390,953
Bendigo .. ..	6,525	271,658	51,221	59,984	389,388
Rodney .. ..	7,441	285,588	48,672	71,077	412,778
Moir .. ..	13,922	534,906	71,589	79,288	699,705
Delatite .. ..	8,648	424,987	129,047	102,861	665,543
Bogong .. ..	5,429	260,024	63,361	66,119	394,933
Benambra .. ..	2,942	163,973	96,993	65,352	329,260
Wonnangatta .. ..	358	20,339	17,130	9,943	47,770
Craajingolong .. ..	273	24,687	16,747	12,443	54,150
Tambo .. ..	1,155	60,374	26,752	27,017	115,298
Dargo .. ..	807	48,039	26,600	25,339	100,785
Tanjil .. ..	3,474	186,498	105,861	90,406	386,239
Buln Buln .. ..	4,640	231,675	197,015	90,670	524,000
Total .. ..	202,778	9,099,573	4,518,532	3,095,699	16,916,582
In Towns and Travelling .. ..	..	74,394	..	16,376	90,770
Grand Total .. ..	202,778	9,173,967	4,518,532	3,112,075	17,007,352

**Production  
of Wool.**

Statistics of wool production are obtained direct from the growers, from fellmongeries and, in respect of wool exported on skins, from the Customs Department.

The output of wool is stated in the grease as, except in the case of fellmongered wool, scoured weights are not available.

**VICTORIA—SHEEP AND LAMBS SHORN (IN DISTRICTS)  
SEASON 1938-39.**

District.	Shorn.		Wool Clipped (including Crutchings).		Average.	
	Sheep.	Lambs.	Sheep's.	Lambs'.	Per Sheep.	Per Lamb.
	No.	No.	lb.	lb.	lb.	lb.
Central .. ..	1,301,712	244,230	9,723,455	491,268	7·47	2·01
North-Central .. ..	1,365,736	221,230	9,873,770	413,619	7·23	1·87
Western .. ..	5,490,666	1,228,696	44,474,667	2,505,547	8·10	2·04
Wimmera .. ..	2,365,787	494,125	19,851,056	1,131,569	8·39	2·29
Mallee .. ..	1,039,608	192,710	7,929,433	398,061	7·63	2·07
Northern .. ..	2,390,592	441,964	16,156,382	914,264	6·76	2·07
North-Eastern .. ..	1,388,616	295,729	9,597,781	530,274	6·91	1·79
Gippsland .. ..	976,467	249,919	7,059,858	414,891	7·23	1·66
State Totals .. ..	<b>16,319,184</b>	<b>3,368,603</b>	<b>124,666,402</b>	<b>6,799,493</b>	<b>7·64</b>	<b>2·02</b>

**VICTORIA—SHEEP SHORN AND WOOL CLIPPED.**

Season.	Shorn.		Wool Clipped (including Crutchings).		Average.	
	Sheep.	Lambs.	Sheep's.	Lambs'.	Per Sheep.	Per Lamb.
	No.	No.	lb.	lb.	lb.	lb.
1934-35 .. ..	13,854,421	3,560,123	108,668,252	7,653,639	7·84	2·15
1935-36 .. ..	14,962,109	3,427,684	117,845,531	7,627,166	7·88	2·23
1936-37 .. ..	15,654,911	3,361,578	118,994,899	7,346,487	7·60	2·19
1937-38 .. ..	16,402,071	4,308,272	133,228,048	9,176,862	8·12	2·13
1938-39 .. ..	16,319,184	3,368,603	124,666,402	6,799,493	7·64	2·02

## VICTORIA—WOOL PRODUCTION AND VALUE.

Season.	Clip.	Stripped from and Exported on Skins, &c.	Total Quantity.	Gross Value.	Average Price per lb.
	lb.	lb.	lb.	£	d.
1934-35 .. ..	116,321,891	34,623,993	150,945,884	5,987,948	9.52
1935-36 .. ..	125,472,697	37,925,199	163,397,896	9,506,557	13.96
1936-37 .. ..	126,341,386	36,707,124	163,048,510	11,133,757	16.39
1937-38 .. ..	142,404,910	36,485,221	178,890,131	9,517,061	12.77
1938-39 .. ..	131,465,895	34,363,287	165,829,182	7,315,016	10.59

The annual collection of statistics is carefully and efficiently carried out by the police. It is expected, however, that the wool clip as recorded is not likely to cover the whole clip, which was shorn some months prior to the collection. After investigation, and examination of the results of investigations elsewhere, it is considered that the quantity not recorded does not exceed 5 per cent. of the Victorian clip.

There is some uncertainty also associated with skin wool. Allowance is made for skins from other States which are exported from Victoria, so that they are not included in Victorian production. The Victorian figures do, however, include skin wool from all sheep and lambs slaughtered in Victoria, even though some of such sheep were brought over from other States for slaughter.

**Prices of Wool.**

The following information as to the average prices of wool per lb. which have prevailed during the last three seasons has been obtained from Victorian wool brokers. These prices are not for Victorian wool only, but for wool sold in Victoria. Wool from the Riverina and the south-east of South Australia is included in Victorian sales.

## PRICES OF WOOL SOLD IN VICTORIA, 1936-37 TO 1938-39.

Class of Wool.	Average Price per lb. in—		
	1936-37.	1937-38.	1938-39.
<b>GREASY MERINO.</b>			
	Pence.	Pence.	Pence.
Extra Super (Western District) ..	30 to 33	20 to 23	18 to 21
Super .. .. .	26 to 29	18 to 20	16 to 18
Good .. .. .	23 to 25	16 to 18	14 to 16
Average .. .. .	18 to 20	14 to 16	12 to 14
Wasty and Inferior .. .. .	12 to 15	10 to 13	8 to 11
Extra Super Lambs .. .. .	30 to 36	19 to 21	17 to 19
Super Lambs .. .. .	22 to 26	16 to 18	14 to 16
Good Lambs .. .. .	18 to 20	12 to 14	10 to 12
Average Lambs .. .. .	13 to 15	10 to 12	8 to 10
Inferior Lambs .. .. .	9 to 11	7 to 9	5 to 7
<b>GREASY CROSSBRED.</b>			
Extra Super Comebacks .. .. .	30 to 32	20 to 23	18 to 20
Super Comebacks .. .. .	26 to 28	18 to 19	16 to 17
Fine Crossbred .. .. .	21 to 23	16 to 17	14 to 15
Medium Crossbred .. .. .	17 to 19	14 to 15	13 to 14
Coarse Crossbred and Lincoln .. .. .	15 to 18	14 to 15	12 to 13
Super Fine Crossbred Lambs .. .. .	18 to 20	13 to 14	11 to 12
Good Crossbred Lambs .. .. .	16 to 18	11 to 12	9 to 10
Coarse and Lincoln Lambs .. .. .	12 to 14	9 to 10	7 to 8
<b>SCOURED.</b>			
Extra Super Fleece .. .. .	42 to 44	26 to 30	22 to 26
Super Fleece .. .. .	39 to 41	24 to 28	21 to 25
Good Fleece .. .. .	34 to 36	20 to 23	18 to 20
Average Fleece .. .. .	30 to 32	18 to 20	16 to 18
<b>RECORD PRICES FOR THE SEASON.</b>			
Greasy Merino Fleece .. .. .	36½	33½	26½
„ Comeback Fleece .. .. .	31½	26½	20½
„ Merino Lambs .. .. .	43	32½	26½
„ Comeback Lambs .. .. .	32½	24	21
Scoured Fleece .. .. .	36½	27	24½

In the subjoined table will be found a statement of the average and of the range of prices of live stock ruling in metropolitan saleyards at Newmarket during the years 1937-38 and 1938-39. The averages stated are the mean of the

Prices of  
Live Stock.

monthly prices realized. Prices of live stock vary each year under the influence of seasonal conditions, prices of wool, &c. During periods of dry weather, stock are hastened to market and consequently prices decline but, with the advent of relief rains, stock are withheld from market for fattening, breeding, &c., and prices rise.

VICTORIA—PRICES OF LIVE STOCK, 1937-38 AND 1938-39.

Stock.	1937-38.			1938-39.		
	Average.	Range.		Average.	Range.	
<i>Fat Cattle.</i>	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Bullocks—						
Extra prime ..	16 19 7	15 8 1 to	19 8 1	18 9 2	15 13 1 to	23 2 6
Prime ..	14 16 9	12 18 5 to	16 12 4	15 13 3	13 7 9 to	19 11 8
Good ..	11 14 5	9 18 9 to	13 8 9	12 16 1	9 17 6 to	15 17 0
Good light and handy weights	9 14 6	8 3 9 to	11 17 6	10 4 9	7 15 0 to	12 17 6
Second ..	7 15 5	6 6 3 to	9 15 0	8 4 11	6 5 7 to	9 16 8
Cows—						
Best ..	10 4 3	8 12 2 to	12 3 1	11 6 3	9 6 10 to	14 2 0
Others ..	6 0 1	4 12 6 to	7 5 0	5 1 8	3 15 0 to	6 8 0
<i>Dairy Cattle.</i>						
Milkers (best) ..	11 1 1	9 7 6 to	13 10 4	12 18 8	10 16 10 to	14 18 9
Springers (best) ..	8 5 3	7 0 7 to	10 3 1	10 1 7	8 0 7 to	12 5 5
<i>Fat Sheep.</i>						
Crossbred Wethers—						
Extra prime ..	1 11 3	1 4 3 to	2 3 0	1 5 3	0 18 7 to	1 15 5
Prime ..	1 7 2	1 2 5 to	1 19 4	1 2 9	0 16 8 to	1 11 6
Good ..	1 3 10	0 18 6 to	1 15 1	0 19 8	0 14 0 to	1 7 11
Crossbred Ewes—						
Extra prime ..	1 2 8	0 15 5 to	1 14 11	0 19 3	0 10 8 to	1 8 0
Prime ..	0 18 10	0 13 3 to	1 11 1	0 16 6	0 9 2 to	1 5 0
Good ..	0 15 2	0 11 4 to	1 5 7	0 14 5	0 8 7 to	1 0 1
Merino Wethers—						
Extra prime ..	1 8 5	1 2 8 to	1 18 7	1 2 9	0 11 4 to	1 13 0
Prime ..	1 4 3	0 17 10 to	1 17 4	1 0 0	0 11 8 to	1 10 2
Good ..	1 0 7	0 14 11 to	1 12 10	0 17 1	0 9 0 to	1 6 1
<i>Fat Lambs.</i>						
Extra prime ..	1 7 2	1 4 4 to	1 16 7	1 4 2	1 1 5 to	1 8 8
Prime ..	1 4 4	1 1 4 to	1 11 1	1 1 8	0 18 7 to	1 5 9
Good ..	1 1 1	0 18 4 to	1 7 2	0 18 11	0 15 10 to	1 2 8
<i>Pigs.</i>						
Back Fatters—						
Extra heavy prime	} Not	Available.		Not	Available.	
Prime medium						
and weighty ..						
Baconers—						
Medium and heavy	3 19 5	3 15 1 to	4 7 4	4 0 6	3 11 9 to	4 11 10
Light ..	3 3 7	2 19 9 to	3 8 1	3 5 11	3 0 4 to	3 11 10
Porkers ..	2 4 4	2 0 6 to	2 9 0	2 8 8	2 0 8 to	2 14 6

**Stock Slaughtered.** The following table shows the numbers of slaughtering establishments and the stock slaughtered in the State during each of the five years, 1935-39.

### VICTORIA—STOCK SLAUGHTERED, 1935 TO 1939.

Kind of Stock.	Stock Slaughtered in Establishments and on Farms and Stations.				
	Year ended June—				
	1935.	1936.	1937.	1938.	1939.
	No.	No.	No.	No.	No.
Sheep .. ..	3,377,398	3,106,757	3,087,809	3,474,819	3,699,566
Lambs .. ..	4,268,672	4,584,731	4,826,624	4,653,725	4,028,208
Bullocks .. ..	181,087	183,140	208,569	199,032	167,826
Cows .. ..	150,868	200,779	216,073	216,495	195,426
Young Cattle .. ..	59,294	80,272	86,950	89,860	81,157
Calves .. ..	201,999	310,204	393,297	465,951	367,294
Pigs .. ..	414,739	495,499	568,477	509,041	434,368
Number of Slaughter-houses .. ..	774	779	769	755	721

**Frozen Mutton and Lamb Exported.** The importance of the mutton and lamb export trade to sheep owners is indicated by the export figures for the years 1935 to 1939 as shown in the statement hereunder.

Seasonal influences are principally responsible for fluctuations in the various years.

### FROZEN MUTTON AND LAMB EXPORTED FROM VICTORIAN PORTS.

Year ended 30th June—	Carcasses Exported.					
	Mutton.			Lamb.		
	Number.	Average Weight.	Value.	Number.	Average Weight.	Value
1935.. ..	439,179	lb.	£	2,714,441	lb.	£
1936.. ..	312,808	43	224,243	2,921,902	33	2,489,952
1937.. ..	367,622	44	283,521	3,159,805	32	2,803,421
1938.. ..	331,674	41	214,047	3,207,620	30	2,904,460
1939.. ..	367,835	40	201,586	2,853,876	30	2,356,159

**Cattle.** The cattle industry of Victoria has always been one of the more important primary industries in this State, despite the gradual increase in the areas that have been given up to dairy

farming, sheep-raising, and cultivation. This has been due mainly to the considerable improvement in methods of pasture management, including the adoption of top-dressing. The vigilant inspection of stock and the rigid quarantine of stock imported from overseas have kept herds in Victoria free from many forms of contagious diseases and animal pests with which stock in other countries are afflicted.

**Silage.** Ensilage is an economical and safe method of conserving fodder, moreover it is presented in a succulent form which is relished by stock during dry periods. Expensive precautions against damage by fire, rodents and stock, required for other fodders, are not necessary in the case of silage.

The following table gives particulars of the silage made in Victoria during the seasons 1934-35 to 1938-39 :—

SILAGE IN VICTORIA, 1934-35 TO 1938-39.

Season.	Farms on which silage made.	Silage made.	Districts in which made.							
			Central.	North Central.	Western.	Wimmera.	Mallee.	Northern.	North Eastern.	Gippsland.
			Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1934-35..	369	22,145	6,932	258	1,818	50	212	1,172	5,422	6,281
1935-36..	326	22,346	7,115	262	788	233	55	878	5,519	7,496
1936-37..	549	32,902	11,635	886	2,085	281	150	1,022	4,617	12,226
1937-38..	841	46,860	14,094	533	4,043	332	488	1,801	9,351	16,218
1938-39..	549	28,716	6,675	389	3,696	438	152	952	7,847	8,567

**Apiculture.** Prior to the season 1936, the statistics of honey and beeswax were based on returns received from apiarists who were permanent occupiers of holdings of one acre and upwards. As a consequence, production was understated because of the exclusion of (a) hives on areas of less than one acre, and (b) travelling beekeepers who were not occupiers of rural holdings.

Since the season 1935-36, returns from all beekeepers have been collected, the particulars of which are given in the following table :—

VICTORIA—BEE-HIVES, HONEY AND BEESWAX, 1935-36 TO 1938-39.

Season ended May—	Bee-keepers.	Hives.	Production.		Gross Value.	
			Honey	Beeswax.	Honey.	Beeswax.
			lb.	lb.	£	£
1936 .. ..	3,330	99,650	5,901,463	61,849	92,210	4,123
1937 .. ..	3,422	99,618	3,439,262	40,612	53,738	2,707
1938 .. ..	3,119	92,226	4,541,516	54,184	70,961	3,612
1939 .. ..	2,445	63,986	1,340,046	22,285	27,918	1,300

**State expenditure on destruction of vermin and noxious weeds.** Active operations for the destruction of vermin and noxious weeds on Crown lands were first undertaken by the Government in 1880. Subsidies to Shire Councils for the destruction of wild animals are made from revenue, and advances to municipalities and farmers for the purchase of wire netting from Loan Funds. The following are the amounts spent during the last five years :—

VICTORIA—EXPENDITURE ON DESTRUCTION OF VERMIN AND NOXIOUS WEEDS, 1934-35 TO 1938-39.

Year.	From Revenue.	Wire Netting Advances from Loan Funds.
	£	£
1934-35 .. .. .	86,359	18,384
1935-36 .. .. .	98,135	19,444
1936-37 .. .. .	95,957	19,585
1937-38 .. .. .	92,935	14,235
1938-39 .. .. .	83,248	15,235

**Poultry Census.** The following table shows the number of poultry owners and of poultry in Victoria, as at the date of the Census in each of the years 1881, 1891, 1901, 1911, and 1933.

VICTORIA—POULTRY OWNERS AND POULTRY.

Census.	Poultry owners.	Fowls.	Ducks.	Geese.	Turkeys.
	No.	No.	No.	No.	No.
1881 .. .. .	97,152	2,332,529	181,698	92,654	153,078
1891 .. .. .	142,797	3,487,989	303,520	89,145	216,440
1901 .. .. .	132,419	3,619,938	257,204	76,853	209,823
1911 .. .. .	144,162	3,855,538	288,413	59,851	190,077
1933 .. .. .	155,672	5,496,969	292,882	39,283	113,966

NOTE.—Details of the classification of poultry for each statistical district of the State are obtainable from the Government Statist.

The Census of 1933 disclosed that there had been an increase in the number of poultry owners since 1911, that there were considerably more fowls than at that year, that ducks had slightly increased, and that both geese and turkeys had decreased in numbers.

Of the number of fowls in the State, 43 per cent. were in the Central district, which consists of the counties of Bourke, Grant, Mornington, and Evelyn, and, of the turkeys, 33 per cent. were in the Northern district.

In addition to the poultry enumerated in the table, there were, at the date of the 1933 census, 1,267 guinea fowls, 322 pea fowls, and 411 pheasants.

The following table gives the yearly average (mean of monthly averages) of the Melbourne wholesale prices of the principal agricultural, dairying, and pastoral food products for the years 1934-35, 1935-36, 1936-37, 1937-38, and 1938-39.

**MELBOURNE—WHOLESALE PRICES—YEAR ENDING JUNE.**

		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
		£ s. d.				
<b>Agricultural—</b>						
Wheat ..	per bushel	0 2 11	0 3 5½	0 4 11½	0 4 5½	0 2 9
<b>Barley—</b>						
English ..	..	0 2 11	0 2 10½	0 4 0½	0 4 1½	0 3 6
Cape ..	..	0 2 5	0 2 4½	0 3 7	0 3 7	0 2 11½
Oats Milling ..	..	0 2 3½	0 2 2½	0 2 7½	0 3 4	0 3 5½
Maize ..	..	0 3 9½	0 4 10½	0 5 6½	0 5 10	0 5 2½
Peas ..	..	0 4 2½	0 4 3	0 5 2½	0 6 5½	0 8 1½
Bran ..	.. per ton	4 14 0	5 9 0	6 0 11	6 9 7	5 18 1
Pollard ..	..	4 19 8	5 16 7	6 12 11	6 18 8	5 18 1
Flour (first quality) ..	..	8 3 5*	9 3 5*	12 9 6	11 5 1	10 17 6†
Oatmeal (bulk) ..	..	19 10 0	18 15 1	18 13 10	23 10 1	23 4 2
Potatoes ..	..	8 5 6	8 8 0	6 15 2	4 7 5	13 4 2
Onions ..	..	7 3 0	7 17 10	12 10 3	7 4 1	16 15 9
<b>Butchers' Meat—</b>						
Beef, prime ..	per 100 lb.	1 5 11	1 6 10	1 9 3	1 19 2	1 19 8
Mutton ..	.. per lb.	0 0 3 ½	0 0 3 ½	0 0 3 ½	0 0 3 ½	0 0 3 ½
Pork ..	..	0 0 6 ½	0 0 6 ½	0 0 6 ½	0 0 8	0 0 8 ½
Veal ..	..	0 0 2 ½	0 0 2 ½	0 0 3 ½	0 0 3 ½	0 0 4 ½
Lamb ..	..	0 0 5 ½	0 0 6 ½	0 0 6 ½	0 0 7	0 0 6 ½
<b>Dairy and Farmyard Produce—</b>						
Butter ..	.. per lb.	0 1 3	0 1 3	0 1 3	0 1 4	0 1 5
Bacon ..	..	0 0 11 ½	0 0 10 ½	0 0 11 ½	0 1 1 ½	0 1 2
Ham ..	..	0 1 3 ½	0 1 2 ½	0 1 3 ½	0 1 5	0 1 6 ½
Cheese (matured) ..	..	0 0 11 ½	0 1 1 ½	0 1 2	0 1 1 ½	0 1 2 ½
Honey ..	..	0 0 4 ½	0 0 3 ½	0 0 3 ½	0 0 3 ½	0 0 4 ½
Eggs ..	.. per doz.	0 1 0 ½	0 1 1 ½	0 1 3	0 1 5 ½	0 1 5

\* Price quoted excludes tax of £2 12s. 6d. payable from 7th January, 1935, to 25th February, 1936.  
 † Price quoted includes tax as from 5th December, 1938.

The average Melbourne retail prices of the various agricultural, dairying and pastoral products shown in the following table are based on the prices quoted by retail shops in the metropolis in returns furnished to the Commonwealth Statistician.

The annual averages represent the mean of the monthly prices during each year.

## MELBOURNE—RETAIL PRICES—YEAR ENDING JUNE.

	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
<b>Agricultural—</b>	<i>s. d.</i>				
Flour .. per 25 lb.	3 2	3 6	(2 lb.) 0 4	(2 lb.) 0 4	(2 lb.) 0 3½
Bread .. per 4-lb. loaf	0 8½	0 9½	0 10½	0 10½	0 10½
Oatmeal .. per lb.	0 2½	0 2½	0 2½	0 3¼	0 3¼
Potatoes .. per 14 lb.	1 4½	1 5¼	(7 lb.) 0 7¼	(7 lb.) 0 5½	1 2½
Onions .. per lb.	0 1¼	0 1½	0 2¼	0 1½	0 2¼
<b>Butchers' Meat—</b>					
Beef .. per lb.	0 6½	0 6½	0 7¼	0 8	0 9
Steak, rump .. "	1 0½	1 0½	1 1	1 2½	1 3½
Mutton .. "	0 5½	0 5½	0 6	0 6½	0 6½
Mutton chops .. "	0 6½	0 7¼	0 8	0 8½	0 8½
Pork .. "	0 9½	0 9½	0 9½	0 11½	1 0½
<b>Dairy and Farmyard Produce—</b>					
Butter .. per lb.	1 5½	1 5½	1 5½	1 6½	1 7½
Cheese (mild) .. "	0 11	1 0	1 0	1 0½	1 1½
Milk .. per quart	0 6	0 6½	0 6½	0 6½	0 7
Bacon (rashers) .. per lb.	1 3½	1 3½	1 5	1 7½	1 7½
Ham (uncooked) .. "	1 4½	1 4½	..	..	..
Eggs .. per doz.	1 3½	1 3½	1 6½	1 9	1 8

A summary of the principal legislative provisions of the *Marketing of Primary Products Act 1935* appears on pages 446 to 448 of the *Victorian Year-Book* for 1934-35.

Pursuant to such Act, Marketing Boards have been constituted for onions, chicory, maize, and eggs and egg pulp.

## FORESTRY.

**Administration.** The State forests comprise both reserved and protected forests and are controlled by a Commission of three which was first appointed in 1919. Pursuant to the *Public Service (Transfer of Officers) Act 1937* the staff of the Commission was transferred to the State Public Service.

For the purposes of administration, the State forests are divided into five inspectorates and 52 forest districts.

**Area of Permanently Reserved Forest.** At the 31st December, 1938, the forest area of the State was 4,845,557 acres, of which 4,121,582 acres were classified as permanent forests, and 723,975 acres as timber reserves. Of this area, 2,024,131 acres have been assessed by survey, of which 1,267,366 acres have been brought under working plans for more intense management. The area of indigenous forest improved or regenerated was 980,788 acres.

**Protected Forests.** In addition to the 4,845,557 acres aforementioned, there were 330,277 acres reserved as State Forests and Timber Reserves under the Land Acts. Including these reserves, but excluding areas reserved as sites for Gardens, Parks and Recreation Purposes, all remaining Crown lands have been proclaimed "Protected Forests." It should not be assumed, however, that all of these lands are "forests" as the term is generally understood, as over 6,000,000 acres comprise roads, water frontages, beds of rivers and lakes, and unsold land in cities, towns and boroughs. In addition, on the area of more than 8,000,000 acres in occupation under grazing and other leases, much of the timber is of little or no commercial value because of remoteness, inaccessibility, and other causes.

Statements in respect of the disposition of Crown lands will be found on pages 415 and 417 *ante*.

**Nurseries.** To encourage the growth of softwoods or conifers in both State and private plantations, three large nurseries have been established at Creswick, Macedon, and Broadford. In addition to providing trees for the plantations, the nurseries supply considerable numbers of plants at low rates to State schools, public bodies, and private applicants. This has proved of great benefit to the community by fostering an interest in tree planting generally, and especially by encouraging farmers to plant in order to afford protection to their homesteads and to provide shade and shelter for their flocks and herds.

**Forestry Fund.** The Forestry Fund was established in 1918 by Act No. 2976, and made applicable only to expenditure on the improvements and reforestation of State Forests and the development of forestry. In each year the Treasurer makes a grant to the Fund of £40,000 (reduced to £32,000 under the provisions of the *Financial Emergency Act 1931*) out of the Consolidated Revenue, and also transfers half of the amount in excess of £80,000 received from royalties, leases, licences, and permits.

**Revenue and Expenditure.** The revenue derived from forest sources during the financial year 1938-39 was £198,157, and the expenditure £406,176—£167,611 of which was paid out of the Unemployment Relief Fund, £111,700 out of the Consolidated Revenue, £45,842 out of loan funds, and the balance—£81,023—from the Forestry Fund.

**Forests Output.** The output from State Forests in 1938-39 was 8,108,000 cubic feet of sawn timber. In addition, 11,350,000 cubic feet of fuel timber and 787,000 cubic feet of miscellaneous timber were produced.

Particulars of sawn timber and firewood, from all sources, will be found on pages 519 and 520 of this volume.

**Silviculture of Indigenous Forests.** The various types of silvicultural operations in the indigenous forests over the period 1935-36 to 1938-39 are indicated in the following table:—

VICTORIA—SILVICULTURAL OPERATIONS IN STATE FORESTS, 1935-36 TO 1938-39.

Nature of Work.	1935-36.	1936-37.	1937-38.	1938-39.
	Acres.	Acres.	Acres.	Acres.
First thinning .. .. .	59,598	63,828	41,823	16,788
Second or subsequent thinning .. .. .	17,325	16,073	10,413	10,027
Regeneration or liberation treatment by ring-barking .. .. .	39,186	28,551	16,392	4,478
Artificial regeneration by sowing .. .. .	352	20	246	..
Removal of surplus coppice .. .. .	82,848	101,844	85,859	42,368
Salvage felling .. .. .	318	64	..	..
Total area treated .. .. .	199,627	210,380	154,733	73,661

**Plantations of Exotic Timbers.** The total area planted during the 1938 planting season was 2,131 acres, comprising extensions to existing plantations, 1,311 acres; restocking cut-over areas, 118 acres; conversion, 108 acres; and renewals, 594 acres. The area planted according to species during the 1938 season and the total area of coniferous plantations at the end of that season are shown in the following table:—

VICTORIA—CONIFEROUS PLANTATIONS, 1938.

	Area Planted 1938 Season.	Total Area of Coniferous Plantations.
	Acres.	Acres.
Monterey Pine ( <i>Pinus Radiata</i> ) .. .. .	1,457	31,132
Western Yellow Pine ( <i>Pinus ponderosa</i> ) .. .. .	152	6,501
Douglas Fir ( <i>Pseudotsuga taxifolia</i> ) .. .. .	86	4,052
Corsican Pine ( <i>Pinus laricio</i> ) .. .. .	190	4,831
Maritime Pine ( <i>Pinus Pinaster</i> ) .. .. .	34	2,981
Prickle Pine ( <i>Pinus Muricata</i> ) .. .. .	212	1,766
Sitka Spruce ( <i>Picea sitchensis</i> ) .. .. .		
Other Species .. .. .		
	2,131	51,263

**Plantation Output.** The plantation output of felled softwood timber in 1938-39 amounted to 4,274,744 superficial feet, which realized £10,824. The corresponding figures for 1937-38 were 5,500,000 superficial feet and £13,520. Approximately 60 per cent. of the 1938-39 output consisted of thinnings and the balance of clear fellings.

**Other  
Commercial  
Soft-wood  
Plantations.**

There are not many private commercial plantations of softwoods in Victoria. The largest is at Dartmoor, near the South Australian border, where a company holds 11,361 acres (approximately 9,000 acres in Victoria) of which 7,000 acres have been planted. The same company holds 1,225 acres at Rosebud (403 acres planted).

The Ballarat Water Commission has an area of approximately 3,500 acres available for afforestation, of which 1,000 acres are planted with conifers. Its present planting programme provides for 250,000 trees (50 acres) per annum.

Trees and forest thinnings, down to a diameter of about 5 inches, are utilized in the Commission's case-making plant, the output of which amounts approximately to £10,000 per annum. Smaller diameter thinnings are disposed of for paper pulping purposes.

Severe damage to the plantations was caused by the bush fires of 1939, about 240,000 trees being destroyed. The loss, after making allowance for the timber salvaged, has been estimated at £10,000.

**The Wood-  
Pulp  
Agreement  
Act.**

The *Wood Pulp Agreement Act* 1936 (No. 4451) passed on 27th December, 1936, is "an Act to ratify validate approve and otherwise give effect to an agreement between the Minister of Forests, the Forests Commission, and Australian Paper Manufacturers Limited with respect to the establishment of the wood-pulp industry." The agreement which is for fifty years provides *inter alia* that the Company (Australian Paper Manufacturers Limited) on its part shall, within three years of date of agreement, expend £300,000 in establishing the wood-pulp manufacturing industry and, on the part of the Forests Commission, the terms and conditions on which the Commission will provide the minimum annual supply to the Company of the variety of pulp-wood timber prescribed in the agreement. The Commission is required to provide and the Company to take, on an ascending yearly scale, such supply of pulp-wood as will produce, in the first year of commercial production, 10,000 tons of wood-pulp, increasing to 25,000 tons in the fifth year and thereafter.

**Production of  
Wood Pulp.**

The first manufacturing unit—the Pilot Mill—erected in accordance with the above-mentioned agreement came into production in January, 1938, with a capacity production of 3,000 tons of air-dried pulp per annum. The main mill, which commenced production in October, 1939, has a capacity output of approximately 30,000 tons of kraft pulp per annum.

**Supply of  
Pulp-wood  
from State  
Forests.**

Consignment of pulp-wood from the State forests to the mill at Maryvale commenced in October, 1937. During the year 1938-39, deliveries to the mill, from State forests only, totalled 63,758 cubic feet.

## THE GREAT BUSH FIRES OF 1939.

In January of 1939, as the culmination of a long period of drought, bush fires of an intensity and destructiveness unequalled in the history of the State swept the forest areas of Victoria. The climax occurred on the 13th January, a day of intense heat and northerly winds, when the many fires, which in the previous month had burned separately, appeared to join forces in a stupendous effort of annihilation.

Action to determine the causes of such State-wide fires was taken immediately by the State Government in appointing a Royal Commission on 27th January. The Commission was required to inquire **into** and report upon the causes of and measures taken to prevent the outbreaks and spread of such fires; the measures taken to protect life and property; and the measures which are desirable to be taken to prevent future bush fires and to protect life and property should further outbreaks occur.

The Commission heard evidence in country centres and in Melbourne, its sittings extending from 31st January to 17th April, 1939, and also inspected fire-ravaged areas in the main fire zones. The Commission's report and recommendations were submitted to His Excellency the Lieutenant-Governor of Victoria on 16th May, 1939, and subsequently presented to Parliament.

In addition to performing adequately its main purpose, the introduction to the report of the Royal Commission provides an awe-inspiring background against which vivid details of the holocaust are presented. "The speed of the fires was appalling. They leaped from mountain peak to mountain peak, or far out into the lower country, lighting the forests 6 or 7 miles in advance of the main fires. Blown by a wind of great force, they roared as they travelled. Balls of crackling fire sped at a great pace in advance of the fires, consuming with a roaring, explosive noise, all that they touched. Houses of brick were seen and heard to leap into a roar of flame before the fires had reached them. Great pieces of burning bark were carried by the wind to set in raging flame regions not yet reached by the fires. Such was the force of the wind that, in many places, hundreds of trees of great size were blown clear of the earth, with tons of soil and embedded masses of rock still adhering to the roots."

It is estimated that the fire losses extended over more than 5,000,000 acres, including 2,000,000 acres of protected forests and 1,500,000 acres of reserved forest. The full extent of the State's losses cannot be measured in terms of money. Seventy-one lives were lost amongst the forest workers and many others suffered hardships and privations (see references on pages 5 and 286 of this *Year-Book*.)

Many of the sylvan beauty spots of the State were destroyed and water supply and soil conservation endangered. The material losses included about 700 dwellings, 10 guest-houses and hotels, 1 hospital, and 69 sawmills with plant, &c. Over 4,000,000 acres of forest, pastoral, and agricultural land were laid waste or badly damaged. In the central highlands alone, the fires killed over 2,000,000,000 superficial feet of commercial timber, the exploitation of which in normal circumstances would have occupied 20 years of regulated cutting. The fires swept over approximately 10,000 acres of pine plantations, the bulk of which, consisting of young trees, was completely destroyed.

Faced with the urgent need of attempting to salvage some of the fire-destroyed timber, to replace the mills and thus to find employment for those forest workers whom the fires had robbed of their livelihood, the Minister of Forests convened a meeting of representatives of the timber industry. Arising from that meeting an expert committee was formed, consisting of representatives of the Hardwood Millers' Association, the Timber Merchants, the Timber Workers' Union, the Council for Scientific and Industrial Research, and the Forests Commission.

The Committee found that, provided the fire-killed trees were felled within two years and that adequate steps were subsequently taken for their preservation, it should be possible to salvage approximately 916,000,000 superficial feet of timber which could be marketed within a period of six years. To give effect to the recommendations of the Committee, Parliament passed the *State Forests (Timber Salvage) Loan and Application Act 1939*, wherein authority was given for the expenditure of an amount not exceeding £475,000 for—

- (a) The carrying out by the Forests Commission of timber salvage operations in State forests.
- (b) The making of advances to sawmillers for or in connexion with the carrying out of timber salvage operations on their allotted milling areas in State forests ; or
- (c) Otherwise for or in connexion with timber salvage operations in State forests.

As a work preliminary to the rehabilitation of the sawmilling industry and the salvage of the fire-damaged timber, the Government, on the recommendation of the Employment Council, made available a sum of £46,000 for the construction of roads and tramways in the burnt-out forest areas.

Further action taken by the State Government as a direct result of the fires was the convening of a conference of forest authorities of the Commonwealth and of the States. The recommendations of that conference are embodied in the amending *Forests Act 1939* (No. 4703), and the *Bush Fire Brigades Act 1939* (No. 4708).

## FISHERIES.

The numbers of men and boats engaged in the fishing industry at the different fishing stations throughout the State are given in the following table for the year 1938-39 :—

VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED,  
1938-39.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet (Inverloch) .. .. .	12	9	310	199
Apollo Bay .. .. .	31	14	1,096	443
Barwon Heads and Ocean Grove .. .. .	11	6	1,101	75
Brighton .. .. .	17	4	158	29
Corner Inlet, Welshpool, Toora, and Port Franklin .. .. .	63	41	5,222	2,447
Dromana and Rosebud .. .. .	39	19	1,770	165
Frankston .. .. .	21	13	1,190	254
Geelong .. .. .	183	44	3,680	1,056
Gippsland Lakes .. .. .	132	123	7,957	3,377
Kerang .. .. .	17	11	106	93
Lake Boga .. .. .	2	2	8	16
Lorne .. .. .	34	13	1,740	267
Mentone .. .. .	8	3	183	90
Mordialloc, Chelsea, and Carrum .. .. .	68	36	2,823	1,186
Mornington .. .. .	34	28	1,641	484
Portarlington and St. Leonards .. .. .	67	40	3,832	1,086
Portland .. .. .	35	24	4,877	440
Port Albert .. .. .	62	46	4,738	854
Port Campbell .. .. .	2	1	120	10
Port Fairy .. .. .	55	35	11,360	963
Port Melbourne .. .. .	73	68	1,686	347
Queenscliff .. .. .	93	58	9,767	1,124
Sandringham and Black Rock .. .. .	29	19	809	283
Sorrento, Portsea, and Rye .. .. .	37	28	2,411	392
St. Kilda .. .. .	52	16	854	470
Torquay .. .. .	15	7	214	104
Warrnambool .. .. .	20	5	1,115	110
Werribee .. .. .	20	9	436	108
Waranga Basin .. .. .	3	2	17	10
Western Port (Coves, Hastings, Grant- ville, Flinders, San Remo, and Tooradin)	139	104	13,148	1,976
Williamstown and Altona .. .. .	185	58	2,873	929
Wonthaggi .. .. .	13	7	833	167
Total .. .. .	1,572	893	88,075	19,554

**Melbourne Fish Market.** The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1937-38 and 1938-39 were as shown in the next table:—

FISH SOLD IN THE MELBOURNE FISH MARKET,  
1937-38 AND 1938-39.

	1937-38.		1938-39.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Fresh Fish (Victorian) lb.	12,608,100	204,125	12,508,391	217,750
Crayfish .. doz.	38,712	29,034	42,307	42,307
Imported Fish (fresh or frozen) .. lb.	3,222,116	120,027	2,989,476	110,358
Oysters .. bags	13,283	32,766	14,281	34,622
Total .. ..	..	385,952	..	405,037

In addition to the above, 1,232 lb. of smoked fish and 44,850 lb. of prawns were sold in this market in 1938-39.

**Victorian fish sold.** The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and in other towns in Victoria in 1938-39 were as follows:—

VICTORIAN FISH SOLD IN 1938-39.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lb.	doz.	£	£
Melbourne .. ..	12,508,391	6,027	217,750	6,901
Ballarat .. ..	322,711	271	4,746	171
Other towns in Victoria ..	8,681	138	125	138
Total .. ..	12,839,783	6,436	222,621	7,210

**Fish Imported.** In connexion with this subject, the quantities and values of the different classes of fish imported are of interest. Particulars of imports from oversea countries in each of the past two years are given in the following statement:—

**VICTORIA—FISH IMPORTED FROM OVERSEA,  
1937-38 AND 1938-39.**

	1937-38.		1938-39.	
	Quantity.	Value.	Quantity.	Value.
<b>Fish—</b>	lb.	£	lb.	£
Fresh or Preserved by Cold Process	2,737,684	74,269	2,592,069	63,002
Smoked or Dried (not Salted) ..	37,161	1,045	112,805	2,574
Potted or Concentrated, &c. ..	198,336	14,660	152,969	13,580
Preserved in tins, &c. ..	6,633,732	204,796	8,205,720	251,284
N.E.I. ..	213,808	2,714	128,688	1,931
Oysters in the Shell ..	89,040	389	70,112	495
<b>Total .. ..</b>	<b>9,909,761</b>	<b>297,873</b>	<b>11,262,363</b>	<b>332,866</b>

Of the 1938-39 oversea imports of fish preserved in tins, 5,424,700 lb. came from Canada, 834,845 lb. from the United Kingdom, and 508,937 lb. from Norway. New Zealand supplied approximately 55 per cent. of fresh fish and fish preserved by cold process and 87 per cent. of the oysters imported into Victoria.

**RABBITS, ETC.**

**Frozen rabbits, &c., exported.** Large quantities of frozen rabbits and hares and of rabbit and hare skins are exported annually to oversea countries, as shown hereunder, for each of the past five years:—

**VICTORIA—RABBITS AND HARES AND RABBIT AND HARE SKINS EXPORTED OVERSEA.**

Year ended 30th June—	Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
	Quantity.	Value.	Quantity.	Value.
	pairs.	£	lb.	£
1935 .. ..	4,297,934	192,104	3,157,799	236,199
1936 .. ..	2,180,524	99,495	3,856,069	556,942
1937 .. ..	1,340,572	58,331	2,972,466	573,354
1938 .. ..	1,976,473	118,295	2,137,549	382,412
1939 .. ..	2,062,183	127,591	2,608,931	221,538

Rabbits, &c.,  
sold at  
Melbourne  
Fish Market.

The quantities of rabbits and hares and wild-fowl sold at the Melbourne Fish Market in each of the past five years were as shown in the following statement:—

RABBITS AND HARES, AND WILD-FOWL SOLD AT THE  
MELBOURNE FISH MARKET.

Year ended 30th June—				Rabbits and Hares.	Wild-fowl.
				pairs.	brace.
1935	..	..	..	1,007,952	1,776
1936	..	..	..	744,584	..
1937	..	..	..	498,888	2,316
1938	..	..	..	536,256	3,000
1939	..	..	..	502,560	1,020

**MINING.**

The supervision of mining and the inspection of mines are regulated by Act of Parliament. Authority for all mining operations, whether on Crown or private lands, must first be obtained in the prescribed manner.

**Miners' Rights.**

The taking out of a "Miner's Right" entitles the holder to prospect for gold on Crown lands. The "Right" may be had for any number of years not exceeding fifteen on payment of a fee at the rate of 2s. 6d. per annum. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands which is called a "claim." "Claims" may also be taken up under certain conditions on private land. The revenue in 1938-39 from "Miners' Rights" was £613.

**Mining Leases.**

Leases of Crown land and of private land for the purpose of mining for gold are granted for a term not exceeding fifteen years at a yearly rental of 2s. 6d. per acre, except for land that was alienated before 29th December, 1884, where the rental is 6d. per acre. For mining leases of land to be worked by means of dredging or hydraulic sluicing, the yearly rental is 5s. per acre. Other mineral and coal-mining leases are also issued at varying rates. The revenue from these sources in 1938-39 was £11,264.

**Petroleum Leases and Licences.** Under the Mines (Petroleum) Acts petroleum mineral leases of not more than 100 square miles and petroleum prospecting licences covering a maximum area of 200 square miles are granted, over Crown lands and land alienated since 1st March, 1892, at yearly rentals of 6d. and 1d. per acre, respectively. The revenue from these two sources in 1938-39 was £906.

The preparation and execution of schemes for the development as one unit of oil fields extending over lands comprised in more than one licence or lease, are also provided for in an Act passed in 1939.

**Area occupied for Mining.** The area of Crown and private lands occupied under the Mines Acts on 31st December, 1938, was 275,909 acres. The subjoined table shows the area being worked for different minerals:—

VICTORIA—AREA OCCUPIED UNDER THE MINES ACTS,  
31ST DECEMBER, 1938.

(Crown Land and Private Land.)

Nature of Lease or Licence.	Area.	Nature of Lease or Licence.	Area.
	Acres.		Acres.
Gold .. .. .	101,643	Kaolin and Gold .. .. .	6
Coal (black)* .. .. .	9,579	Kaolin and Quartz Grit .. .. .	10
Coal (brown)† .. .. .	3,288	Limestone .. .. .	80
Coal (black and brown) .. .. .	100	Magnesite .. .. .	58
Antimony .. .. .	214	Marble .. .. .	6
Aluminous Ore (including Bauxite) .. .. .	44	Mineral Water and Gas .. .. .	1
Antimony and Gold .. .. .	28	Molybdenite .. .. .	30
Bluestone .. .. .	16	Oil§ .. .. .	156,955
Calcite .. .. .	5	Pigment .. .. .	12
Cement Gravel .. .. .	6	Sand .. .. .	37
Clay .. .. .	56	Silver and Gold .. .. .	137
Clay and Schist .. .. .	4	Tin .. .. .	163
Copper .. .. .	80	Tin and Gold .. .. .	74
Copper and platinum .. .. .	115	Tailings Licences .. .. .	1,804
Granite .. .. .	21	Water Right Licences .. .. .	593
Gypsum .. .. .	251	Wolfram .. .. .	70
Iron .. .. .	380		
Kaolin .. .. .	43	Total .. .. .	275,909

\* Includes State Coal Mine Area, 7,575 acres.

† Includes State Electricity Commission Area, 2,800 acres.

§ Includes Petroleum Prospecting Licences, 153,698 acres.

Certain gold mining leases include the right to mine for other minerals.

Certain mineral leases include the right to mine for gold.

**Mining development.** The advances from loan moneys and revenue to mining companies under the provisions of the Mining Development Acts to 30th June, 1930, when assistance under these Acts was discontinued, totalled £285,705.

Advances to mining companies have since been made under the joint Commonwealth-State scheme for the development of metal-liferous mining, the amount so expended between 1st July, 1935, and 30th June, 1939, being £73,891.

VICTORIA—STATE EXPENDITURE AND REVENUE  
CONNECTED WITH MINING, 1934-35 TO 1938-39.

Item.	Expenditure from Consolidated Revenue				
	1934-35.	1935-36	1936-37.	1937-38.	1938-39.
<b>EXPENDITURE.</b>	£	£	£	£	£
Mines Department .. ..	22,546	23,420	25,047	28,341	30,413
State Coal Mine .. ..	324,840	321,818	295,940	338,451	318,949
Boring for Gold, Coal, Oil, &c. ..	453	1,083	3,033	3,750	2,100
Testing plants .. ..	10,088	10,986	10,922	10,856	9,773
Geological and underground surveys of mines .. ..	1,431	1,392	1,446	1,271	1,372
Laboratory Expenses, &c. ..	547	617	615	869	596
Miscellaneous .. ..	1,183	1,184	2,073	1,271	296
<b>Total .. ..</b>	<b>361,088</b>	<b>360,500</b>	<b>339,076</b>	<b>384,809</b>	<b>363,499</b>
<b>REVENUE.</b>					
State Coal Mine .. ..	242,514	229,428	159,945	188,732	189,583
All other .. ..	26,961	34,698	28,321	26,644	23,562
<b>Total .. ..</b>	<b>269,475</b>	<b>264,126</b>	<b>188,266</b>	<b>215,376</b>	<b>213,145</b>

**Total  
minerals  
production.**

The mineral production of the State (excluding stone raised in quarries and salt) for the year 1938 is summarized in the subjoined statement:—

VICTORIA—MINERAL PRODUCTION, 1938.

Metals and Minerals.	Recorded during 1938.	
	Quantity.	Value.
	Fine Oz.	£
Gold .. .. .	144,243	1,273,351
Silver .. .. .	16,098	1,732
	Tons (2,240 lb.)	
Coal, black .. .. .	307,258	286,679
,, brown .. .. .	3,675,450	351,721
Tin* .. .. .	169	28,650
Antimony* .. .. .	398	10,619
Wolfram* .. .. .	..	..
Gypsum .. .. .	13,381	14,826
Magnesite .. .. .	120	458
Kaolin .. .. .	5,656	5,020
Diatomaceous earth .. .. .	190	786
Molybdenite* .. .. .	35	7,306
Fluorspar .. .. .	791	1,616
Bauxite .. .. .	1,320	760
	Gallons	
Oil (crude) .. .. .	6,173	154
Total .. .. .	..	1,983,678

\* Concentrates.

NOTE.—The value of gold as shown above is based on the average value of Victorian gold received at the Melbourne Mint.

**Gold  
production  
in Victoria.**

The quantities of gold produced in Victoria in different periods are shown in the next table:—

### GOLD PRODUCTION IN VICTORIA, 1851 TO 1938.

Period.	Quantity • (Gross ozs.).	Period.	Quantity (Fine ozs.).
1851-60 .. ..	23,334,263	1928 .. ..	33,917
1861-70 .. ..	16,276,566	1929 .. ..	26,275
1871-80 .. ..	10,156,297	1930 .. ..	24,119
1881-90 .. ..	7,103,448	1931 .. ..	43,637
1891-1900 .. ..	7,476,038	1932 .. ..	47,745
1901-10 .. ..	7,095,061	1933 .. ..	58,183
1911-15 .. ..	2,161,349	1934 .. ..	70,196
1916-20 .. ..	905,561	1935 .. ..	87,609
1921-25 .. ..	421,250	1936 .. ..	117,596
1926 .. ..	49,078	1937 .. ..	145,799
1927 .. ..	38,538	1938 .. ..	144,243

• Gross ozs. 1851-1900, fine ozs. from 1901 inclusive.

From 1906 until 1930 the yield of gold continued to decrease, that for 1930 being the lowest since 1851. Since 1930, when both the State and Commonwealth Governments undertook a campaign to encourage prospecting and mining, particularly amongst the unemployed, there has been a gradual increase in the production of gold throughout the State. A steady increase in the world price of gold and the depreciation of the Australian currency in terms of gold have further stimulated the mining industry, the production for the past three years in particular having substantially increased. The average Australian mint price of gold for the year 1938 was £8 13s. 10d. per fine oz.

The two main headings under which financial assistance is rendered to mining parties and companies are, (a) grants to small parties which are paid to each member at the rate of £1 per week, and (b) loans to approved mining companies and syndicates.

The yields in fine ounces in the other principal gold-producing States in 1938 were 1,167,791 ounces in Western Australia, 151,432 ounces in Queensland, and 88,698 ounces in New South Wales.

The total production of the Commonwealth in fine ounces was 595,213 in 1931, 713,882 in 1932, 830,332 in 1933, 887,490 in 1934, 914,736 in 1935, 1,178,581 in 1936, 1,381,135 in 1937, and 1,592,034 in 1938.

The total production of gold in the world in fine ounces, as shown in the United States Mint Report, was 22,284,290 in 1931, 24,098,676 in 1932, 25,400,295 in 1933, 27,372,374 in 1934, 29,999,245 in 1935, 32,930,555 in 1936, 34,740,055 in 1937, and 37,603,213 in 1938.

Mining district gold yields.

The yield of gold (given in gross ounces) for 1937 and 1938 in each mining district of the State, as estimated by the mining registrars, is shown in the following table:—

VICTORIA—DISTRICT YIELDS OF GOLD (ALLUVIAL AND QUARTZ) 1937 AND 1938.

Mining District.	1937.			1938.		
	Alluvial.	Quartz.	Total	Alluvial.	Quartz.	Total.
	oz.	oz.	oz. (gross)	oz.	oz.	oz. (gross)
Ararat and Stawell ..	623	1,491	2,114	534	1,531	2,065
Ballarat .. .. .	3,075	13,962	17,037	3,987	10,248	14,235
Beechworth .. ..	18,872	14,367	33,149	16,054	19,051	35,105
Bendigo .. .. .	2,151	38,545	40,696	2,346	36,552	38,898
Castlemaine .. ..	8,095	32,805	40,900	7,011	33,525	40,536
Gippsland .. .. .	492	8,588	9,080	359	8,403	8,762
Maryborough .. ..	3,028	14,567	17,595	5,882	15,631	21,513
Total .. .. .	36,246	124,325	160,571	36,173	124,941	161,114

Government batteries, cyanidation, and dredging and sluicing.

Particulars relating to the operations of Government batteries, all cyanide works, and of dredging and sluicing plants for the six years 1933 to 1938 are as follows:—

VICTORIA—GOVERNMENT BATTERIES, CYANIDATION, AND DREDGING AND SLUICING, 1933 TO 1938.

Year.	Government Batteries.			Cyanidation.			Dredging and Sluicing.		
	Number of Batteries.	Quantity of Ore Treated.	Yield of Gold.	Number of Plants.	Quantity of Tailings Treated.	Yield of Gold.	Number of Plants.	Quantity of Material Treated.	Yield of Gold.
		tons.	oz.		tons.	oz.		cub. yds.	oz.
1933 ..	34	17,394	6,397	32	63,535	3,550	8	720,411	1,937
1934 ..	34	17,721	10,088	86	421,104	14,842	12	1,509,756	4,462
1935 ..	34	18,070	10,298	121	630,318	22,460	13	2,328,859	9,343
1936 ..	32	16,659	8,547	141	794,640	28,565	23	3,198,883	12,544
1937 ..	32	16,495	7,785	157	1,233,914	41,923	20	4,353,976	19,032
1938 ..	32	15,497	5,580	132	1,202,623	40,384	17	4,871,563	22,013

The first Government battery was erected in 1897. Since that date Government batteries have crushed 209,691 tons of ore for 116,456 ounces of gold.

Up to the end of 1938, 20,426,549 tons of tailings had been treated by the cyanide and other processes, and 1,441,286 ounces of gold had been won therefrom.

Since the inception of dredge and sluice mining 1,975,598 ounces of gold have been won by these systems.

**Coal.** Bituminous coal was mined during 1938 at Wonthaggi, Jumbunna, Korumburra and Kilcunda, and brown coal at Morwell and Gelliondale. The coal resources of Victoria have been described in detail in previous issues of the *Year Book*.

The average annual production and value per ton of black and brown coal, and the production of briquettes up to the end of 1938 are given in the following table:—

## VICTORIA—COAL PRODUCTION AND VALUE PER TON.

Period.	Black Coal.		Brown Coal.		
	Annual Production.	Value per Ton at Pit's Mouth.	Annual Production.	Cost of Production per Ton at Mine.	Briquettes—Annual Production.
	tons.	s. d.	tons.	s. d.	tons.
Prior to 1892	77,914	18 8			
1892-1900 ..	184,517*	9 11	} 81,748†	6 10	..
1901-10 ..	168,548*	11 8			
1911-15 ..	608,512*	9 2			
1916-20 ..	437,833*	15 11	76,514*	6 9	..
1921-25 ..	520,705*	22 8	258,094*	4 9	77,945‡
1926 ..	591,001	22 3	957,935	3 11	95,477
1927 ..	684,245	22 4	1,455,482	3 0	121,644
1928 ..	658,323	22 2	1,591,858	2 6	131,349
1929 ..	703,828	23 1	1,741,176	2 1	146,548
1930 ..	703,487	23 0	1,831,507	1 11	180,905
1931 ..	571,342	12 8	2,194,452	2 3	290,558
1932 ..	432,353	12 9	2,612,512	2 1	319,979
1933 ..	523,000	12 7	2,580,060	2 5	310,767
1934 ..	356,958	12 1	2,617,534	2 0	316,594
1935 ..	476,495	11 10	2,221,515	2 3	317,200
1936 ..	426,725	11 11	3,044,897	2 2	355,088
1937 ..	257,945	12 0	3,393,919	1 11	390,493
1938 ..	307,258	12 3	3,675,450	1 11	414,059

\* Average annual production. † Total production to 1916. ‡ 1,392 tons in 1924, 76,553 tons in 1925.

The quantities of coal which were produced in the other States in 1938 were as follows:—New South Wales, 9,570,930 tons; Queensland, 1,113,426 tons; Western Australia, 604,792 tons; and Tasmania, 83,753 tons.

**Tin Production in Victoria.** According to records supplied to the Mines Department by the various Mining Companies, the amount of tin concentrates obtained in Victoria up to 31st December, 1938, was 17,704 tons, valued at £1,085,796. A large proportion of this yield was obtained as an incidental return from gold-mining operations.

The principal tin-producing districts are in the north-east portion of the State, including Eldorado, Chiltern, Beechworth, Omeo, Granya, Mitta Mitta, Mount Wills, and Rutherglen. Tin is also produced at Foster and Toora in South Gippsland; other known tin-bearing districts include Bunyip, Wilson's Promontory, and Gembrook.

The numbers of fatal and of non-fatal accidents in gold and coal mines during the past five years are shown in the following table. Only those non-fatal accidents have been recorded which rendered the injured unfit for work for a period of at least fourteen days.

## VICTORIA—MINING ACCIDENTS, 1935 TO 1939.

Year	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1935 .. ..	6,960	5	4	2,012	..	5
1936 .. ..	6,959	5	21	1,786	1	8
1937 .. ..	6,180	8	19	1,749	14	7
1938 .. ..	6,315	7	11	1,766	2	5
1939 .. ..	6,169*	10	5	1,825	..	2

\* Estimated in 1939—alluvial, 2,820; quartz, 3,349.

The recorded quantities and values of the principal kinds of stone which were raised from Victorian quarries during the past five years are as set forth in the following table:—

## VICTORIA—QUARRIES, 1934-35 TO 1938-39.

Year ended 30th June—	Number of Quarries.	Main kinds of stone extracted.				Approximate Value of Stone Raised.
		Bluestone.	Sandstone.	Granite.	Limestone.	
		c. yds.	c. yds.	tons.	tons.	£
1935 ..	77	1,026,859	6,667	5,917	273,951	374,454
1936 ..	76	1,206,255	4,180	7,389	307,058	387,554
1937 ..	76	1,306,078	6,272	8,329	274,795	462,359
1938 ..	72	1,154,852	30,200	6,824	296,735	403,838
1939 ..	81	1,150,303	31,477	7,383	305,904	414,311

\* Wholesale selling value of stone at the quarry, exclusive of delivery charges therefrom.

### THE SEARCH FOR OIL IN VICTORIA.

The history of the search for oil in Victoria, is recorded in the *Year-Book* 1937-38, page 504.

The search was continued in 1939. The deep-drilling plant completed two bores at Lake Wellington and Sperm Whale Head, attaining depths of 3,560 and 3,111 feet respectively; two smaller plants also operated at various locations in the chosen area in Gippsland. None of these operations produced any positive result.

At the end of 1939, the total number of bores drilled under the Commonwealth-State scheme was 35 for a total footage exceeding 45,000 feet and a cost of £23,000.

The total quantity of oil produced to 31st December, 1939, from oil wells drilled in the Lakes Entrance and Metung areas was 111,283 gallons.

### MANUFACTURING IN VICTORIA.

#### Industrial Progress.

Statistical records of factories date from 1850, when the number of factories in Victoria was 68. In 1900 the total had reached 3,097, employing 64,207 persons, and fairly regular expansion has since taken place, concurrent with the increase in the population and consequent extension of the protected home market. A temporary check in this expansion occurred at the onset of the world depression. The factory statistics from 1927-28 until 1931-32 show clear evidence of the effect of gradually declining prices and restricted activity.

Steady recovery has since been maintained although the statistics for 1938-39 show evidence of a general decline in prices, which is reflected in the cost of materials used and the value of articles produced. Certain industries, particularly those supplying agricultural needs, also suffered from a decreased demand owing to the severe drought which affected the whole of the State.

Since 1930-31 the number of factories has increased by 1,051 (12·8 per cent.), the persons employed therein by 75,815 (60·2 per cent.), the total salaries and wages paid by £15,026,196 (64·5 per cent.), the value of materials by £30,341,570 (60·2 per cent.), and the value of output by £59,541,816 (63·7 per cent.).

It will therefore be seen that, not only have Victorian manufacturing industries fully recovered from the depression of 1930 and following years, but that they have since made further progress.

When consideration is given to the many advantages possessed by this State as a manufacturing field, it is not an unreasonable anticipation that, with efficient organization both of production and of the markets therefor, this progress should continue. Victoria possesses the advantages of a comparatively compact territory producing a variety of raw materials, a temperate climate, an intelligent labour supply, large power resources, a growing home market, an extensive network of State-owned railways served by constantly improving feeder roads, and a good system of highways and main roads. No doubt this combination of advantages has been partly responsible for the attraction of capital to and the consequent development of the manufacturing industries in this State.

The appended table summarizes particulars which indicate the growth of manufacturing since 1919-20. The figures for the past twelve years have been increased by the inclusion of statistics relating to the bakery industry, allowance for which should be made when comparing the figures for that period with those of previous years.

#### VICTORIA—GROWTH IN THE MANUFACTURING INDUSTRIES.

Year.	Number of Factories	Number of Persons employed.	Value of Plant, Machinery, Land, and Buildings.	Amount of Salaries and Wages paid.	Value of Materials used (including containers).	Value of Output.
1	2	3	4	5	6	7
			£	£	£	£
1919-20..	6,038	136,522	30,804,520	17,702,173	65,563,104	101,475,363
1920-21..	6,532	140,743	35,392,735	21,377,216	65,401,425	106,008,294
1921-22..	6,753	144,876	40,992,280	23,846,495	60,352,561	106,243,181
1922-23..	7,096	152,625	46,423,240	25,457,192	62,568,163	111,286,343
1923-24..	7,289	156,162	53,196,475	27,472,084	62,217,874	113,921,927
1924-25..	7,425	154,158	61,031,975	29,057,052	65,205,233	118,177,398
1925-26..	7,461	152,959	60,396,500	29,329,400	67,164,445	119,986,439
1926-27..	7,690	161,639	63,850,005	31,822,589	69,816,935	127,397,951
1927-28..	8,245	160,357	67,507,020	32,087,851	69,637,778	128,465,317
1928-29..	8,197	156,568	69,909,370	31,533,586	70,100,456	127,897,463
1929-30..	8,195	151,009	72,011,020	30,517,535	66,770,302	122,811,099
1930-31..	8,199	126,016	70,990,071	23,279,689	50,380,110	93,425,795
1931-32..	8,204	128,265	68,350,575	21,258,599	51,727,685	93,388,617
1932-33..	8,612	144,428	67,827,428	23,096,512	56,757,681	102,085,429
1933-34..	8,896	156,334	68,834,279	24,819,143	59,776,270	108,496,310
1934-35..	9,100	169,691	70,591,677	27,318,815	63,387,061	117,182,857
1935-36..	9,160	183,390	71,872,906	30,593,707	74,568,265	134,043,170
1936-37..	9,165	191,383	75,161,894	33,192,904	78,233,032	142,692,192
1937-38..	9,241	201,789	77,207,830	37,228,543	85,926,478	157,050,725
1938-39..	9,250	201,831	80,652,988	38,305,885	80,721,680	152,967,611

Prior to 1924-25 the amounts taken by working proprietors as drawings were not included in the figures in column 5 (Salaries and Wages paid).

**Factories and Wages Board Legislation.**

The first Factories Act in Victoria was passed in 1873 and since that year many other Acts dealing with the subject have been placed upon the statute-book. The *Factories and Shops Act 1928* consolidated all Acts passed prior to that date. The general provisions of factory legislation, including "Wages Boards," are fully dealt with in Part VI., "Social Condition," of this *Year-Book*.

**Statistics Act 1928.**

Statistics relating to the manufacturing industries of Victoria are collected by the Government Statist in accordance with the provisions of the *Statistics Act 1928*. In the year 1902, Australian statisticians adopted a uniform classification of industries for statistical purposes in all States. A factory was then defined as "any establishment employing on the average four persons or more, or any establishment employing less than four persons where machinery is worked by other than manual power, whether the business carried on is that of making or repairing for the trade (wholesale or retail) or for export". In 1930, a new classification, based upon that used in Great Britain for census purposes, was adopted. The definition of a factory was unchanged.

**Added Value.**

In estimating the relative importance of various industries, or the value of manufacturing industry as a whole, the method used is to calculate the value added in the process of manufacture, termed "added value." This is arrived at in the following way:—From the value of output of each industry are deducted the most important items of manufacturing expense such as costs of raw materials, containers, fuel and light, repairs to plant and machinery, replacement of tools, and any other important cost of manufacture, the difference being the value added to raw materials in the process of manufacture, and representing the fund available for the payment of wages, rent, interest, minor expenses, and profit.

It is considered that, owing to the duplication of materials used, the finished product of one process of manufacture forming, as it often does, the raw material for another, an inaccurate impression would be obtained by using the total value of output of manufacturing industries in year to year comparisons. Woollen manufactures might be cited as an example. Greasy wool forms the raw material for the woolscouring industry, the product of which is scoured wool. This is afterwards combed into wool tops which are used in the spinning mills for the manufacture of yarn. In due course the yarn is woven into cloth, the raw material for the clothing industry. If these processes are carried out separately in different factories it is evident that the value of the wool would be counted five times by using value of output as the basis for annual comparisons of manufacturing production.

The concept of "Added value" prevents this double counting, gives a truer picture of the relative economic importance of industries, and also provides a good basis for estimating and comparing productive efficiency in manufacturing.

As added value is based on value of output, the added value per employee is affected not only by output per employee, but also by the price obtained, and should, therefore, in a comparison of the results of different years, be corrected to allow for variations in price levels. Other important factors are the quantity and the efficiency of the machinery used in the process of manufacture.

The subjoined table shows the value added per person employed in each class of manufacturing industry for the year ended 30th June, 1939.

As the extent of the mechanization of particular industries affects the value added by manufacturing, comparisons between the different classes of industry would have to take into account interest on the capital employed and depreciation of plant and machinery.

VICTORIA—VALUE ADDED BY PROCESS OF MANUFACTURE  
1938-39.

Class of Industry.	Average Number of Persons Employed.	Value Added.	Value Added per Person Employed.	
		£	£	s. d.
1. Treatment of non-metalliferous mine and quarry products ..	3,221	1,576,318	489	7 9
2. Bricks, pottery, glass, &c. ..	4,552	1,530,308	336	3 8
3. Chemicals, dyes, explosives, paint, oils, and grease .. ..	8,554	4,462,225	521	13 1
4. Industrial metals, machines, implements and conveyances ..	51,872	16,459,333	317	6 2
5. Precious metals, jewellery, and plate .. ..	2,315	546,751	236	3 6
6. Textiles and textile goods (not dress) .. ..	26,780	6,324,102	236	3 0
7. Skins and leather (not clothing or footwear) .. ..	4,599	1,372,448	298	8 6
8. Clothing .. ..	38,973	7,864,569	201	15 10
9. Food, drink, and tobacco ..	26,949	12,610,059	467	18 5
10. Woodworking and basketware ..	7,386	2,391,293	323	15 3
11. Furniture, bedding, &c. ..	4,871	1,281,297	263	0 11
12. Paper, stationery, printing, book- binding, &c. .. ..	13,819	4,929,959	356	15 0
13. Rubber .. ..	2,948	1,572,901	533	11 0
14. Musical instruments .. ..	89	24,292	272	18 10
15. Miscellaneous products ..	2,699	722,264	267	12 1
16. Heat, light, and power ..	2,204	2,327,950	1,056	4 9
Total .. ..	201,831	65,996,069	326	19 9

Omitting the "heat, light and power," industry, the 1936-37 statistics of which were subjected to some refinement, the total value added per person employed in the process of manufacture in the remaining industries averaged £318 18s. 8d. in 1938-39, compared with £312 7s. for the previous year.

The table hereunder summarizes the total value added by the process of manufacturing in each of the past ten years.

VICTORIA—VALUE ADDED BY PROCESS OF MANUFACTURE.

Year.	Value of Output.	Expenses of Manufacturing.*	Value Added	Average Number of Persons Employed.	Value Added per Person Employed.
1.	2.	3.	4.	5.	6.
	£	£	£		£ s. d.
1929-30 ..	122,811,099	71,551,731	51,259,368	151,009	339 8 11
1930-31 ..	93,425,795	54,011,827	39,413,968	126,016	312 15 5
1931-32 ..	93,388,617	55,568,989	37,819,628	128,265	294 17 1
1932-33 ..	102,085,429	61,004,327	41,081,102	144,428	284 8 10
1933-34 ..	108,496,310	64,294,665	44,201,645	156,334	282 14 9
1934-35 ..	117,182,857	68,420,266	48,762,591	169,691	287 7 3
1935-36 ..	134,043,170	79,999,480	54,043,690	183,390	294 13 10
1936-37 ..	142,692,192	83,979,911	58,712,281	191,383	306 15 7
1937-38 ..	157,050,725	92,161,335	64,889,390	201,789	321 11 5
1938-39 ..	152,967,611	86,971,542	65,996,069	201,831	326 19 9

\* "Expenses of manufacturing" includes the following costs only:—Raw materials, containers, fuel and light, tools replaced, repairs to plant and machinery, lubricating oil, and water.

Column 3 deducted from column 2 gives column 4, which when divided by column 5 gives Column 6.

The classification of industries, as adopted in 1930, is set out in the next table. The data shown was compiled from returns rendered compulsorily by all factory proprietors in Victoria.

## VICTORIAN FACTORIES—POWER, WORKERS, MANUFAC

Nature of Industry.	Factories.	Rated Horse-power of Engines.	Average Number Employed.		Salaries and Wages Paid.
			Males.	Females.	
	No.	H.P.	No.	No.	£
<b>Class 1.—Non-metalliferous Mine and Quarry Products</b>	<b>178</b>	<b>32,732</b>	<b>3,127</b>	<b>94</b>	<b>714,649</b>
Lime, plaster, and asphalt	83	3,529	1,046	35	222,023
Marble, slate, &c.	41	1,680	403	10	101,332
Cement and cement goods	42	9,089	1,348	16	303,291
Other	12	18,434	330	33	88,003
<b>Class 2.—Bricks, Pottery, Glass, &amp;c.</b>	<b>113</b>	<b>18,950</b>	<b>4,199</b>	<b>353</b>	<b>941,826</b>
Bricks, tiles, and firebricks	60	12,563	2,040	79	445,340
Earthenware, china, and porcelain	23	1,560	998	138	206,634
Glass, including bottles	27	4,823	1,138	136	285,695
Modelling, &c.	3	4	23		4,157
<b>Class 3.—Chemicals, Dyes, Explosives, Paint, Oils and Grease</b>	<b>234</b>	<b>25,341</b>	<b>6,114</b>	<b>2,440</b>	<b>1,772,513</b>
Chemicals, drugs, and medicines	66	3,045	915	903	364,442
Explosives	8	6,159	2,071	649	577,686
White lead, paints, and varnish	40	1,164	310	44	79,740
Oils, vegetable (including oilcake)	18	380	104	4	22,322
Oils, mineral	13	817	162	2	40,727
Boiling-down, tallow refining, and bone milling works	28	1,885	342	19	84,824
Soap and candles	18	1,839	535	176	137,232
Chemical fertilizers	7	7,616	1,065	10	237,571
Inks, polishes, &c.	30	834	242	145	85,212
Matches	3	1,074	241	465	111,266
Other	3	528	127	23	31,491
<b>Class 4.—Industrial Metals, Machines, Implements, and Conveyances</b>	<b>2,528</b>	<b>80,890</b>	<b>48,971</b>	<b>2,901</b>	<b>11,335,688</b>
Smelting, refining, &c. of iron and steel	161	10,857	4,127	239	931,557
Engineering (not marine or electrical)	385	20,065	9,343	304	2,271,059
Extracting and refining of other metals and alloys	7	111	61	1	17,431
Electrical apparatus	132	3,409	2,753	513	651,600
Tram and railway workshops	25	5,634	5,806	5	1,441,800
Motor vehicles and cycles—					
(i) Construction and assembly	28	1,834	1,730	131	451,948
(ii) Repairs	990	4,454	5,118	218	1,129,835
Motor-bodies	95	4,448	3,210	60	757,389
Horse-drawn vehicles	106	478	370	16	69,262
Cycle and motor accessories	37	2,275	1,171	103	255,928
Aeroplanes	6	1,737	959	25	229,720
Ship and boat building and repairing, marine engineering	13	2,909	443	1	103,189
Cutlery and small tools (not machine tools)	39	1,297	600	33	113,017
Agricultural implements	79	9,421	3,835	164	900,844
Brass and copper	102	2,333	1,857	134	405,069
Galvanized-iron working and tin-smithing	117	2,976	2,580	459	564,684
Wireworking (including nails)	38	1,986	1,049	65	211,650
Art metal works	18	399	306	9	68,168
Stoves and ovens	24	1,724	1,073	79	238,647
Gas fittings and meters	3	24	212	1	56,038
Lead mills	4	466	65	2	11,894
Wireless apparatus	20	532	900	173	157,706
Die sinking and engraving	20	145	170	12	35,629
Other metal works	79	1,376	1,233	154	261,624

TURING COSTS AND VALUE OF PRODUCTION, 1938-39.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
<b>219,756</b>	<b>13,803</b>	<b>100,268</b>	<b>1,083,467</b>	<b>2,993,612</b>	<b>1,576,318</b>	<b>813,982</b>	<b>1,632,442</b>
33,400	2,565	18,209	479,540	1,060,326	526,612	193,617	202,720
4,291	692	3,478	53,416	213,499	151,622	49,439	39,105
127,761	3,979	66,307	414,910	1,306,647	693,690	321,388	681,320
54,304	6,567	12,274	135,601	413,140	204,394	249,538	709,297
<b>295,210</b>	<b>14,842</b>	<b>86,331</b>	<b>368,024</b>	<b>2,294,715</b>	<b>1,530,308</b>	<b>736,454</b>	<b>941,024</b>
175,518	9,527	44,588	91,562	1,002,160	680,965	352,752	458,708
54,157	1,565	20,298	57,911	446,043	312,112	173,052	147,681
65,438	3,705	21,445	217,537	839,217	531,092	204,408	333,894
97	45	..	1,014	7,295	6,139	6,242	741
<b>210,959</b>	<b>33,855</b>	<b>191,839</b>	<b>5,217,105</b>	<b>10,115,983</b>	<b>4,462,225</b>	<b>3,103,873</b>	<b>2,994,053</b>
28,124	4,048	16,061	997,867	2,180,185	1,134,085	572,560	386,703
41,197	3,001	55,847	704,132	1,610,456	801,279	1,052,718	832,770
5,673	668	4,712	280,441	502,335	210,841	132,573	48,822
2,990	390	1,845	108,835	154,898	40,838	37,609	20,069
14,521	3,028	3,782	667,718	981,782	292,733	94,493	167,117
20,670	2,621	10,204	232,220	378,018	112,303	143,499	85,766
33,182	4,252	36,180	497,178	1,237,505	666,713	213,789	260,361
42,566	5,623	52,360	1,100,127	1,842,955	642,279	537,993	880,174
4,194	712	2,408	350,212	626,078	268,552	127,039	45,705
4,783	616	4,582	203,788	453,594	239,825	118,028	183,726
13,059	3,896	3,858	74,587	148,177	52,777	73,572	82,840
<b>551,565</b>	<b>60,575</b>	<b>483,945</b>	<b>13,163,480</b>	<b>30,718,898</b>	<b>16,459,333</b>	<b>9,683,860</b>	<b>6,527,516</b>
127,310	7,637	54,531	1,050,739	2,682,921	1,442,704	622,355	555,971
88,921	13,861	89,260	2,913,249	6,633,378	3,528,087	1,518,233	1,475,567
3,057	120	1,796	160,609	194,697	29,115	22,646	5,863
23,952	6,489	25,969	844,498	2,005,566	1,104,658	490,182	275,390
51,149	1,202	34,782	1,094,800	2,886,456	1,704,523	1,496,306	1,127,383
13,414	1,577	21,735	212,434	821,955	572,795	489,491	104,732
41,536	9,496	32,809	837,413	2,415,049	1,493,795	1,464,268	378,484
14,793	2,425	41,770	1,341,190	2,563,900	1,163,722	604,557	288,985
3,492	572	1,308	44,700	137,291	87,219	98,991	21,603
12,908	1,980	16,395	202,705	652,753	418,765	212,043	179,713
6,053	1,153	5,208	127,380	401,068	261,274	231,114	326,316
4,718	265	5,863	49,978	187,377	126,553	116,852	75,416
6,088	514	4,888	119,025	284,980	154,465	110,417	85,418
51,165	4,162	49,641	914,487	2,180,881	1,161,426	600,327	562,705
22,590	1,520	17,672	378,687	990,868	570,399	319,285	177,666
19,863	2,282	30,986	1,274,351	2,285,211	957,729	450,500	378,136
9,933	1,735	11,603	610,983	996,246	361,092	238,305	150,914
1,986	200	970	65,468	171,903	103,279	50,335	26,786
26,459	1,404	13,744	255,826	704,611	407,178	123,869	137,022
2,066	80	1,257	36,512	117,366	77,451	21,136	4,220
2,812	135	1,648	95,906	143,729	43,228	19,175	12,290
4,383	680	11,537	292,435	554,846	245,811	153,814	40,572
1,189	139	1,118	16,260	71,251	52,545	33,053	21,036
11,728	947	7,455	223,845	634,595	390,620	196,606	115,328

## VICTORIAN FACTORIES—POWER, WORKERS, MANUFACTURING

Nature of Industry.	Factories.	Rated Horse-power of Engines.	Average Number Employed.		Salaries and Wages Paid.
			Males.	Females.	
	No.	H.P.	No.	No.	£
<b>Class 5.—Precious Metals, Jewellery, and Plate</b>	<b>137</b>	<b>2,503</b>	<b>1,956</b>	<b>359</b>	<b>422,178</b>
Jewellery .. .. .	65	424	447	155	108,175
Watches and clocks .. .	16	184	368	118	87,359
Gold, silver, and electroplate .. .	51	1,787	1,071	83	210,158
Other .. .	5	108	70	3	16,486
<b>Class 6.—Textiles and Textile Goods (not dress)</b>	<b>371</b>	<b>45,190</b>	<b>11,052</b>	<b>15,728</b>	<b>3,856,105</b>
Cotton .. .	20	4,738	667	1,206	283,805
Wool, worsted and shoddy (including wool scouring) .. .	53	27,797	4,916	4,980	1,506,078
Hosiery and other knitted goods .. .	221	5,990	4,048	8,451	1,681,591
Silk, natural and artificial .. .	6	1,022	140	384	68,208
Rope and cordage .. .	6	4,600	721	379	164,348
Canvas goods, tents, &c. .. .	22	61	113	115	42,229
Bags and sacks .. .	22	199	151	103	41,619
Other .. .	21	783	296	110	68,227
<b>Class 7.—Skins and Leather (not Clothing or Footwear)</b>	<b>207</b>	<b>10,581</b>	<b>3,564</b>	<b>1,035</b>	<b>893,873</b>
Furriers and fur dressing .. .	76	357	439	410	140,566
Fellmongery .. .	20	2,021	363	..	89,575
Tanning and leather dressing .. .	41	7,903	2,194	27	489,647
Saddlery, harness, and whips .. .	10	45	69	7	13,786
Machine belting .. .	6	95	66	2	15,997
Bags and trunks .. .	51	153	412	536	134,040
Other leather goods .. .	3	7	21	53	10,262
<b>Class 8.—Clothing</b>	<b>1,813</b>	<b>11,758</b>	<b>10,704</b>	<b>28,269</b>	<b>5,503,404</b>
Tailoring and slop clothing .. .	375	952	1,953	6,287	1,161,536
Waterproof and oilskin clothing .. .	8	145	83	272	52,002
Dressmaking .. .	472	1,009	639	7,729	1,020,587
Millinery .. .	59	143	99	1,169	150,394
Shirts, collars, and underclothing .. .	99	925	420	4,135	548,208
Stays and corsets .. .	11	329	189	1,056	153,651
Handkerchiefs, ties, and scarves .. .	18	58	42	443	55,842
Hats and caps .. .	35	1,221	687	831	238,184
Gloves .. .	5	36	15	41	6,463
Boots and shoes .. .	158	3,710	4,615	4,994	1,589,323
Foot repairing .. .	478	625	683	14	111,650
Foot accessories .. .	30	1,055	527	251	145,427
Umbrellas and walking sticks .. .	3	7	16	31	7,787
Dyeworks and cleaning .. .	46	1,429	655	620	203,241
Other .. .	16	114	81	396	58,509
<b>Class 9.—Food, Drink, and Tobacco</b>	<b>1,458</b>	<b>87,105</b>	<b>19,298</b>	<b>7,651</b>	<b>5,674,767</b>
Grain milling .. .	38	8,174	1,063	36	288,537
Cereal foods and starch .. .	23	6,246	607	312	185,481
Cattle and poultry foods .. .	6	224	31	1	7,824
Chaff-cutting and corn crushing .. .	101	2,328	378	12	77,489
Bakeries .. .	576	2,679	2,785	496	675,377
Biscuits .. .	10	1,627	556	575	147,237
Confectionery .. .	57	6,668	1,163	1,673	448,896
Jam, fruit, and vegetable canning .. .	27	3,113	1,343	1,276	485,708
Pickles, sauces, and vinegar .. .	16	905	200	130	60,050
Bacon curing .. .	18	3,804	505	27	129,111
Butter and cheese factories, &c. .. .	174	13,958	2,503	423	707,527
Margarine and butterine .. .	7	361	98	4	24,615
Meat and fish preserving, meat extracts .. .	10	462	151	122	46,971
Condiments, coffee, spices, &c. .. .	72	2,202	541	610	183,325
Ice and refrigerating .. .	88	13,900	2,130	121	491,828
Salt refining .. .	9	487	130	5	29,770
Aerated waters, cordials, &c. .. .	86	958	592	59	135,983
Breweries .. .	9	6,611	1,493	23	517,505

COSTS AND VALUE OF PRODUCTION, 1938-39—continued.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
<b>16,123</b>	<b>1,781</b>	<b>10,204</b>	<b>435,908</b>	<b>1,010,767</b>	<b>546,751</b>	<b>343,889</b>	<b>127,226</b>
2,414	174	1,769	141,175	297,113	151,581	116,756	26,207
1,762	149	1,052	81,099	188,699	104,637	46,861	14,915
10,398	1,297	6,539	144,720	431,725	268,771	175,679	78,583
1,549	161	814	68,914	93,230	21,762	4,593	7,521
<b>311,896</b>	<b>53,414</b>	<b>275,033</b>	<b>7,559,039</b>	<b>14,523,484</b>	<b>6,324,102</b>	<b>3,380,469</b>	<b>3,901,301</b>
25,534	2,355	18,780	719,569	1,339,098	572,860	413,193	477,073
173,703	31,607	121,328	3,248,754	5,956,106	2,380,714	1,298,132	1,773,475
79,810	14,890	101,412	2,618,243	5,464,417	2,650,062	1,221,375	1,271,787
5,478	500	4,504	94,209	224,215	119,524	86,530	54,549
17,034	1,714	17,569	369,372	756,966	351,277	169,338	218,766
902	254	580	124,486	200,646	74,424	60,799	5,396
935	222	3,072	177,781	246,443	64,433	38,074	8,920
8,500	1,872	7,788	206,625	335,593	110,808	93,028	91,335
<b>53,365</b>	<b>15,806</b>	<b>35,920</b>	<b>2,244,166</b>	<b>3,721,705</b>	<b>1,372,448</b>	<b>956,936</b>	<b>363,019</b>
2,580	609	1,754	324,496	520,988	191,549	196,244	19,944
11,545	4,061	4,947	340,057	477,378	116,768	174,034	75,128
36,080	10,690	27,060	1,268,331	2,113,299	770,538	422,437	243,067
151	86	83	15,282	35,542	19,940	14,000	1,776
524	33	273	50,692	84,939	33,417	27,120	9,363
1,730	268	1,645	230,603	461,199	226,953	116,291	12,929
155	59	158	14,705	28,360	13,283	6,810	812
<b>134,525</b>	<b>13,094</b>	<b>121,822</b>	<b>9,040,517</b>	<b>17,174,627</b>	<b>7,864,569</b>	<b>4,502,971</b>	<b>1,269,017</b>
27,476	1,426	13,363	2,096,043	3,700,708	1,562,400	877,038	128,639
1,484	159	656	83,057	172,294	86,938	55,940	14,751
16,473	710	8,429	1,603,633	2,994,581	1,365,336	1,179,055	103,551
2,955	194	1,868	193,431	432,628	234,180	127,708	18,053
10,965	1,249	10,325	1,278,314	2,156,124	855,271	448,682	117,681
3,115	370	3,331	344,750	674,978	323,412	130,117	46,282
934	67	769	141,436	250,991	107,785	74,051	5,182
12,606	1,619	10,057	303,120	712,993	385,591	193,759	95,836
122	3	71	7,855	16,400	8,349	11,805	4,135
27,442	2,797	54,520	2,409,106	4,600,365	2,106,500	618,245	469,268
3,025	238	607	80,949	241,268	156,449	423,230	31,848
4,173	506	8,212	314,709	582,999	255,399	94,904	67,796
117	3	83	13,652	31,856	18,001	13,305	343
22,078	3,515	8,278	79,013	426,470	313,586	181,122	153,816
1,560	238	1,253	91,549	179,972	85,372	74,010	11,836
<b>752,091</b>	<b>107,586</b>	<b>475,876</b>	<b>30,163,844</b>	<b>44,109,455</b>	<b>12,610,059</b>	<b>9,774,451</b>	<b>7,179,642</b>
57,944	5,866	27,173	3,378,044	3,972,336	503,309	595,565	492,065
42,168	6,397	37,549	840,717	1,392,733	465,902	461,988	465,370
705	49	348	41,960	59,550	16,488	20,410	5,212
7,715	1,146	3,762	559,394	681,020	109,003	94,960	51,850
83,768	6,015	29,668	2,032,906	3,479,340	1,326,983	1,231,844	415,927
20,313	1,404	5,576	384,343	677,528	265,892	204,028	176,902
37,303	4,035	11,562	1,179,219	2,057,846	825,727	468,734	473,226
32,394	7,063	26,735	2,001,634	3,039,481	971,655	548,729	265,182
6,277	1,767	3,891	209,649	350,940	129,356	126,633	77,567
164,412	2,186	5,568	823,987	1,039,391	191,238	226,933	121,273
164,642	15,306	71,278	9,464,548	11,453,619	1,737,845	1,192,828	1,244,262
1,615	852	1,655	185,418	276,184	86,644	15,629	10,072
8,773	900	3,730	270,490	364,776	85,883	77,038	23,821
13,882	2,676	8,812	851,297	1,270,235	393,568	370,044	163,126
95,562	13,495	43,796	68,439	1,015,936	794,644	1,133,387	693,370
3,914	257	7,105	32,481	120,148	76,391	215,002	49,082
6,452	2,955	9,441	258,624	617,813	340,341	224,080	84,748
63,203	19,883	127,774	1,269,269	2,986,119	1,485,990	789,404	932,992

## VICTORIAN FACTORIES—POWER, WORKERS, MANUFACTURING

Nature of Industry.	Factories.	Rated Horse-power of Engines.	Average Number Employed.		Salaries and Wages Paid.
			Males.	Females.	
	No.	H.P.	No.	No.	£
<b>Class 9.—continued.</b>					
Distilleries .. .. .	8	978	85	5	25,549
Malting .. .. .	20	1,232	344	7	114,926
Bottling .. .. .	12	280	160	35	44,199
Tobacco, cigars, cigarettes .. .. .	14	1,972	874	1,355	445,411.
Dried fruits .. .. .	25	1,271	586	197	148,154
Ice Cream .. .. .	25	1,726	148	103	50,664
Sausage skins .. .. .	10	128	306	4	72,214
Other .. .. .	17	4,811	526	40	130,416
<b>Class 10.—Woodworking and Basketware</b>	<b>720</b>	<b>29,575</b>	<b>7,178</b>	<b>208</b>	<b>1,634,188</b>
Sawmills (forest) .. .. .	205	7,430	1,788	9	375,504
Sawmills (town) .. .. .	122	11,507	1,862	34	442,217
Bark mills .. .. .	3	30	6	1	1,051
Joinery .. .. .	200	3,830	1,628	58	380,815
Cooperage .. .. .	12	541	257	1	83,517
Boxes and cases .. .. .	61	4,238	759	19	170,053
Woodturning, woodcarving, &c. .. .. .	77	1,524	482	25	103,771
Basket, wicker, bamboo, &c. .. .. .	18	162	160	3	29,354
Perambulators .. .. .	10	85	127	17	24,810
Other .. .. .	10	228	109	41	23,096
<b>Class 11.—Furniture, Bedding, &amp;c.</b>	<b>412</b>	<b>8,027</b>	<b>3,932</b>	<b>939</b>	<b>867,569</b>
Cabinet and furniture making .. .. .	312	5,972	3,274	203	660,488
Bedding and mattresses .. .. .	45	1,896	454	283	119,203
Furnishing, drapery .. .. .	38	117	108	404	65,095
Picture frames .. .. .	7	10	32	14	7,231
Blinds, window, verandah, &c. .. .. .	10	32	64	35	15,552
<b>Class 12.—Paper, Stationery, Printing, Bookbinding, &amp;c.</b>	<b>675</b>	<b>40,645</b>	<b>9,750</b>	<b>4,069</b>	<b>2,984,831</b>
Newspapers, &c. .. .. .	116	4,803	2,435	113	733,244
Printing—Government, &c. .. .. .	3	912	634	278	204,098
General printing, &c. .. .. .	423	6,123	4,146	1,647	1,197,168
Stationery and paper products .. .. .	31	1,218	421	585	168,775
Stereotyping and electrotyping .. .. .	9	171	93	14	23,952
Process and photo engraving .. .. .	16	153	374	24	111,312
Cardboard boxes, cartons, &c. .. .. .	35	1,947	587	942	235,487
Paper bags .. .. .	11	152	87	168	32,593
Other paper and printing .. .. .	31	25,166	973	298	278,202
<b>Class 13.—Rubber Goods</b>	<b>105</b>	<b>19,215</b>	<b>2,212</b>	<b>708</b>	<b>628,177</b>
<b>Class 14.—Musical Instruments</b>	<b>13</b>	<b>65</b>	<b>88</b>	<b>1</b>	<b>19,415</b>
<b>Class 15.—Miscellaneous Products</b>	<b>168</b>	<b>3,376</b>	<b>1,847</b>	<b>852</b>	<b>443,100</b>
Celluloid and similar compositions .. .. .	12	388	283	32	50,925
Buttons .. .. .	11	84	96	41	15,897
Brooms and brushes .. .. .	16	360	278	155	68,177
Surgical, and other scientific instruments .. .. .	51	159	287	26	68,668
Toys, games, and sports requisites .. .. .	49	879	533	254	125,923
Artificial flowers .. .. .	7	11	67	201	26,637
Other .. .. .	22	1,495	303	143	86,873
<b>Class 16.—Heat, Light, and Power</b>	<b>118</b>	<b>446,268</b>	<b>2,198</b>	<b>6</b>	<b>613,602</b>
Electric light and power—					
(a) Government .. .. .	8	393,559	1,028	2	294,760
(b) Local authority .. .. .	39	42,658	257	..	73,387
(c) Companies .. .. .	32	4,653	89	..	21,943
Gas works—					
(a) Local authority .. .. .	10	71	75	2	18,056
(b) Companies .. .. .	29	5,327	749	2	205,456
<b>Total all Classes</b>	<b>9,250</b>	<b>862,221</b>	<b>136,218</b>	<b>65,613</b>	<b>38,305,885</b>

COSTS AND VALUE OF PRODUCTION, 1938-39—continued.

Fuel and Light Used.	Lubricating Oil and Water.	Repairs to Plant, &c.	Materials Used, Including Containers.	Articles Produced or Work Done.	Value Added.	Land and Buildings.	Plant and Machinery.
£	£	£	£	£	£	£	£
9,551	1,738	3,227	73,901	222,077	133,660	220,579	160,418
21,645	3,870	6,327	454,221	737,848	251,785	322,944	69,157
2,023	409	1,010	90,628	177,926	83,856	137,180	16,779
8,115	1,822	12,287	2,190,934	3,644,549	1,431,391	352,702	295,576
6,524	719	9,200	117,176	314,341	180,722	136,680	135,873
9,076	1,050	4,176	152,586	344,306	177,418	175,645	119,116
1,633	1,272	1,472	196,684	309,483	108,422	41,844	9,887
35,482	4,454	12,753	3,035,295	3,523,930	435,946	389,641	621,789
<b>72,805</b>	<b>14,756</b>	<b>65,914</b>	<b>2,775,347</b>	<b>5,320,115</b>	<b>2,391,233</b>	<b>1,039,245</b>	<b>878,796</b>
19,949	7,489	29,394	364,703	916,232	494,697	61,439	383,608
22,054	3,175	14,354	1,161,807	1,867,440	666,050	353,241	222,482
64	7	13	10,304	15,321	4,983	2,793	476
10,316	1,407	7,675	529,900	1,125,500	576,202	303,788	87,278
2,581	765	2,221	57,988	185,029	121,474	25,999	31,341
9,597	1,030	6,921	380,486	630,735	232,701	113,288	73,745
4,157	656	3,599	139,429	306,679	158,838	112,377	64,635
625	89	647	42,293	92,948	49,294	20,202	2,556
431	24	294	44,919	90,442	44,774	18,605	2,630
3,031	114	796	43,518	89,789	42,330	27,513	10,045
<b>24,874</b>	<b>2,752</b>	<b>15,882</b>	<b>1,600,087</b>	<b>2,924,832</b>	<b>1,281,237</b>	<b>913,993</b>	<b>203,423</b>
16,679	1,916	9,742	942,880	1,885,209	913,992	653,350	145,608
7,026	662	5,058	406,557	644,462	225,159	152,893	52,674
786	111	593	194,072	304,309	108,747	78,603	7,275
73	21	20	7,171	17,404	10,119	15,330	911
310	42	469	49,407	73,508	23,280	13,727	2,955
<b>186,922</b>	<b>24,100</b>	<b>120,960</b>	<b>3,808,688</b>	<b>9,070,629</b>	<b>4,923,959</b>	<b>3,446,850</b>	<b>2,736,034</b>
26,719	5,198	16,862	931,350	2,083,268	1,103,139	792,094	690,589
6,096	734	3,101	151,107	395,222	234,184	204,400	70,874
28,462	5,038	28,546	1,227,909	3,134,918	1,844,963	1,415,105	1,086,864
6,369	594	7,239	372,108	874,712	488,402	185,856	178,847
1,472	22	559	10,467	52,304	39,784	31,665	21,554
2,285	248	2,217	27,372	193,202	161,080	84,150	45,523
8,427	1,645	6,974	409,792	878,445	451,607	309,493	282,172
788	241	904	107,519	155,840	46,388	57,812	46,348
106,304	10,380	54,558	571,064	1,302,718	560,412	366,305	373,323
<b>121,699</b>	<b>14,869</b>	<b>86,833</b>	<b>1,881,535</b>	<b>3,677,837</b>	<b>1,572,901</b>	<b>621,191</b>	<b>740,698</b>
<b>211</b>	<b>28</b>	<b>98</b>	<b>5,653</b>	<b>30,282</b>	<b>24,292</b>	<b>25,096</b>	<b>2,751</b>
<b>26,802</b>	<b>2,374</b>	<b>16,388</b>	<b>728,189</b>	<b>1,496,017</b>	<b>722,264</b>	<b>452,638</b>	<b>278,347</b>
4,551	537	4,701	55,748	137,484	71,947	32,679	47,238
824	44	267	14,721	42,199	26,343	23,595	7,060
1,885	336	2,354	160,690	266,790	101,525	52,217	29,279
1,816	201	1,425	73,178	173,782	97,162	97,197	26,254
4,761	537	3,079	160,921	393,042	223,744	87,706	46,093
500	13	203	33,431	71,764	37,617	22,248	3,837
12,465	706	4,359	229,500	410,956	163,926	136,996	118,586
<b>616,325</b>	<b>31,171</b>	<b>162,616</b>	<b>646,531</b>	<b>3,784,593</b>	<b>2,327,950</b>	<b>2,230,407</b>	<b>8,785,394</b>
533,724	2,911	64,342	3,546	2,085,578	1,481,055	1,565,450	5,846,551
61,749	6,265	13,297	951	271,542	189,280	241,107	657,610
17,241	3,641	3,617	29	73,484	53,956	22,003	113,369
1,175	640	2,726	31,789	67,166	30,836	27,754	110,118
2,436	17,714	78,634	610,216	1,281,823	572,823	374,093	2,057,746
<b>3,595,128</b>	<b>404,806</b>	<b>2,249,928</b>	<b>80,721,680</b>	<b>152,967,611</b>	<b>65,996,069</b>	<b>42,026,245</b>	<b>38,626,743</b>

## INDIVIDUAL INDUSTRIES.

The salient features of the chief industries are set forth in the succeeding pages.

Tanning was one of the earliest industries established in Victoria; in the year 1850 there were thirteen tanneries in the State. Particulars relating to the industry for the year 1929-30 and the past four years are given in the following table:—

## VICTORIA—TANNERIES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	44	43	41	40	41
Number of persons engaged ..	1,838	2,415	2,460	2,316	2,221
Horsepower of engines used ..	3,840	4,612	7,460	8,057	7,903
Value of plant and machinery £	336,835	250,430	241,453	241,226	243,067
Value of land and buildings £	454,580	408,178	418,191	420,363	422,437
Salaries and wages paid £	449,027	475,765	506,310	514,937	489,647
Fuel, light, and power £	33,288	35,251	36,166	40,056	36,680
Value of materials used £	1,417,919	1,492,039	1,610,687	1,622,917	1,268,331
Value of output .. £	2,197,709	2,346,531	2,517,926	2,436,346	2,113,299
Value added to materials £	720,999	776,861	823,082	730,246	770,538
Materials treated—					
Cow and ox hides .. No.	638,915	837,375	921,075	895,171	793,069
Calf hides .. .. .	429,373	621,562	334,578	430,347	377,126
Other skins and pelts ..	1,048,002	1,505,445	1,115,689	1,035,055	996,618
Bark used .. .. . tons	11,703	11,424	10,559	10,209	10,600
Sole leather produced .. lb.	12,624,029	13,425,826	12,808,892	13,030,832	11,342,423

The value of leather imported into Victoria from oversea countries during the year ended 30th June, 1939, was £43,256; the value of leather exported in the same period was £274,714.

The manufacture of soap was also one of the earliest Victorian industries. In the year 1850 the recorded production of the four establishments then operating was 5,840 cwt. of soap. The following table indicates the development which has since taken place.

## VICTORIA—SOAP FACTORIES.

Item	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	17	20	19	18	18
Number of persons engaged ..	653	680	700	723	711
Horsepower of engines used ..	823	769	1,327	1,356	1,839
Value of plant and machinery £	246,020	197,518	206,879	255,201	260,361
Value of land and buildings £	204,895	195,054	203,741	206,326	213,789
Salaries and wages paid £	138,450	123,355	128,422	143,482	137,232
Fuel, light and power £	31,282	24,634	27,793	33,443	33,182
Value of materials used £	636,295	556,797	586,545	576,483	497,178
Value of output .. £	1,138,963	1,613,180	1,243,208	1,323,103	1,237,505
Value added to materials £	455,107	399,345	595,056	673,282	666,713
Materials treated—					
Tallow .. .. . cwt.	197,953	198,924	217,831	206,349	190,245
Alkali .. .. .	78,020	119,721	100,649	101,216	109,048
Copra oil .. .. .	26,112	41,877	47,393	49,382	52,726
Output—					
Soap, household .. cwt.	285,324	205,550	199,166	185,886	192,283
" Sand .. .. .	28,346	38,186	34,121	35,342	37,875
" Toilet .. .. .	14,464	16,903	19,192	20,705	17,863
Soda crystals .. ..	31,148	36,253	30,629	36,829	28,401

Other items of manufacture include soft soap, wool scouring soap, soap extract, candles, glycerine, &c.

The imports from oversea countries in 1938-39 included 173,716 lb. of soap and 340,428 lb. of soap substitutes, valued at £7,878, and £11,343 respectively, and 33,468 lb. of candles, &c., valued at £2,027.

These industries are grouped because some establishments which produce bricks also manufacture tiles, and others which produce tiles, also manufacture pipes and pottery. Factories manufacturing cement pipes and tiles are not included herein, but are grouped with those making cement and cement products.

VICTORIA—BRICKS, POTTERY, PIPES AND TILES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	77	79	79	81	83
Number of persons engaged ..	2,165	2,868	2,969	3,166	3,255
Horse-power of engines used ..	8,838	11,311	12,922	13,780	14,123
Value of plant and machinery £	499,205	490,969	524,667	566,624	606,389
Value of land and buildings £	581,765	563,500	547,025	564,158	525,804
Salaries and wages paid £	483,873	509,958	563,858	607,613	651,974
Fuel, light, and power £	214,917	173,439	190,029	217,217	229,675
Value of materials used £	125,978	146,084	140,341	153,200	149,473
Value of output £	1,084,452	1,188,968	1,259,323	1,381,198	1,448,203
Value added to materials £	703,619	794,906	859,506	934,428	993,077
Production—					
Bricks, common .. (1,000)	162,676	195,680	183,727	190,666	197,245
Firebricks .. (1,000)	3,595	6,351	5,187	4,631	4,551
Roofing tiles .. (1,000)	8,940	10,663	10,232	12,069	13,737
Pipes .. £	145,430	131,984	151,681	196,357	199,008
Pottery .. £	126,708	181,876	242,987	297,211	306,704

Forest Sawmills.

Detailed information in regard to the forest sawmills of the State for the six years 1933-34 to 1938-39 is given in the table which follows:—

VICTORIA—FOREST SAWMILLS.

Year.	Number of Mills.	Value of Machinery and Plant in Use.	Persons Employed.	Salaries and Wages Paid.	Victorian Timber Sawn.	
					Quantity.	Value.
					super ft	£
1933-34 ..	182	372,978	1,894	336,556	81,078,557	511,858
1934-35 ..	202	392,217	2,368	422,798	97,110,074	642,058
1935-36 ..	193	380,800	2,486	462,042	105,934,903	719,714
1936-37 ..	192	395,419	1,951	371,772	122,907,580	865,789
1937-38 ..	203	434,935	1,935	387,940	121,782,570	893,991
1938-39 ..	205	383,608	1,797	375,504	111,383,079	862,828

The reduction in the number of persons employed and in the amount paid in salaries and wages since the year 1935-36, is due to the rigid exclusion from these statistics of all persons engaged in felling and hauling timber from forest to mills. The number of persons employed now quoted is comprised of those working in the sawmills only.

In addition to the forest sawmills there were 515 other factories in the wood working group. Particulars relating to these for the year 1938-39 are given on page 516.

**Firewood.**

The quantity of timber sawn for firewood consumption in the year 1938-39 was 236,770 tons, valued at the saw-mills at £167,241. There is also a large amount of firewood taken from the forests which does not pass through these sawmills and its value cannot be reliably estimated. Statistics collected from factories, mines and quarries show that during 1938-39, 465,265 tons of firewood, which cost £210,735, were consumed. The increased use of brown coal briquettes and the extension of the use of gas and electricity for cooking and heating have caused a reduction in the demand for firewood in recent years.

**Agricultural and Dairying Machinery Works.**

The Agricultural Implement Industry, in 1938-39, was affected by the decreased production, due to a very dry season, as well as a substantial fall in prices of primary products.

### VICTORIA—AGRICULTURAL AND DAIRYING MACHINERY WORKS.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	72	70	74	80	79
Number of persons employed	2,639	2,828	3,486	4,539	3,999
Horse-power of engines used	2,656	3,590	7,939	8,721	9,421
Value of land and buildings £	324,305	290,084	342,503	405,089	600,327
Value of plant and machinery £	319,705	290,819	360,033	401,625	562,705
Salaries and wages paid £	603,817	568,695	757,743	1,045,214	900,844
Value of materials used £	537,545	610,477	855,674	1,135,453	914,487
Fuel, light, and power used £	41,540	41,132	49,118	64,475	51,165
Value of output .. £	1,378,287	1,445,497	1,903,662	2,691,479	2,180,881

In the following table particulars of bacon and ham curing establishments are given for the year 1929 30 and the past four years.

### VICTORIA—BACON FACTORIES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	19	21	20	19	18
Number of persons employed	544	546	554	545	532
Horse-power of engines used	1,798	3,105	3,954	3,783	3,804
Value of land, buildings, plant, &c. .. £	348,270	353,720	360,320	361,933	348,206
Salaries and wages paid £	144,120	122,679	120,440	124,020	129,111
Value of materials used £	1,043,360	733,807	789,851	800,605	825,987
Value of fuel and light £	23,075	17,742	17,606	16,510	16,412
Value of output .. £	1,367,179	953,305	985,645	1,040,253	1,039,391
Pigs slaughtered for curing No.	218,799	198,148	193,048	172,535	170,189
Bacon and ham cured—					
In factories .. lb.	18,222,220	17,099,550	16,652,906	16,006,403	16,024,626
On farms .. lb.	606,317	1,065,618	918,886	689,995	485,511

The number of butter, cheese, and kindred factories in 1938-39 was 174. Of these 140 were making butter, 33 cheese, 3 concentrated milk, 3 condensed milk, 11 powdered milk, 10 casein, and 1 milk sugar. There were also 15 creameries attached to the factories. The following table gives some indication of the value of this industry to the State :—

## VICTORIA—BUTTER AND CHEESE FACTORIES.

Year.	Number of Factories.	Value of Machinery, Plant, Land, and Buildings.	Persons Employed	Salaries and Wages Paid.	Value of Output.
		£		£	£
1929-30 ..	163	2,040,058	2,387	586,395	8,753,102
1930-31 ..	165	2,025,267	2,235	542,374	8,077,608
1931-32 ..	169	2,005,965	2,346	516,619	8,353,481
1932-33 ..	174	2,061,690	2,455	514,584	7,998,432
1933-34 ..	175	2,088,195	2,509	506,109	6,745,845
1934-35 ..	179	2,116,447	2,711	543,372	8,213,097
1935-36 ..	176	2,163,363	2,680	560,621	10,251,289
1936-37 ..	175	2,315,765	2,859	629,230	10,825,003
1937-38 ..	172	2,340,384	3,017	694,356	12,407,723
1938-39 ..	174	2,437,090	2,926	707,527	11,453,619

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on pages 476 and 477.

## BAKERIES (INCLUDING BREAD, PASTRY, CAKES, ETC.).

The statistical definition of a factory (see page 509) excludes from enumeration many small bakeries. Of the 1,738 bakehouses registered at the Factories Department during the year 1938, only 576 come within the definition and are embraced by the

table hereunder. It must be explained that the value quoted is the wholesale selling value of the goods at the factory exclusive of all selling and delivery costs.

## VICTORIA—BAKERIES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of factories ..	464	537	556	549	576
Number of persons employed	2,951	3,131	3,374	3,213	3,281
Horse-power of engines used ..	1,944	2,138	2,289	2,502	2,679
Value of land and buildings £	1,019,260	1,132,603	1,158,299	1,184,892	1,231,844
Value of plant and machinery £	366,290	365,988	377,886	376,595	415,927
Salaries and wages paid £	719,055	597,453	651,183	657,061	675,377
Value of materials used £	1,987,669	1,755,585	1,867,858	1,920,579	2,032,906
Fuel, light, and power used £	82,347	77,614	79,869	81,127	83,768
Repairs, oil and water used £	18,529	30,975	35,736	33,056	35,683
Total output ..	£ 3,313,820	2,842,227	3,114,907	3,235,506	3,479,340
Value added ..	£ 1,225,275	978,053	1,131,444	1,200,744	1,326,983
Value added per worker £	415	312	335	374	404
Flour used—tons (2,000 lb.)	104,069	94,115	94,742	92,191	92,770
Bread made—4-lb. loaves ..	53,852,013	56,318,333	56,683,427	55,485,924	55,386,952
Cakes, pastry, pies	£ *	*	1,635,766	1,522,674	1,581,795

\* Not available.

Meat freezing and preserving works. Details of the production of frozen and preserved meat for the past five years are shown in the following table:—

## VICTORIA—MEAT FREEZING AND PRESERVING WORKS.

Item.	1934-35.	1935-36.	1936-37. †	1937-38. †	1938-39. †
Frozen meat—					
Cattle and calves	qrs. 60,292	107,496	438,926	955,502	1,037,204
Sheep and Lambs	No. 3,253,640	3,784,083	4,049,966	5,077,313	4,609,034
Rabbits and hares	„ 8,595,868	4,475,210	3,913,437	5,791,622	4,647,300
Poultry ..	„ 46,420	323,451	257,741	261,392	249,701
Pigs ..	„ 13,599	37,863	86,504	126,412	78,324
Preserved meat ..	cwt. *6,746	45,722	49,448	52,740	66,256

\* Incomplete.

† Includes chilled.

Imports and exports of meats, Victoria.

The following statement shows the imports from and exports to oversea countries of frozen, chilled, and preserved meats during the year ended 30th June, 1939.

VICTORIA—MEAT IMPORTED AND EXPORTED OVERSEA, 1938-39.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Preserved by cold process—				
Beef .. .. .	lb. 491	11	lb. 9,158,102	156,125
Game.. .. .	.. 6,197	431	.. 78,045	1,102
Lamb .. .. .	.. .. .	.. .. .	.. 86,736,377	2,356,159
Mutton .. .. .	.. .. .	.. .. .	.. 14,690,484	201,586
Pork .. .. .	.. .. .	.. .. .	.. 9,530,942	283,685
Poultry .. .. .	.. .. .	.. .. .	pr. 2,439	1,575
Rabbits and Hares .. .. .	.. .. .	.. .. .	.. 2,062,183	127,591
Veal .. .. .	.. .. .	.. .. .	lb. 2,849,964	49,142
Other.. .. .	.. 28	1	.. 2,784,373	72,510
Bacon and Hams .. .. .	.. 402	38	.. 55,913	3,647
Potted and Concentrated .. .. .	.. 22,610	5,873	.. *	1,296
Preserved in tins, &c. .. .. .	.. 29,729	1,632	.. 2,691,242	96,774
Sausage Casings .. .. .	cwt. 4,051	59,908	cwt. 14,228	297,311
Other .. .. .	.. 3	25	.. 7	42
Total value .. .. .	.. .. .	67,919	.. .. .	3,648,545

\* Not available.

Victorian flour mills produce ample flour, &c., to supply all local requirements and a considerable surplus for export. During the year 1938-39, 256,231 tons of flour, valued at £1,607,110, were exported from Victoria to countries beyond Australia. The following table gives particulars of the industry for the year 1929-30 and for the past four years:—

VICTORIA—FLOUR MILLS.

Item.	1929-30.	1935-36.	1936-37	1937-38.	1938-39.
Number of establishments ..	38	38	38	38	38
Number of persons engaged	898	1,113	1,112	1,101	1,099
Horse-power of engines used	5,591	6,151	6,911	7,115	8,174
Value of plant and machinery £	580,835	543,396	508,072	493,838	492,065
Value of land and buildings £	431,710	553,578	546,587	543,861	595,565
Salaries and wages paid	247,692	259,587	255,397	274,725	288,537
Fuel, light, and power	52,163	57,916	56,037	55,543	57,944
Value of materials used	4,355,538	3,729,365	4,975,111	4,814,257	3,378,044
Value of output	5,106,194	4,411,691	5,574,290	5,409,048	3,972,336
Value added to materials	677,443	591,263	511,878	510,315	503,309
Wheat ground into flour bushels	17,227,886	20,668,321	20,007,887	20,175,007	21,026,412
Flour produced .. tons	364,682	435,340	420,364	424,177	436,828
Bran produced .. (2,000 lb.)	72,381	96,005	89,832	86,275	95,237
Pollard produced ..	76,670	96,288	91,978	91,910	90,180
Wheatmeal produced cwt.	57,276	90,246	122,100	139,200	152,804

Jam, pickle, and sauce works. Particulars relating to jam, pickle, sauce, fruit and vegetable canning factories are given in the table hereunder, which shows the main items of output, etc., for the year 1929-30 and for the past four years.

## VICTORIA—JAMS, PICKLES, SAUCES, PRESERVES, ETC.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	39	43	45	46	43
Number of persons engaged ..	2,261	2,755	2,868	3,225	2,949
Horse-power of engines used ..	2,085	2,397	3,153	3,797	4,018
Value of plant and machinery £	286,240	310,891	328,249	354,841	342,749
Value of land and buildings £	460,635	570,205	635,774	682,800	675,362
Salaries and wages paid £	418,024	456,723	487,947	580,312	545,758
Fuel, light, and power used £	35,496	33,419	34,641	37,055	38,671
Value of materials used £	1,607,306	1,838,565	1,907,845	2,297,776	2,211,283
Value of output .. £	2,592,061	2,918,703	3,023,101	3,533,091	3,390,421
Fresh Fruit used .. cwt.	1,052,534	874,452	913,275	1,089,549	900,833
Sugar used ..	308,012	285,065	315,240	326,180	290,100
Output of—					
Jams and jellies .. cwt.	335,530	317,346	324,452	275,086	257,193
Fruit preserved in liquid ..	510,298	631,296	677,085	913,796	814,706
Fruit pulp ..	150,647	71,544	82,442	88,591	64,332
Sauce .. pints	8,806,347	8,886,488	8,410,984	9,895,651	9,299,365
Pickles ..	1,451,693	1,704,039	2,189,510	†2,949,428	†2,537,772

† Includes Chutney.

## Beet Sugar Industry.

The Victorian Government operates a beet sugar factory at Maffra. A brief history of the beet sugar industry since its establishment in Victoria was given in the *Year-Book*, 1937-38.

The following table contains particulars relating to the production, &c., of sugar for the past ten years. A severe drought affected the production of beet in the 1938-39 season.

Prices paid to growers for beet vary annually in accordance with the sugar content and the Australian price of sugar. The prices per ton for the past five years were as follows:—1934-35, 37s. 6d.; 1935-36, 41s.; 1936-37, 42s.; 1937-38, 40s.; 1938-39, 40s.

## VICTORIA—BEET SUGAR PRODUCTION.

Year.	Area Harvested.	Beet Purchased.	Sugar Content.	Sugar Produced.
	acres.	tons.	%	tons.
1929-30 ..	2,500	26,525	17·0	3,472
1930-31 ..	3,045	38,291	16·48	5,095
1931-32 ..	3,173	43,209	15·91	5,428
1932-33 ..	3,155	36,741	19·25	5,701
1933-34 ..	3,234	50,625	13·91	5,303
1934-35 ..	3,097	40,788	15·06	4,998
1935-36 ..	3,165	37,634	17·12	5,115
1936-37 ..	3,475	31,079	17·58	4,180
1937-38 ..	4,046	48,594	15·46	5,625
1938-39 ..	4,268	13,454	14·83	1,507

**Breweries and Distilleries.** Particulars regarding breweries and distilleries for the year 1929-30 and the past four years are set forth in the succeeding tables.

## VICTORIA—BREWERIES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of breweries ..	9	9	9	9	9
Number of persons engaged ..	1,153	1,258	1,325	1,420	1,516
Horse-power of engines ..	4,186	4,160	6,815	6,860	6,611
Value of plant and machinery £	1,007,420	855,072	842,958	840,581	932,992
Value of land and buildings £	714,795	731,229	766,377	769,562	789,404
Salaries and wages paid £	409,815	423,986	456,312	495,493	517,505
Fuel, light and power used £	65,502	51,054	54,566	60,587	63,203
Value of materials used £	1,019,847	940,621	987,897	1,243,561	1,269,269
Value of output ..	2,334,283	2,417,226	2,499,494	2,891,604	2,966,119
Value added to materials £	1,231,372	1,322,947	1,345,467	1,467,503	1,485,990
Materials used—					
Sugar .. .. cwt.	103,328	101,150	106,042	121,427	124,918
Malt .. .. bush.	754,288	836,103	863,330	992,860	1,014,010
Hops .. .. lb.	619,218	728,876	746,794	854,087	846,801
Beer and stout made gals.	21,952,775	25,974,483	27,246,234	30,570,063	31,541,886

## VICTORIA—DISTILLERIES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of distilleries ..	8	7	7	7	8
Number of persons engaged ..	124	134	81	74	90
Horse-power of engines ..	752	630	405	403	978
Value of plant and machinery £	214,335	146,755	112,381	106,043	160,418
Value of land and buildings £	188,485	203,664	188,848	186,494	220,579
Salaries and wages paid £	33,896	32,062	18,755	18,667	25,549
Fuel, light and power £	13,350	7,838	7,300	7,242	9,551
Value of materials used £	178,058	101,399	69,926	69,913	73,901
Value of output ..	343,819	223,209	170,121	192,227	222,077
Materials used—					
Wine .. .. gals.	1,556,249	1,135,844	2,147,674	1,181,601	789,135
Malt .. .. bush.	300,267	58,571	34,160	57,008	72,704
Other grain .. .. bush.	93,781	78,829	58,091	97,325	84,728
Molasses .. .. lb.	1,284,528	1,466,304	1,723,120	1,447,040	1,217,552
Spirits distilled in distilleries proof gals.	1,142,762	606,996	594,134	745,063	583,837
Spirits distilled by vintgrowers proof gals.	18,299	20,353	36,798	38,882	22,883

**Tobacco Factories.** The number of tobacco, cigar, and cigarette factories licensed in 1938-39 was twenty-six, of which twelve were too small to be classified statistically as factories and were consequently not included in the statistical tabulation on page 516. In the year mentioned the remaining fourteen gave employment to 2,229 persons, who were paid £445,411 in wages and who used machinery, plant, land, and buildings valued at £648,278. The subjoined table

shows the quantity of tobacco leaf used by and the output of the full number of licensed establishments for the past ten years:—

## VICTORIA—TOBACCO FACTORIES.

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured.		
	Australian.	Imported.	Tobacco.	Cigars.	Cigarettes.
	lb.	lb.	lb.	number.	number.
1929-30 ..	491,936	4,319,954	5,450,116	23,739,045	91,309,252
1930 31 ..	1,818,722	3,551,324	5,575,051	20,592,865	278,304,141
1931-32 ..	1,441,938	3,991,979	5,548,931	15,020,743	375,371,651
1932-33 ..	1,574,135	4,184,640	5,829,704	18,503,055	412,015,592
1933-34 ..	1,589,744	3,737,635	5,034,477	18,932,673	473,677,018
1934-35 ..	1,494,725	3,784,672	4,815,978	19,479,242	550,359,781
1935-36 ..	1,543,839	4,132,698	5,121,360	22,226,147	615,493,655
1936-37 ..	1,509,120	4,150,400	4,906,102	22,744,652	670,676,576
1937-38 ..	1,565,159	4,727,731	5,229,385	23,076,385	837,549,346
1938-39 ..	1,592,449	5,093,062	5,296,000	22,797,977	1,032,768,141

## Woollen mills

Victorian manufacturers supply nearly half of the Australian requirements in woollen piece goods. They have also developed an oversea export trade in wool tops and noils, the value of which for the year 1938-39 was £49,222.

## VICTORIA—WOOLLEN MILLS.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	31	50	52	52	53
Number of persons employed ..	6,663	10,085	10,036	9,813	9,896
Horse-power of engines ..	14,627	18,927	23,874	26,767	27,797
Value of plant and machinery £	1,835,875	1,711,725	1,776,088	1,777,059	1,773,475
Value of land and buildings £	1,135,975	1,312,840	1,252,528	1,284,491	1,298,132
Salaries and wages paid £	1,036,745	1,383,210	1,320,125	1,437,060	1,506,078
Fuel, light and power £	150,620	163,138	159,801	168,709	173,703
Value of materials used £	1,978,388	2,425,557	3,689,537	3,879,806	3,248,754
Value of output ..	£ 3,903,164	5,936,927	6,156,701	6,325,824	5,956,106
Added value ..	£ 1,702,822	2,189,130	2,161,754	2,130,844	2,380,714
Scoured wool used .. lb.	11,708,536	19,125,620	16,250,885	17,894,500	19,257,012
Cotton used ..	547,307	1,114,003	839,356	848,040	866,270
Tweed and cloth made .. sq. yds.	6,077,129	14,571,066	12,757,001	12,973,069	13,133,128
Flannel made ..	3,546,961	3,531,909	3,217,803	1,791,011	1,852,585
Blankets ..	190,869	275,579	317,348	289,848	297,378
Rugs and shawls .. No.	123,361	132,906	129,340	92,588	77,513

Early records show that, in the year 1886-87, there were three hosiery factories in Victoria, employing 56 hands. The capital value of land, buildings and machinery was £2,080. The following table shows the main details relating to this industry for the past five years :—

VICTORIA—HOSIERY AND KNITTING.

Item.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	219	225	208	216	221
Number of persons employed—					
Male .. .. .	2,910	3,296	3,632	3,959	4,048
Female .. .. .	7,001	7,354	7,964	8,432	8,451
Salaries and wages paid £	1,114,396	1,272,176	1,427,980	1,643,609	1,681,591
Value of land and buildings £	1,067,836	1,138,108	1,181,990	1,157,824	1,221,375
Value of plant and machinery £	1,115,739	1,143,572	1,273,751	1,265,179	1,271,787
Value of materials used £	2,137,824	2,369,985	2,564,249	2,790,791	2,618,243
Fuel, light, and power £	66,690	66,413	64,993	74,879	79,810
Value of output .. .. .	£ 4,290,652	4,969,671	5,213,388	5,655,022	5,404,417
Added value .. .. .	£ 2,000,930	2,437,339	2,460,934	2,674,686	2,650,062
Yarn used—					
Woollea .. .. lb.	4,015,316	4,140,712	3,674,751	3,858,639	3,802,763
Cotton .. .. .	2,071,621	2,515,851	2,406,832	2,649,711	2,979,849
Silk .. .. .	585,221	688,866	767,090	1,154,939	919,595
Artificial silk .. ..	2,061,551	2,541,557	2,803,599	2,993,386	2,766,684
Stockings made .. .. doz. pair	1,082,106	1,194,036	*1,359,548	*1,550,154	*1,615,701
Socks made .. .. .	875,676	954,655	†1,006,454	†1,094,752	†1,158,222
Garments made .. .. Number	15,682,529	16,966,933	16,406,904	17,915,280	16,553,520

\* Women's socks and stockings only. † Includes men's socks and stockings, 1936-37, 775,443 doz. pair; 1937-38, 836,222 doz. pair; 1938-39, 892,631 doz. pair; children's socks and stockings, 1936-37 231,011 doz. pair; 1937-38, 258,530 doz. pair; 1938-39, 265,591 doz. pair.

Boots and Shoes.

Particulars relating to factories manufacturing boots and shoes are shown in the following table :—

VICTORIA—BOOTS AND SHOES.

Item.	1929-30.	1935-36.	1936-37.	1937-38.	1938-39.
Number of establishments ..	175	164	165	162	158
Number of persons employed	10,321	9,347	9,362	9,497	9,609
Horse-power of engines used ..	3,077	3,108	3,219	3,440	3,710
Value of plant, machinery, land, and buildings £	1,369,000	988,385	1,045,991	1,057,287	1,087,513
Salaries and wages paid £	1,834,816	1,301,816	1,354,623	1,515,390	1,589,323
Fuel, light, and power £	34,284	27,655	27,948	27,406	27,442
Value of materials used £	2,726,740	2,249,581	2,395,438	2,477,930	2,409,106
Value of output .. .. .	£ 5,375,438	4,186,799	4,288,431	4,603,609	4,600,365
Boots and shoes made .. pairs	7,891,133	7,900,791	8,253,084	7,877,630	7,463,770
Slippers made .. .. .	*2,567,407	*4,259,884	4,173,599	4,378,935	4,218,245

\* Includes canvas shoes.

The value of the output of establishments connected with the manufacture of dress, i.e., clothing, tailoring, dressmaking, millinery, underclothing, hats and caps, &c., but exclusive of boots and shoes, was £17,703,544 in 1938-39, as compared with £15,783,906 in 1929-30. During the period 1929-30 to 1938-39 the persons employed increased by 23 per cent., the salaries and wages paid by 19 per cent., the value of materials used by 7 per cent., and the value of the output by 12 per cent. Particulars of the industry for each of the past ten years are as follows:—

#### VICTORIA—DRESS (EXCLUSIVE OF BOOT) FACTORIES.

Year.	Number of Factories.	Number of Persons Employed.			Salaries and Wages Paid.	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
1929-30	1,474	5,915	27,631	33,546	4,594,570	8,602,639	15,783,906
1930-31	1,405	5,361	22,162	27,523	3,492,542	6,333,943	11,698,487
1931-32	1,371	5,924	24,255	30,179	3,496,808	7,105,835	12,856,708
1932-33	1,445	6,760	27,432	34,192	3,791,163	7,744,205	13,920,069
1933-34	1,493	7,168	28,529	35,697	3,936,233	8,149,015	14,820,538
1934-35	1,540	7,694	30,246	37,940	4,236,961	8,228,047	15,082,449
1935-36	1,515	8,277	31,235	39,512	4,581,706	8,884,171	16,571,245
1936-37	1,417	9,828	30,981	40,809	4,770,768	8,831,838	16,655,155
1937-38	1,479	9,231	32,225	41,456	5,352,401	9,700,508	18,027,490
1938-39	1,441	9,350	31,840	41,190	5,471,374	9,164,940	17,703,544

Particulars relating to the electric light and power works of the State are given in the next table:—

#### VICTORIA—ELECTRIC LIGHT AND POWER WORKS.

Year.	Number of Stations.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Generated.	Value of Output.
		£		£	Kilowatt Hours.	£
1929-30	91	6,559,245	1,230	354,823	724,525,000	1,873,361
1930-31	91	6,411,935	1,162	306,785	681,230,000	1,605,138
1931-32	84	6,152,620	1,168	266,657	704,639,000	1,375,886
1932-33	87	6,262,802	1,244	276,499	778,650,000	1,422,938
1933-34	93	6,494,657	1,281	284,811	830,910,000	1,506,903
1934-35	94	6,373,593	1,364	292,529	900,247,000	1,604,679
1935-36	93	6,336,498	1,414	314,961	981,189,000	1,677,499
1936-37	91	6,934,522	1,346	320,098	1,049,768,000	2,635,151
1937-38	81	6,327,762	1,306	345,576	1,071,596,000	2,524,528
1938-39	79	6,617,530	1,376	390,090	1,136,301,000	2,435,604

The reduction shown in the number of persons employed since 1935-36 is probably due to a more rigid exclusion of employees engaged in the transmission and distribution of electricity: the increase in the value of output to an alteration in the method of computing value at the generating station. In addition to the power stations shown above for the year 1938-39, there were 31 factories which generated electricity mostly for their own use, the total thus generated for the year mentioned amounted to 86,203,000 kwh. Prior to 1937-38 the power generated in such factories was included in the production of electricity shown on the previous page.

### STATE ELECTRICITY COMMISSION.

The State Electricity Commission was constituted by the *Electricity Commissioners Act 1918* as amended by the *State Electricity Commission Act 1920*, now consolidated in the *State Electricity Commission Act 1928*. The Act provides for the appointment, for terms not exceeding seven years, of a chairman and three commissioners. The Commission's duties cover—

1. Control of generation, supply, and use of electricity in Victoria.
2. Investigation and, where practicable, development of all possible sources of power.
3. Promotion of the use of electricity.

The Commission is empowered to erect, acquire, and operate electrical undertakings and to operate any business associated therewith; to supply electricity to corporations and to persons outside areas in which there are existing undertakings, to frame safety regulations, register electrical contractors, and to issue licences for electrical mechanics. It controls its own funds and all officers and employees required for the operation of the Act.

A comprehensive transmission system has been established, based upon the brown coal deposits at Yallourn, where there is a generating capacity of 195,000 kw. (including briquette factory) in six turbo-alternators of 12,500 kw., four of 25,000 kw. and two of 10,000

kw. (briquette factory). Two 132,000-volt lines transmit electricity to receiving stations at Richmond and Yarraville. A third station (Thomastown) receives the electricity from the Sugarloaf-Rubicon group of hydro stations (26,415 kw.) in the north-eastern district. There are two peak load stations in the metropolitan area, viz., Newport "B" (60,000 kw.) and Richmond (15,000 kw.). At Geelong and Ballarat, the power stations have a capacity of 10,500 kw. and 4,500 kw. respectively.

A hydro-electric scheme on the Kiewa River, to provide 104,000 kw. in economic instalments between 1942 and 1952 is under construction, while the peak load capacity at Newport is to be increased by 90,000 kw. in three equal instalments.

The total kva. of the six main receiving stations is 351,900, in addition to which there are 23 main metropolitan sub-stations, aggregating 249,500 kva.; 13 distribution sub-stations at line voltage, aggregating 27,530 kva.; and 2,478 metropolitan and rural sub-stations, aggregating 259,560 kva.; grand total, 888,490 kva. High and low tension lines aggregate 3,821 and 3,464 route miles respectively, excluding 719 cable miles of underground cables. The Commission supplies practically the whole of the electricity requirements of the metropolitan area of Melbourne, excluding the railways. It retails direct in twenty of the metropolitan municipalities, in addition to outer metropolitan centres.

The rural centres supplied by the Commission number 423, of which 346 had no supply previously. These figures exclude the provincial cities of Ballarat, Bendigo, and Geelong, where the Commission also operates tramways.

The Commission also operates a briquette factory at Yallourn. This includes eight steam presses and twelve electric presses, the total capacity of which is 1,200 tons of brown coal briquettes a day. The bulk of the output is used for industrial purposes. By-product electricity to the amount of about 8,000 kw. is supplied from the briquette factory to the transmission system at Yallourn power station.

Particulars in regard to gasworks are given below for each of the past five years.

## VICTORIA—GASWORKS.

Year.	Number of Works.	Persons Employed.	Wages Paid.	Coal Used.	Gas Made.	Coke Produced.	Value of Output.
			£	tons	cubic feet.	tons	£
1934-35 ..	38	714	163,265	325,602	5,922,690,000	199,745	1,315,751
1935-36 ..	39	785	184,739	352,324	6,196,556,000	224,444	1,496,610
1936-37 ..	39	724	186,489	368,963	6,564,355,000	199,652	1,367,838
1937-38 ..	39	747	199,289	379,960	6,701,804,000	212,542	1,395,166
1938-39 ..	39	828	223,512	391,092	7,129,698,000	217,850	1,348,989

Some inconsistency is shown in the movement of the statistics since 1935-36. This can be ascribed to an alteration in the form used for the collection of this data. More detailed statistics relating to the costs of transmission and distribution were thereby obtained, thus enabling a more accurate estimate to be made of the value of output at the gasworks.

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 1,210,733 in 1934-35, 1,128,140 in 1935-36, 1,292,206 in 1936-37, 1,203,294 in 1937-38, and 1,785,500 in 1938-39.

The following table is an analysis of factory statistics designed to show the relative importance of the various classes of manufacturing in Victoria.

## VICTORIA—VALUE OF ARTICLES PRODUCED IN FACTORIES.

Class of Industry.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
1. Treatment of non-ferrous mine and quarry products ..	1,846,480	2,308,109	2,445,353	2,808,306	2,993,612
2. Bricks, pottery, glass, &c. ..	1,566,137	1,878,773	2,018,926	2,241,357	2,294,715
3. Chemicals, dyes, explosives, paint, oils, and grease ..	7,085,892	7,850,284	9,073,976	9,970,909	10,115,983
4. Industrial metals, machines, implements, and conveyances ..	18,745,029	22,565,640	26,849,850	31,140,916	30,718,898
5. Precious metals, jewellery, and plate ..	726,806	904,487	917,674	1,022,471	1,010,767
6. Textiles and textile goods (not dress) ..	10,587,501	13,087,825	14,262,943	15,298,559	14,523,484
7. Skins and leather (not clothing or footwear) ..	4,142,328	4,257,914	4,547,047	4,237,259	3,721,705
8. Clothing ..	15,091,802	16,123,208	16,021,980	17,281,253	17,174,627
9. Food, drink, and tobacco ..	36,589,677	42,817,086	41,770,149	45,912,799	44,109,455
10. Woodworking and basket ware ..	3,805,889	4,290,263	5,066,362	5,527,505	5,320,115
11. Furniture, bedding, &c. ..	1,928,725	2,448,374	2,573,992	2,825,221	2,924,892
12. Paper, stationery, printing, bookbinding, &c. ..	7,362,094	7,725,011	8,182,693	9,141,044	9,070,629
13. Rubber ..	3,399,448	3,047,269	3,455,116	4,094,017	3,677,837
14. Musical instruments ..	29,499	33,078	30,888	38,052	30,282
15. Miscellaneous products ..	1,343,750	1,522,377	1,472,254	1,591,888	1,496,017
16. Heat, light, and power ..	2,931,800	3,183,472	4,002,989	3,919,669	3,784,593
<b>Total ..</b>	<b>117,182,857</b>	<b>134,043,170</b>	<b>142,692,192</b>	<b>157,050,725</b>	<b>152,967,611</b>

Factory output by classes.

**Employment in factories.** The average number of persons employed in each class of industry is shown hereunder. The method of arriving at this average was altered in the year 1928-29, and it is now taken as the average number employed over the whole year, and not, as formerly in the case of a seasonal factory working only for a portion of the year, the average for the period of operation.

The table of monthly employment in factories (see page 555) is designed to show seasonal employment.

VICTORIA—AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.

Class of Industry.	1930-31.	1935-36.	1936-37.	1937-38.	1938-39.
1. Treatment of non-ferrous metal products .. ..	1,505	2,217	2,630	3,050	3,221
2. Bricks, pottery, glass, &c. ..	1,831	4,008	4,244	4,482	4,552
3. Chemicals, dyes, explosives, paint, oils, and grease ..	4,723	6,870	7,342	7,856	8,554
4. Industrial metals, machines, implements, and conveyances .. ..	26,193	43,573	48,194	52,570	51,872
5. Precious metals, jewellery, and plate .. ..	941	1,994	2,102	2,273	2,315
6. Textiles and textile goods (not dress) .. ..	14,719	24,158	25,467	26,487	26,780
7. Skins and leather (not clothing or footwear) .. ..	2,738	4,689	4,925	4,608	4,599
8. Clothing .. ..	30,157	38,897	37,953	39,204	38,973
9. Food, drink, and tobacco ..	20,024	24,426	25,902	27,009	26,949
10. Woodworking and basketware .. ..	4,483	7,313	7,289	7,720	7,386
11. Furniture, bedding, &c. ..	2,674	4,330	4,565	4,853	4,871
12. Paper, stationery, printing, bookbinding, &c. .. ..	10,641	12,979	13,350	13,817	13,819
13. Rubber .. ..	2,051	3,327	2,759	3,042	2,948
14. Musical instruments .. ..	298	97	96	100	89
15. Miscellaneous products .. ..	1,052	2,307	2,495	2,693	2,699
16. Heat, light, and power .. ..	1,986	2,205	2,070	2,025	2,204
Total .. ..	126,016	183,390	191,383	201,789	201,831

The above table shows that there has been a substantial recovery in factory employment since the year 1930-31, when severely depressed conditions prevailed. Since then the number of persons employed in factories has increased by 60·1 per cent.

An interesting feature of the next table is the steady increase shown in factories of over 50 hands and of the persons employed therein. In 1934-35 the total number employed in factories of this size group was 100,218, representing 58·2 per cent., whilst in 1938-39 this total had increased to 127,125, or 62·6 per cent. of the total number employed in factories.

VICTORIA—FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

	Showing Annual Percentage Increase or Decrease.									
	1934-35.	Increase.	1935-36.	Increase.	1936-37.	Increase.	1937-38.	Increase.	1938-39.	Increase.
		%		%		%		%		%
<b>Under 4 hands—</b>										
Number of Factories	3,405	— 1·9	3,312	— 2·7	3,263	— 1·5	3,220	— 1·0	3,208	— 0·7
„ Employees	6,352	3·5	6,248	— 1·6	6,153	— 1·5	6,156	0·0	6,140	— 0·3
<b>4 hands—</b>										
Number of Factories	830	11·3	826	— 0·5	777	— 5·9	742	— 4·5	784	5·7
„ Employees	3,320	11·3	3,304	— 0·5	3,108	— 5·9	2,968	— 4·5	3,136	5·7
<b>5 to 10 hands—</b>										
Number of Factories	2,170	— 0·8	2,194	1·1	2,189	— 0·2	2,220	1·4	2,178	— 1·9
„ Employees	15,130	0·8	15,314	1·2	15,291	— 0·2	15,526	1·5	15,213	— 2·0
<b>11 to 20 hands—</b>										
Number of Factories	1,062	3·1	1,136	7·0	1,209	6·4	1,267	4·8	1,278	0·9
„ Employees	15,704	2·8	16,820	7·1	17,759	5·6	18,706	5·3	19,013	1·6
<b>21 to 50 hands—</b>										
Number of Factories	1,006	14·7	997	— 0·9	998	0·1	1,008	1·0	1,021	1·3
„ Employees	31,547	13·3	31,673	0·4	31,755	0·3	32,288	1·7	32,838	1·7
<b>51 to 100 hands—</b>										
Number of Factories	332	5·7	369	11·1	384	4·1	405	5·5	415	2·5
„ Employees	23,033	6·0	25,297	9·8	26,499	4·8	28,125	6·1	28,813	2·4
<b>Over 100 hands—</b>										
Number of Factories	295	9·3	326	10·5	345	5·8	370	7·2	366	— 1·1
„ Employees	77,185	10·5	86,410	12·0	92,127	6·6	99,329	7·8	98,312	— 1·0

### VICTORIA—PROPORTION OF FACTORIES OF DIFFERENT SIZES.

Size of Factory.	Percentage to Total.									
	1934-35.		1935-36.		1936-37.		1937-38.		1938-39.	
	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.	Factories.	Employees.
Under 4 hands ..	37.4	3.7	36.2	3.4	35.6	3.2	35.0	3.0	34.7	3.0
4 ..	9.1	1.9	9.0	1.8	8.5	1.6	8.0	1.5	8.5	1.5
5 to 10 ..	23.8	8.8	23.9	8.3	23.9	7.9	24.0	7.6	23.5	7.5
11 to 20 ..	11.7	9.1	12.4	9.1	13.1	9.2	13.7	9.2	13.8	9.3
21 to 50 ..	11.1	18.3	10.9	17.1	10.9	16.5	10.9	15.9	11.0	16.1
51 to 100 ..	3.6	13.4	4.0	13.6	4.2	13.8	4.4	13.9	4.5	14.2
101 and over ..	3.3	44.8	3.6	46.7	3.8	47.8	4.0	48.9	4.0	48.4
Total ..	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0	100.0

**Occupations  
in factories.**

In the following table the persons employed in factories are grouped according to their occupational status :—

### VICTORIA—OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

Occupations.		1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Working proprietors ..	No.	8,009	8,040	8,032	7,919	7,760
Managers, overseers ..	"	5,662	6,025	6,402	6,749	6,867
Accountants, clerks ..	"	7,861	8,483	9,588	10,382	11,008
Engine-drivers, firemen ..	"	1,757	1,808	1,877	1,823	1,814
Workers in factory or works ..	"	144,186	156,494	163,099	172,695	172,083
Outworkers ..	"	143	142	176	148	120
Carters, messengers ..	"	1,344	1,444	2,209	2,073	2,179
Others ..	"	729	954			
Total ..	..	169,691	183,390	191,383	201,789	201,831

**Outworkers.** The term "outworkers" used in the above table relates to factory workers working in their own homes, but does not include individuals working for themselves. The employment of outworkers is regulated by a special provision of the Factories and Shops Act. They are required to register their names and addresses with the Chief Inspector of Factories, and factory proprietors are forbidden to give work to those who are not registered.

Sex distribution  
in  
factories.

The average numbers of males and females employed in factories and their proportions to the male and female populations, for the years 1929-30 to 1938-39, were as follows :—

VICTORIA—EMPLOYMENT OF MALES AND FEMALES IN FACTORIES.

Year.	Males.		Females.		Total.	
	Number.	Average per 10,000 of Male Population.	Number.	Average per 10,000 of Female Population.	Number.	Average per 10,000 of Total Population.
1929-30 ..	100,135	1,136	50,874	568	151,009	850
1930-31 ..	82,949	936	43,067	476	126,016	704
1931-32 ..	81,618	917	46,647	512	128,265	712
1932-33 ..	91,899	1,020	52,529	575	144,428	796
1933-34 ..	100,959	1,115	55,375	602	156,334	857
1934-35 ..	110,910	1,219	58,781	634	169,691	924
1935-36 .	121,734	1,335	61,656	662	183,390	995
1936-37 ..	128,457	1,403	62,926	672	191,383	1,033
1937-38 ..	136,160	1,481	65,629	697	201,789	1,084
1938-39 ..	136,218	1,470	65,613	692	201,831	1,076

Of the total persons employed, males formed 66·3 per cent. in 1929-30 and 67·5 per cent. in 1938-39. During the period 1929-30 to 1938-39 the number of males employed increased by 36,083, or 36·0 per cent., and the number of females employed, by 14,739 or 29·0 per cent.

**Employment of females.** Of the total number of females in factories, 67·1 per cent. are engaged in the textile and clothing industries and 11·7 per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next table :—

VICTORIA—FEMALE EMPLOYMENT IN FACTORIES, 1938-39.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Chemicals, drugs, &c. .. ..	915	903	98
Explosives .. .. .	2,071	649	31
Matches .. .. .	241	465	193
Cotton .. .. .	667	1,206	180
Woollen mills .. .. .	4,916	4,980	101
Hosiery and knitting .. ..	4,048	8,451	209
Silk, natural and artificial ..	140	384	274
Rope, cordage .. .. .	721	379	52
Furriers and fur dressing .. ..	439	410	93
Bags, trunks, &c... .. .	412	536	130
Tailoring and slop clothing ..	1,953	6,287	322
Clothing, waterproof .. .. .	83	272	328
Dressmaking .. .. .	639	7,729	1,209
Millinery .. .. .	99	1,169	1,181
Shirts, underclothing, corsets ..	609	5,191	852
Handkerchiefs, ties, &c. .. ..	42	443	1,054
Hats and caps .. .. .	687	831	121
Boots and shoes .. .. .	4,615	4,994	108
Dyeworks and cleaning .. .. .	655	620	94
Biscuits .. .. .	556	575	103
Confectionery .. .. .	1,163	1,673	144
Jams, pickles, &c. .. .. .	1,543	1,406	91
Condiments, Grocers' sundries ..	541	610	113
Tobacco, cigarettes, &c. .. ..	874	1,355	155
Furnishing, drapery .. .. .	108	404	374
General printing and bookbinding ..	4,146	1,647	40
Envelopes, stationery, &c. .. ..	421	585	139
Cardboard boxes, cartons .. ..	587	942	160
Rubber goods .. .. .	2,212	708	32
All other factories .. .. .	100,115	9,809	10
Total .. .. .	136,218	65,613	48

**Child labour in factories.** The main reason for the small proportion of children engaged in factories is that daily attendance at school is compulsory between the ages of 6 and 14 years.

Another reason is the restriction imposed by the Victorian Factories Act on the employment of female children under the age of 15 years unless a special permit is granted by the Chief Inspector of Factories on the grounds of poverty or hardship.

VICTORIA—FACTORY EMPLOYMENT—AGE GROUPS.

Year.	Males.				Females.			
	Under 16 Years.	16 and Under 21 Years.	21 Years and Over.	Total Males.*	Under 16 Years.	16 and Under 21 Years.	21 Years and Over.	Total Females.*
1929-30 ..	3,748	16,593	79,794	100,135	4,019	16,808	30,047	50,874
1930-31 ..	2,543	14,482	65,924	82,949	3,361	14,484	25,222	43,067
1931-32 ..	2,615	14,835	64,168	81,618	4,089	16,238	26,320	46,647
1932-33 ..	3,441	16,847	71,611	91,899	4,643	18,234	29,652	52,529
1933-34 ..	4,247	17,889	78,823	100,959	5,635	19,579	30,161	55,375
1934-35 ..	5,194	20,865	84,851	110,910	6,015	20,187	32,579	58,781
1935-36 ..	6,118	22,567	93,049	121,734	6,002	21,135	34,519	61,656
June 15th, 1937	6,213	24,851	99,501	130,565	5,298	21,296	35,404	61,998
June 15th, 1938	6,017	26,444	104,327	136,788	5,279	22,429	37,208	64,916
June 15th, 1939	6,167	26,303	103,115	135,585	5,005	21,999	37,566	64,570

Percentage—

Year.	To Total Males Employed				To Total Females Employed			
	3.74	16.57	79.69	100.00	7.90	33.04	59.06	100.00
1929-30 ..	3.74	16.57	79.69	100.00	7.90	33.04	59.06	100.00
1930-31 ..	3.07	17.46	79.47	100.00	7.80	33.63	58.57	100.00
1931-32 ..	3.20	18.18	78.62	100.00	8.77	34.81	56.42	100.00
1932-33 ..	3.74	18.34	77.92	100.00	8.84	34.71	56.45	100.00
1933-34 ..	4.20	17.72	78.08	100.00	10.18	35.35	54.47	100.00
1934-35 ..	4.68	18.81	76.51	100.00	10.23	34.34	55.43	100.00
1935-36 ..	5.03	18.54	76.43	100.00	9.73	34.28	55.99	100.00
June 15th, 1937	4.76	19.03	76.21	100.00	8.54	34.35	57.11	100.00
June 15th, 1938	4.40	19.33	76.27	100.00	8.13	34.56	57.31	100.00
June 15th, 1939	4.55	19.40	76.05	100.00	7.75	34.07	58.18	100.00

\* Includes working proprietors—average number over whole year.

Prior to the year 1936-37, the proportions were based on the average numbers employed over the whole year. In 1936-37 the annual questionnaire was altered to ask for the number of employees in each age group on 15th June. The effect is simplified compilation and possibly more precise statistics.

**Machinery in factories.**

In the following tables are shown the number of factories using mechanical power, and the value of the machinery and plant for the ten years, 1929-30 to 1938-39. The value recorded is the depreciated value or book value less any existing depreciation reserve.

VICTORIA—MACHINERY IN FACTORIES.

Year.	Number of Factories equipped with Machinery	Value of Machinery and Plant.	Average Horse-power used.
		£	
1929-30 ..	7,419	35,022,535	359,952
1930-31 ..	7,519	34,771,687	333,066
1931-32 ..	7,617	33,481,615	340,653
1932-33 ..	8,023	33,022,441	364,121
1933-34 ..	8,238	33,270,400	389,186
1934-35 ..	8,445	33,947,056	404,702
1935-36 ..	8,480	34,194,608	441,445
1936-37 ..	8,538	36,213,626	*789,524
1937-38 ..	8,655	36,868,289	*858,216
1938-39 ..	8,761	38,626,743	*862,221

\* "Rated" Horse-power. See following table relating to Horse-power.

The nature of the motive power used in the factories of the State is set out in the next table. Establishments using more than one kind of mechanical power are included once only in the table, usually under the power which is principally used.

### VICTORIA—POWER USED IN FACTORIES.

Year.	Number of Factories using—					
	Steam.	Gas.	Electricity.	Oil.	Water.	Manual Labour.
1928-29 ..	579	278	5,941	493	14	892
1929-30 ..	539	223	6,142	490	25	776
1930-31 ..	502	228	6,279	499	11	680
1931-32 ..	479	213	6,426	493	6	587
1932-33 ..	485	197	6,840	493	8	589
1933-34 ..	491	174	7,074	492	7	658
1934-35 ..	477	180	7,279	499	10	655
1935-36 ..	458	160	7,341	512	9	680
1936-37 ..	402	171	7,465	489	11	627
1937-38 ..	385	146	7,661	455	8	586
1938-39 ..	424	129	7,780	424	4	489

The difficulty of obtaining an accurate measure of average horse-power of engines used in factories has been pointed out in previous issues of this *Year-Book*. In 1937 Australian Statisticians decided to discard the "average" as a measure of horse-power and to substitute the "rated" horse-power of engines (a) ordinarily in use and (b) in reserve or idle.

From the table hereunder, it can be calculated that the total rated horse-power used in Victorian factories other than Electric Generating stations, during 1938-39, excluding, to avoid duplication, the horse-power driven by electricity generated in their own works, was 384,973.

### VICTORIA—HORSE-POWER OF ENGINES IN FACTORIES, 1938-39.

Class of Engine.	Electric Generating Stations. (Maximum Load).	Other Factories. Rated Horse-power	Total.
<b>Steam—</b>			
Reciprocating .. ..	1,235	38,468	39,703
Turbine .. ..	378,069	30,698	408,767
<b>Internal Combustion—</b>			
Gas .. ..	1,432	5,704	7,136
Petrol or other light oils .. ..	45	3,700	3,745
Heavy oils .. ..	8,474	11,200	19,674
Water .. ..	32,590	1,025	33,615
<b>Total .. ..</b>	<b>421,845</b>	<b>90,795</b>	<b>512,640</b>
<b>Electric motors driven by—</b>			
(a) Electricity generated in own works .. ..	19,025	36,378	55,403
(b) Purchased electricity .. ..	..	294,178	294,178

Reserve or idle horse-power capacity amounted to 93,217, exclusive of that in heat, light, and power generating stations.

The total amount and the average amount of salaries and wages paid to persons employed in factories are given in the following table for each of the past ten years.

**VICTORIA—SALARIES AND WAGES PAID IN FACTORIES.**

Year.	Drawings by Working Proprietors (excluding Profits).		Salaries Paid to Managers and Clerks.		Wages Paid to Factory Workers.		Total Salaries and Wages Paid.		
	Males.	Females.	Males.	Females.	Males.	Females.			
<i>Aggregate Amounts.</i>									
	£	£	£	£	£	£	£		
1929-30..	2,032,445	97,250	3,395,311	554,149	19,293,295	5,145,085	30,517,535		
1930-31..	1,819,904	100,294	2,955,747	485,137	14,042,377	3,876,230	23,279,689		
1931-32..	1,705,796	98,758	2,679,923	455,454	12,425,431	3,893,237	21,258,599		
1932-33..	1,774,820	103,421	2,775,190	480,551	13,821,827	4,140,703	23,096,512		
1933-34..	1,858,005	109,489	2,932,119	506,467	15,077,479	4,335,584	24,819,143		
1934-35..	1,918,021	125,780	3,111,666	542,939	16,924,648	4,695,761	27,318,815		
1935-36..	2,008,313	129,366	3,345,721	588,515	19,409,390	5,112,402	30,593,707		
1936-37..	2,070,557	155,452	3,755,443	691,602	21,208,444	5,331,406	33,192,904		
1937-38..	2,126,948	140,684	4,075,295	757,828	24,165,763	5,962,025	37,228,543		
1938-39..	2,139,882	139,461	4,322,645	802,841	24,683,101	6,217,955	38,305,885		
<i>Average Amounts.</i>									
	£	s.	d.	£	s.	d.	£	s.	d.
1929-30..	321	1	8	153	12	8	386	10	8
1930-31..	290	6	1	163	12	3	364	9	2
1931-32..	275	7	11	165	8	6	345	7	11
1932-33..	275	5	0	159	7	1	334	9	7
1933-34..	269	12	7	159	2	10	334	10	6
1934-35..	264	3	1	168	3	1	335	13	5
1935-36..	275	1	6	175	1	1	335	14	11
1936-37..	286	5	4	169	10	7	343	7	5
1937-38..	297	18	8	180	7	3	349	13	10
1938-39..	305	12	3	183	19	8	355	14	3

\* This figure is based on the number of employees and the wages, &c., paid to them, working proprietors being excluded.

The average annual earnings of all employees (excluding working proprietors) increased by £4 19s. 11d. in 1938-39.

The cost of production and the value of the output in each class of manufacturing industry during the year 1938-39 are given in the subjoined statement:—

## VICTORIA—FACTORY COSTS AND OUTPUT, 1938-39.

Class of Industry.	Cost of—				Value of Output.
	Raw Materials Used (including Containers).	Fuel, Light, and Power Used.	Salaries and Wages Paid.	Tools replaced, Repairs to Plant, Oil and Water Used.	
	1.	2.	3.	4.	
	£	£	£	£	£
1. Treatment of non-metalliciferous mine and quarry products ..	1,083,467	219,756	714,649	114,071	2,993,612
2. Bricks, pottery, glass, &c.	368,024	295,210	941,826	101,173	2,294,715
3. Chemicals, dyes, explosives, paint, oils, and grease ..	5,217,105	210,959	1,772,513	225,694	10,115,983
4. Industrial metals, machines, implements, and conveyances ..	13,163,480	551,565	11,335,688	544,520	30,718,898
5. Precious metals, jewellery, and plate ..	435,908	16,123	422,178	11,985	1,010,767
6. Textiles and textile goods (not dress) ..	7,559,039	311,896	3,856,105	328,447	14,523,484
7. Skins and leather (not clothing or footwear) ..	2,244,166	53,365	893,873	51,726	3,721,705
8. Clothing ..	9,040,617	134,525	5,503,404	134,916	17,174,627
9. Food, drink, and tobacco	30,163,844	752,091	5,674,767	583,461	44,109,455
10. Woodworking and basket-ware ..	2,775,347	72,805	1,634,188	80,670	5,320,115
11. Furniture, bedding, &c.	1,600,087	24,874	867,569	18,634	2,924,892
12. Paper, stationery, printing, bookbinding, &c. ..	3,808,688	186,922	2,984,831	145,060	9,070,629
13. Rubber ..	1,881,535	121,699	628,177	101,702	3,677,837
14. Musical instruments ..	5,653	211	19,415	126	30,282
15. Miscellaneous products ..	728,189	26,802	443,100	18,762	1,496,017
16. Heat, light, and power ..	646,531	616,325	613,602	193,787	3,784,593
Total ..	80,721,680	3,595,128	38,305,885	2,654,734	152,967,611

The difference between the sum of the first four columns and the last column in the preceding table represents the amount available for miscellaneous expenses, interest, and profit. The proportions which this margin and the chief items of the cost of production bear to the total value of production in each class of industry are shown in the following table:—

VICTORIA—PROPORTIONATE VALUE OF COSTS, ETC., TO PRODUCTION IN FACTORIES, 1938-39.

Class of Industry.	Percentage of Costs, &c., to Total Value of Output.				
	Materials Used, including Containers.	Fuel, Light, &c.	Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Expenditure, Interest and Profit.
	%	%	%	%	%
1. Treatment of non-ferrous mine and quarry products .. ..	36·2	7·3	23·9	3·8	28·8
2. Bricks, pottery, glass, &c.	16·0	12·9	41·1	4·4	25·6
3. Chemicals, dyes, explosives, paint, oils, and grease .. ..	51·6	2·1	17·5	2·2	26·6
4. Industrial metals, machines, implements, and conveyances .. ..	42·8	1·8	36·9	1·8	16·7
5. Precious metals, jewellery, and plate .. ..	43·2	1·6	41·7	1·2	12·3
6. Textiles and textile goods (not dress) .. ..	52·0	2·1	26·6	2·3	17·0
7. Skins and leather (not clothing or footwear) ..	60·3	1·4	24·0	1·4	12·9
8. Clothing .. ..	52·7	0·8	32·0	0·8	13·7
9. Food, drink, and tobacco	68·4	1·7	12·9	1·3	15·7
10. Woodworking and basketware .. ..	52·2	1·4	30·7	1·5	14·2
11. Furniture, bedding, &c. ..	54·7	0·9	29·7	0·6	14·1
12. Paper, stationery, printing, bookbinding, &c. ..	42·0	2·1	32·9	1·6	21·4
13. Rubber .. ..	51·1	3·3	17·1	2·8	25·7
14. Musical instruments ..	18·7	0·7	64·1	0·4	16·1
15. Miscellaneous products ..	48·7	1·8	29·6	1·2	18·7
16. Heat, light, and power ..	17·1	16·3	16·2	5·1	45·3
Total .. ..	52·8	2·4	25·0	1·7	18·1

There are considerable variations in the proportions which the cost of materials and the expenditure on wages bear to the value of the output in the different classes of industries. These are, of course, due to the difference in the treatment required to convert the raw material to its manufactured form. Thus, in class two, the sum paid in wages represents 41·1 per cent. and the cost of raw materials 16·0 per cent. of the value of the finished article, whilst, in class nine, the expenditure on wages amounts to 12·9 per cent. and that on raw materials to 68·4 per cent. of the value of the output.

In the next table the cost of production, the value of the output of factories, and the balance available for profit and miscellaneous expenses are compared for the years 1929-30 to 1938-39.

VICTORIA—COST OF PRODUCTION AND VALUE OF OUTPUT OF FACTORIES.

Year.	Cost of Production.					Total value of Output.
	Materials. (including containers).	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Expenditure, Interest, and Profit.	
1929-30 ..	£ 66,770,302	£ 3,435,727	£ 30,517,535	£ 1,345,702	£ 20,741,833	£ 122,811,099
1930-31 ..	50,380,110	2,589,475	23,279,689	1,042,242	16,134,279	93,425,795
1931-32 ..	51,727,685	2,443,539	21,258,599	1,397,765	16,561,029	93,388,617
1932-33 ..	56,757,681	2,633,659	23,096,512	1,612,987	17,984,590	102,085,429
1933-34 ..	59,776,270	2,765,971	24,819,143	1,752,424	19,382,502	108,496,310
1934-35 ..	63,387,061	3,011,127	27,318,815	2,022,078	21,443,776	117,182,857
1935-36 ..	74,568,265	3,145,097	30,593,707	2,286,118	23,449,983	134,043,170
1936-37 ..	78,233,032	3,302,178	33,192,904	2,444,701	25,519,377	142,692,192
1937-38 ..	85,926,478	3,627,106	37,228,543	2,607,751	27,660,847	157,050,725
1938-39 ..	80,721,680	3,595,128	38,305,885	2,654,734	27,610,184	152,967,611

These figures are reduced in the succeeding statement to their respective percentages of the total output.

VICTORIA—PROPORTION OF OUTLAY TO OUTPUT OF  
FACTORIES.

Year.	Proportion of Outlay to Output.					Total.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	Other Expenditure Interest, and Profit.	
	%	%	%	%	%	%
1929-30 ..	54·4	2·8	24·8	1·1	16·9	100·0
1930-31 ..	53·9	2·8	24·9	1·1	17·3	100·0
1931-32 ..	55·4	2·6	22·8	1·5	17·7	100·0
1932-33 ..	55·7	2·6	22·5	1·6	17·6	100·0
1933-34 ..	55·1	2·5	22·9	1·6	17·9	100·0
1934-35 ..	54·1	2·6	23·3	1·7	18·3	100·0
1935-36 ..	55·6	2·4	22·8	1·7	17·5	100·0
1936-37 ..	54·8	2·3	23·3	1·7	17·9	100·0
1937-38 ..	54·5	2·3	23·6	1·7	17·9	100·0
1938-39 ..	52·8	2·3	25·1	1·7	18·1	100·0

The ratio of cost of materials to the value of the output of factories was 54·4 per cent. on the average of the last five years, as against 54·9 per cent. in the period 1929-30 to 1933-34. The ratio of salaries and wages to output averaged 23·6 per cent. over both periods. The proportionate outlay on fuel, light, and power was 2·7 per cent. in the earlier and 2·4 per cent. in the later period. After allocating the proportion for repairs to plant and buildings, replacement of tools, and costs of lubricating oil and water, the balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £17 18s. 10d. in every £100 of the total output value in the period 1934-35 to 1938-39, as compared with £17 9s. 7d. in the preceding five-year period.

In 1938-39, wages and salaries (including working proprietors' drawings) took 58·0 per cent. of the value added in manufacturing (see page 510), leaving 42·0 per cent. for the payment of miscellaneous expenses, rent, interest, and profits.

In the following statement the amount of capital invested in machinery, plant, land and buildings used in connexion with the various classes of manufacturing industries is shown for the year 1938-39.

Capital  
invested in  
manufacturing  
plant and  
premises.

**VICTORIA—MACHINERY AND PLANT, LAND AND  
BUILDINGS USED IN MANUFACTURING INDUSTRIES,  
1938-39.**

Class of Industry	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
1. Treatment of non-metalliferous mine and quarry products .. .. .	1,632,442	813,982
2. Bricks, pottery, glass, &c. .. .. .	941,024	736,454
3. Chemicals, dyes, explosives, paint, oils, and grease .. .. .	2,994,053	3,103,873
4. Industrial metals, machines, implements, and conveyances .. .. .	6,527,516	9,683,860
5. Precious metals, jewellery, and plate .. .. .	127,226	343,889
6. Textiles and textile goods (not dress) .. .. .	3,901,301	3,380,469
7. Skins and leather (not clothing or footwear) .. .. .	363,019	956,936
8. Clothing .. .. .	1,269,017	4,502,971
9. Food, drink, and tobacco .. .. .	7,179,642	9,774,451
10. Woodworking and basketware .. .. .	878,796	1,039,245
11. Furniture, bedding, &c. .. .. .	209,423	913,903
12. Paper, stationery, printing, bookbinding, &c. .. .. .	2,796,094	3,446,880
13. Rubber .. .. .	740,698	621,191
14. Musical instruments .. .. .	2,751	25,096
15. Miscellaneous products .. .. .	278,347	452,638
16. Heat, light, and power .. .. .	8,785,394	2,230,407
Total .. .. .	38,626,743	42,026,245

The capital invested in plant, buildings, &c., used in connexion with three classes of industry—food and drink, industrial metals, &c., and heat, light, and power—amounted, in the year under review, to £44,181,270, or more than one-half of the total for all manufacturing industries.

The values of machinery and plant and of land and buildings used in connexion with manufacturing industries are shown in the next table for the years 1929-30 to 1938-39. The value recorded is the depreciated value or the book value less any existing depreciation reserve.

**VICTORIA—MACHINERY AND PLANT, LAND AND  
BUILDINGS USED IN MANUFACTURING INDUSTRIES.**

Year.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
1929-30 .. .. .	35,022,535	36,988,485
1930-31 .. .. .	34,771,687	36,218,384
1931-32 .. .. .	33,481,615	34,868,960
1932-33 .. .. .	33,022,441	34,804,987
1933-34 .. .. .	33,270,400	35,563,879
1934-35 .. .. .	33,947,056	36,644,621
1935-36 .. .. .	34,194,608	37,678,298
1936-37 .. .. .	36,213,626	38,948,268
1937-38 .. .. .	36,868,289	40,339,541
1938-39 .. .. .	38,626,743	42,026,245

It will be seen from these figures that the values of machinery, plant, land and buildings increased by 12·0 per cent. between 1929-30 and 1938-39.

In the appended table the number of accidents in factories is given for the past ten years. The particulars in the table relate to establishments which came within the scope of the Factories Acts in force in the years specified, and not to those classified for statistical purposes in the preceding tables.

### VICTORIA—ACCIDENTS IN FACTORIES.

Year.	Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1929 .. ..	136,025	1,129	·829
1930 .. ..	104,926	890	·848
1931 .. ..	110,692	677	·611
1932 .. ..	125,670	809	·644
1933 .. ..	134,842	956	·709
1934 .. ..	148,155	1,162	·784
1935 .. ..	159,912	1,290	·807
1936 .. ..	170,084	1,513	·889
1937 .. ..	179,650	2,432	1·354
1938 .. ..	184,509	2,374	1·287

**Manufactures—** The foregoing tables do not include particulars relating to work of various kinds done at the Pentridge Penal Department and Blind Institute. Establishment and the Royal Victorian Institute for the Blind. At the former establishment the manufacture of wire netting, clothing, brushware, boots, mats, blankets, flannel, underclothing, and printing are carried on. The estimated value of the output for 1938-39 was £52,779, and, of the materials used, £34,466. The articles produced are used principally by Government Departments. The work carried on by the latter establishment is the manufacture of brushware, brooms, mats and matting, baskets, and millet brooms, and gives employment to 154 persons (136 males and 18 females). The value of the work turned out for the period under review was £48,659.

**Factory Statistics by Municipalities.** Although approximately 70 per cent. of the factories in Victoria are located within the Metropolitan area, some of the municipalities outside Greater Melbourne also have important manufacturing industries.

The following table gives factory statistics for the metropolitan and the more important extra-metropolitan municipalities for the year 1938-39.

VICTORIA—FACTORY STATISTICS BY MUNICIPALITIES, 1938-39.

Municipality.	Number of Factories.	PERSONS EMPLOYED.		Salaries and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Value of Materials Used (including containers).	Value of Articles Produced or Work Done.
		Males.	Females.					
Melbourne .. ..	2,333	29,590	22,661	9,838,461	11,431,758	6,688,604	18,572,668	36,557,010
Brunswick .. ..	342	6,165	5,153	1,823,708	1,418,763	1,139,182	2,705,757	5,751,269
Essendon .. ..	124	666	296	172,716	202,286	103,004	351,109	634,003
Coburg .. ..	90	1,715	1,473	482,827	337,624	312,668	844,848	1,762,106
Preston .. ..	85	1,814	330	459,887	552,327	242,311	787,792	1,472,641
Northcote .. ..	121	1,224	398	308,683	293,912	190,212	497,126	1,016,952
Fitzroy .. ..	334	5,380	3,861	1,613,274	1,404,966	874,309	2,900,248	5,460,926
Collingwood .. ..	395	9,709	7,699	2,938,125	2,535,099	2,146,391	5,304,270	10,037,439
Kew .. ..	44	122	61	33,906	67,658	24,476	51,228	102,126
Camberwell .. ..	108	477	345	135,101	159,452	70,124	202,697	429,607
Hawthorn .. ..	166	1,025	740	292,450	396,667	188,043	402,643	895,094
Richmond .. ..	340	9,571	5,062	2,670,889	2,605,330	2,025,833	4,836,825	9,798,686
Prahran .. ..	322	3,013	2,491	944,921	969,765	398,139	2,406,473	4,365,983
Malvern .. ..	145	596	216	149,322	198,136	59,341	214,211	410,457
Caulfield .. ..	148	638	210	148,983	183,554	57,070	213,522	433,777
Oakleigh .. ..	29	471	6	99,915	111,680	139,555	180,516	392,909
Sandringham .. ..	41	229	274	76,456	90,617	22,252	113,345	238,106
Brighton .. ..	87	606	403	167,884	190,355	253,073	240,704	543,728
St. Kilda .. ..	134	965	439	270,903	237,461	95,348	372,714	805,484
South Melbourne .. ..	461	12,562	3,430	3,355,356	2,991,666	2,082,367	6,181,403	12,616,371
Port Melbourne .. ..	92	3,160	557	784,819	905,467	891,609	1,663,003	3,398,901
Footscray .. ..	229	9,431	1,862	2,320,892	2,573,265	3,296,092	7,805,427	12,660,433
Williamstown .. ..	74	5,834	274	1,424,603	1,852,142	2,339,701	1,890,797	4,308,447
Braybrook .. ..	57	4,985	795	1,260,492	1,382,315	1,222,183	2,117,972	4,315,309
Heidelberg .. ..	56	705	194	198,441	292,677	377,136	592,735	1,146,905
Box Hill .. ..	44	362	54	86,274	92,146	114,051	138,585	273,025
Moorabbin .. ..	35	280	180	66,820	82,044	77,516	116,846	237,472
Mordialloc .. ..	19	73	18	16,096	22,987	30,420	28,770	56,036
Chelsea .. ..	12	77	5	13,039	17,404	5,633	21,030	41,282
Total Metropolitan .. ..	6,467	111,445	59,487	32,155,243	33,599,523	25,466,643	61,755,264	120,162,484

VICTORIA—FACTORY STATISTICS BY MUNICIPALITIES, 1938-39—continued.

Municipality.	Number of Factories.	PERSONS EMPLOYED.		Salaries and Wages Paid.	Value of Land and Buildings.	Value of Plant and Machinery.	Value of Materials Used (including containers)	Value of Articles Produced or Work Done.
		Males.	Females.					
Werribee .. .. .	22	155	12	£ 41,593	£ 123,034	£ 149,564	£ 613,820	£ 915,514
Blackburn and Mitcham .. .. .	30	515	79	109,902	86,758	93,292	53,354	274,431
Dandenong .. .. .	32	727	57	168,090	134,812	154,862	453,061	740,486
*Geelong .. .. .	247	5,320	1,957	1,426,929	2,232,364	2,640,838	2,766,254	6,070,319
Korumburra .. .. .	24	120	12	28,590	42,541	33,987	488,376	543,984
Castlemaine .. .. .	24	643	143	163,585	65,546	164,154	195,968	432,534
Maryborough .. .. .	30	282	303	93,802	40,339	68,582	209,066	341,436
†Ballarat (including Sebastopol)	214	2,304	1,199	629,872	664,825	633,083	1,099,976	2,154,504
Colac .. .. .	61	400	42	95,442	123,162	96,888	607,221	767,391
Hampden .. .. .	34	322	27	84,179	91,087	93,175	592,486	776,563
†Warrnambool .. .. .	59	878	317	230,743	452,122	489,975	1,084,759	1,531,552
Hamilton .. .. .	42	227	27	51,158	49,162	57,326	202,255	307,658
Horsham .. .. .	41	214	18	49,679	97,926	74,918	154,192	235,333
†Stawell .. .. .	40	295	123	65,668	45,873	74,196	149,861	266,775
Dimboola .. .. .	31	98	4	20,480	25,609	43,733	52,007	87,535
†Mildura .. .. .	95	916	213	219,280	231,746	247,275	222,848	578,282
Swan Hill .. .. .	50	261	25	53,443	70,635	81,460	112,685	208,584
Bendigo (including Eaglehawk)	156	908	504	243,119	228,990	192,230	618,954	1,021,662
Echuca .. .. .	34	176	10	38,707	43,829	29,006	169,715	234,589
Rodney .. .. .	36	288	180	91,010	145,619	117,442	562,597	718,288
†Shepparton .. .. .	50	425	137	129,272	213,837	112,018	655,937	945,102
Benalla .. .. .	28	146	10	32,356	31,879	25,138	118,213	167,535
†Wangaratta .. .. .	43	240	126	65,223	76,159	75,639	261,805	383,074
Bairnsdale .. .. .	36	185	17	41,013	40,054	31,813	129,165	192,309
Morwell .. .. .	23	1,005	11	268,654	1,012,940	4,450,594	209,434	2,205,464
Other Municipalities .. .. .	1,301	7,723	573	1,708,853	2,055,874	2,928,912	7,182,407	10,698,223
Total Country .. .. .	2,783	24,773	6,126	6,150,642	8,426,722	13,160,100	18,966,416	32,805,127
Total State .. .. .	9,250	136,218	65,613	38,305,885	42,026,245	38,626,743	80,721,680	152,967,611

\* Includes Corio, Geelong West, and Newtown and Chilwell.

† Includes Shire of same name.

Production.

### VALUE OF VICTORIAN PRODUCTION.

The value of production as estimated hereunder is based to a large extent on returns received annually from individual producers throughout the State. As a measure of total production it is incomplete, as it does not include the building and construction industry, it omits small manufacturers with factories employing less than four hands (unless power-driven machinery is used) and excludes agriculturists with holdings of less than 1 acre.

Gross value is defined as the value placed on recorded production at the wholesale price realized in the principal markets. In cases where primary products are absorbed locally, or where they become raw material for secondary industry, these points are presumed to be the principal markets. Care is taken to prevent as far as possible all overlapping or double counting. The primary value of dairy production, in accordance with the above definition, is the price paid at the factory for milk or cream sold by the farmer; the value added by the process of manufacture into butter, &c., is included in manufacturing production.

### VICTORIA—GROSS VALUE OF PRODUCTION.

Division of Industry.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Agriculture .. ..	15,793,092	10,079,008	24,038,124	24,106,207	14,378,841
Pastoral .. ..	14,969,013	19,484,164	21,948,704	21,147,151	17,936,267
Dairying .. ..	9,368,531	11,276,604	13,018,154	12,989,517	12,682,076
Poultry and Bees ..	3,613,119	3,697,004	4,128,136	4,866,129	4,854,076
Trapping .. ..	581,647	890,078	953,046	922,930	615,217
Forestry .. ..	901,099	908,579	1,121,312	1,231,322	1,241,143
Fisheries .. ..	169,182	197,009	214,212	220,682	229,906
Mining .. ..	1,580,867	2,106,334	2,448,262	2,558,880	2,624,276
Manufacturing* ..	48,762,591	54,043,690	58,712,281	64,889,390	65,996,069
Total .. ..	95,739,141	111,782,470	126,582,231	132,932,208	120,557,871

\* Manufacturing is included at its net or added value because the gross or wholesale selling value contains so much duplication of products, the finished article of one class of manufacture forming in numerous cases the raw material for others.

The ultimate aim of the valuation of production is to arrive at the sum available for distribution among those concerned in each class of industry, i.e.—

- (a) Workers in all grades of the industry.
- (b) Proprietors (including landlords) of any of the instruments of production concerned.
- (c) Providers of capital, including debenture holders and mortgagees.

It is, therefore, necessary to deduct from the gross values of realization all costs of marketing and production, the former including freight, cartage, brokerage, commission, insurance, and containers, and the latter such items as stock feed, seed costs, manures, spraying, animal dips, fuel, power, water, all other materials consumed in the process of production, and depreciation. Complete details of these costs are not yet available for the forestry and fishing industries in Victoria, but the following table gives the value of production in detail after deduction of marketing costs, and may be considered to represent with a fair degree of accuracy the value of Victorian production at the place of production.

## VICTORIA—VALUE AT THE PLACE OF PRODUCTION.

Industry and Produce.	Value in—				
	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
<b>Agricultural.</b>					
	£	£	£	£	£
Barley .. .. .	184,545	259,568	393,249	421,823	224,145
Maize .. .. .	131,945	137,684	189,679	165,572	91,506
Oats .. .. .	468,622	544,655	672,456	743,829	432,100
Wheat .. .. .	4,119,773*	6,560,446*	10,161,533	7,859,971	2,241,991*
Onions .. .. .	191,540	167,063	223,446	118,524	174,269
Potatoes .. .. .	670,872	578,870	489,632	638,268	846,649
Hay and Straw .. .. .	3,180,923	3,007,610	3,749,928	5,043,540	3,405,579
<b>Fruit—</b>					
Orchards .. .. .	1,007,729	1,188,958	1,285,249	1,387,257	1,360,070
Vineyards .. .. .	1,196,262	1,464,927	1,670,006	1,916,952	1,474,893
Other Crops .. .. .	1,869,541	1,953,306	1,985,626	1,981,038	1,774,865
Total .. .. .	13,021,752	15,863,037	20,820,804	20,276,774	12,026,067
<b>Pastoral.</b>					
Wool .. .. .	5,519,469	8,991,206	10,618,871	8,922,596	6,677,765
Sheep Slaughtered .. .. .	4,700,644	4,613,721	5,451,803	5,442,794	5,172,214
Cattle Slaughtered .. .. .	3,402,232	4,392,228	4,235,861	5,169,535	4,442,251
Horses .. .. .	66,764	47,180	..	8,708	44,596
Total .. .. .	13,689,109	18,044,335	20,306,535	19,543,633	16,336,826
<b>Dairying.</b>					
Cream for Butter .. .. .	5,317,537	6,433,169	6,882,750	7,340,263	6,831,850
Milk for Cheese .. .. .	201,991	253,857	319,157	461,248	549,147
Milk for Condensing, Con- centrating, &c. .. .. .	387,682	471,853	682,889	941,233	823,611
Whole Milk consumed .. .. .	1,860,126	1,975,344	2,130,446	2,205,338	2,662,557
Pigs .. .. .	1,154,966	1,781,393	2,399,681	1,487,321	1,329,009
Total .. .. .	8,922,302	10,915,616	12,414,923	12,435,403	12,196,174
<b>Poultry and Bees.</b>					
Eggs .. .. .	2,626,542	2,612,853	3,037,782	3,654,860	3,631,000
Poultry .. .. .	668,857	717,767	728,532	714,303	831,999
Honey and Beeswax .. .. .	39,540	77,505	45,360	59,930	23,448
Total .. .. .	3,334,939	3,408,125	3,811,674	4,429,093	4,486,447
<b>Trapping, etc.</b>					
Rabbits and Hares .. .. .	230,202	161,397	140,710	214,094	227,999
Rabbit and Hare Skins, &c. .. .. .	250,621	643,532	741,751	635,321	315,683
Total .. .. .	480,823	807,935	882,461	849,415	543,682
<b>Forestry.</b>					
Forest Sawmills .. .. .	99,190	101,707	343,625	426,881	414,978
Firewood .. .. .	486,980	529,043	489,996	533,282	583,584
Bark for tanning .. .. .	78,630	81,459	69,486	69,011	69,170
Total .. .. .	664,800	692,209	903,107	1,029,174	1,067,732
<b>Fisheries.</b>					
Fish .. .. .	131,103	136,464	153,349	159,251	170,746
Crayfish .. .. .	9,446	10,468	8,647	8,834	6,114
Oysters .. .. .	..	14	3	10	59
Total .. .. .	140,549	146,946	161,999	168,095	176,919

\* Inclusive of wheat bounties.

VALUE AT THE PLACE OF PRODUCTION—*continued.*

Produce.	Value in—				
	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
<b>Mining.</b>					
Gold .. .. .	594,115	764,751	1,013,770	1,260,432	1,267,341
Coal—					
Black .. .. .	215,413	282,255	253,835	171,369	188,101
Brown .. .. .	264,192	249,476	323,914	325,950	351,721
Other Metals and Minerals .. .. .	11,421	89,204	93,410	153,517	156,982
Quarrying .. .. .	374,454	407,965	462,359	408,838	414,311
<b>Total .. .. .</b>	<b>1,459,595</b>	<b>1,793,649</b>	<b>2,147,288</b>	<b>2,315,106</b>	<b>2,378,456</b>
<b>Total Primary .. .. .</b>	<b>41,713,869</b>	<b>51,671,902</b>	<b>61,502,791</b>	<b>61,046,693</b>	<b>49,212,303</b>
<b>Manufacturing .. .. .</b>	<b>48,762,591</b>	<b>54,043,690</b>	<b>58,712,281</b>	<b>64,889,390</b>	<b>65,996,069</b>
<b>Grand Total .. .. .</b>	<b>90,476,460</b>	<b>105,715,592</b>	<b>120,215,072</b>	<b>125,936,083</b>	<b>115,208,372</b>

The values of production of the various classes of industry, as they appear in the previous table for the year 1938-39, are shown hereunder, together with the costs of production where available. The difference between the two figures represents the net value of production or the net return available to the producers for wages, rent, interest and profits. As previously explained, the deductions are incomplete, and depreciation (see below) has been here disregarded, but the margin of error is considered to be small in view of the comparative unimportance of the industries concerned from the point of view of production costs.

## VICTORIA—COSTS OF PRODUCTION, 1938-39.

Industry.	Value at Place of Production.	Cost of Production.†	Net Value.	Net Value per Head of Population.
	£	£	£	£ s. d.
Agriculture .. .. .	12,026,067	6,408,406	5,617,661	2 19 11
Pastoral .. .. .	16,336,826	1,180,550	15,156,276	8 1 8
Dairying .. .. .	12,196,174	2,237,700	9,958,474	5 6 3
Poultry and Bees .. .. .	4,486,447	1,350,390	3,136,057	1 13 6
Miscellaneous .. .. .	1,788,333	* 92,450	1,695,883	0 18 1
Mining .. .. .	2,378,456	635,841	1,742,615	0 18 7
Manufacturing .. .. .	65,996,069	..	65,996,069	35 3 11
<b>Total .. .. .</b>	<b>115,208,372</b>	<b>11,905,337</b>	<b>103,303,035</b>	<b>55 1 11</b>

\* Incomplete.

† Costs of production include stockfeed, seed costs and pickling, manures, spraying, sheep and cattle dips, power, fuel, water, and all other materials used in production.

**Depreciation.** While depreciation of assets used must be considered as a legitimate charge against the value of production, the problem of exact measurement presents much difficulty. Depreciation may generally be considered as proportionate to the life of the asset, but this cannot always be accurately measured, particularly with machinery where obsolescence might be suddenly accentuated by new invention. Care and expertness in handling and proper repairing must influence the effective life of machinery, while managerial policy and methods of determining depreciation affect annual amounts actually written off.

In these circumstances there is no certainty that depreciation will vary in direct proportion to annual production as in the case of other production costs, but it is considered that some attempt at measurement of the annual amount chargeable against production should be made.

The table hereunder shows details of the fixed capital invested in certain of Victorian industries and the estimated depreciation thereon for the year 1938-39 :—

VICTORIA—DEPRECIATION, 1938-39.

Industry	Capital Value.	Depreciation.	Per Cent.
	£	£	%
Agriculture—Machinery and implements ..	8,750,000	875,000	10
Pastoral machinery and implements ..	860,000	43,000	5
Dairying machinery .. ..	480,000	24,000	5
Agriculture, dairying and pastoral—buildings and fences .. ..	41,000,000	1,640,000	4
Manufacturing—Land, buildings, plant and machinery .. ..	78,136,960	3,040,155	3·9

The estimated percentages of depreciation on agricultural, pastoral, and dairying machinery and on the value of buildings and fences in those industries have been arbitrarily fixed by Australian Statisticians in the interests of uniformity. The amount of depreciation on factory buildings, &c., is the total written off as shown by the returns rendered by manufacturers.

**Employment in factories.** Every factory in Victoria submits an annual statement showing the number of persons employed on the 15th day of each month, and from this data an index of employment is constructed.

Supplementary to this annual collection, 105 large factories send to the Government Statist monthly returns which are used for the purpose of estimating the current movement in the employment index until the annual returns covering the whole field come to hand. Although the sample is small it has proved to fluctuate closely with the total annual figures.

The following table shows the monthly index calculated from the figures above-mentioned; the index from July, 1939, is obtained from the sample of 105 factories and is shown on the graph on page 553 by double lines.

### INDEX OF FACTORY EMPLOYMENT.

(Base—July, 1933, 136,793 = 1,000.)

Month.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
July ..	1,000	1,115	1,202	1,272	1,352	1,393	1,366
August ..	1,018	1,132	1,220	1,289	1,367	1,396	1,372
September ..	1,050	1,150	1,254	1,312	1,387	1,409	1,380
October ..	1,075	1,192	1,282	1,342	1,414	1,430	1,432
November ..	1,104	1,205	1,303	1,350	1,426	1,437	1,458
December ..	1,102	1,193	1,295	1,337	1,425	1,425	1,447
January ..	1,055	1,150	1,261	1,291	1,378	1,372	1,470
February ..	1,108	1,196	1,313	1,371	1,447	1,428	1,504
March ..	1,144	1,217	1,343	1,383	1,472	1,446	1,513
April ..	1,124	1,209	1,311	1,393	1,458	1,433	..
May ..	1,128	1,202	1,310	1,368	1,436	1,428	..
June ..	1,118	1,191	1,286	1,349	1,416	1,406	..

### Employment in Retail Trade.

The volume of employment in retail trade is a valuable indicator of economic conditions. Since July, 1933, monthly returns showing the numbers of employees on the payrolls of 102 large retail stores in Victoria have been collected by the Government Statist, but have not previously been published. It would appear, however, that despite the limitation of the size of the sample the statistics reflect the trend of retail employment. The fluctuations over the period 1933 to 1940 have regular periodic movements and the general trend closely approximates to that shown by factory employment.

The following table shows the monthly index calculated from the figures above-mentioned which are plotted on the graph which follows:—

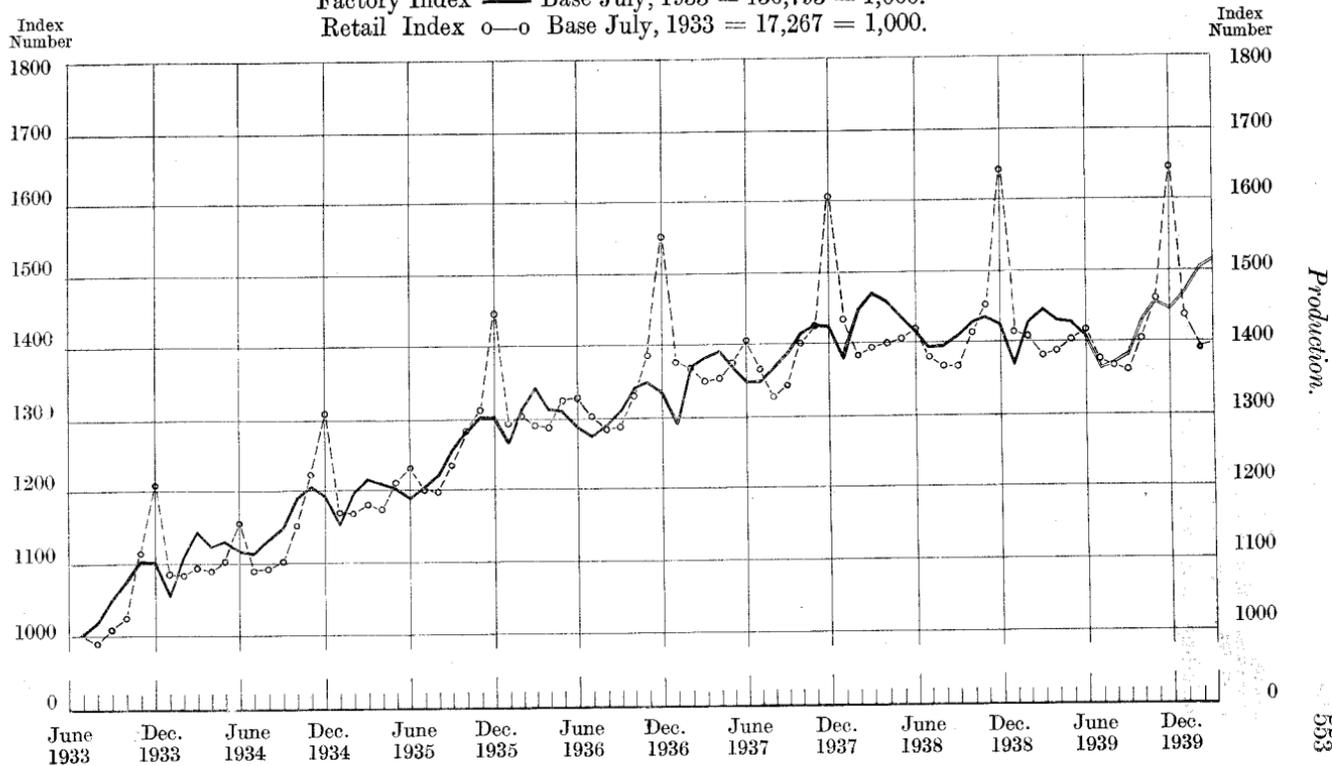
### INDEX OF RETAIL EMPLOYMENT.

(Base—July, 1933, 17,267 = 1,000.)

Month.	1933-34.	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.	1939-40.
July ..	1,000	1,089	1,202	1,301	1,366	1,381	1,378
August ..	990	1,092	1,197	1,282	1,327	1,367	1,367
September ..	1,010	1,102	1,231	1,286	1,344	1,368	1,362
October ..	1,024	1,153	1,281	1,332	1,400	1,415	1,404
November ..	1,113	1,221	1,309	1,384	1,428	1,456	1,461
December ..	1,208	1,308	1,445	1,548	1,606	1,643	1,646
January ..	1,085	1,167	1,287	1,377	1,436	1,414	1,439
February ..	1,082	1,167	1,302	1,368	1,386	1,410	1,393
March ..	1,092	1,180	1,290	1,350	1,395	1,382	1,397
April ..	1,088	1,173	1,286	1,355	1,399	1,390	..
May ..	1,101	1,207	1,322	1,373	1,406	1,401	..
June ..	1,155	1,227	1,327	1,404	1,420	1,418	..

MONTHLY INDEX OF FACTORY AND RETAIL EMPLOYMENT IN VICTORIA: JULY, 1933,  
TO MARCH, 1939.

Factory Index — Base July, 1933 = 136,793 = 1,000.  
Retail Index o—o Base July, 1933 = 17,267 = 1,000.



Production.

Statistics furnished by manufacturers include information relating to the number of employees on factory pay-rolls on the pay day nearest the 15th day of each month, including managers, clerks, engine-drivers, operatives, carters, and

## VICTORIA—MONTHLY EMPLOYMENT

Industry.	Average Number			
	July.	August.	September.	October.
Aerated waters .. .. .	464	486	512	593
Agricultural implements .. .. .	4,429	4,445	4,566	4,386
Art metal .. .. .	294	288	301	300
Artificial flowers .. .. .	260	258	254	247
Bacon curing .. .. .	522	528	525	521
Bags and sacks .. .. .	240	234	231	232
Bags, trunks, &c. .. .. .	869	870	887	890
Bakeries .. .. .	2,710	2,745	2,730	2,719
Basketware .. .. .	159	161	155	151
Bedding and mattress .. .. .	702	679	676	667
Biscuits .. .. .	1,097	1,143	1,113	1,054
Boiling down, tallow, &c. .. .. .	324	326	326	376
Boot accessories .. .. .	757	781	798	794
Boot repairing .. .. .	250	250	250	248
Boots and shoes .. .. .	9,627	9,869	10,054	10,106
Boxes and cases .. .. .	709	721	724	730
Brass and copper .. .. .	1,837	1,844	1,845	1,859
Breweries .. .. .	1,432	1,438	1,448	1,508
Bricks, tiles, firebricks .. .. .	2,028	2,055	2,058	2,059
Brooms and brushware .. .. .	416	418	418	411
Butter and cheese .. .. .	2,613	2,690	3,079	3,295
Buttons .. .. .	120	118	121	123
Cabinet, furniture .. .. .	3,101	3,119	3,147	3,160
Celluloid and similar compositions .. .. .	356	341	343	333
Cement and cement goods .. .. .	1,275	1,243	1,283	1,317
Cereal foods .. .. .	889	889	906	888
Chaffcutting .. .. .	385	334	338	328
Chemical fertilizers .. .. .	1,015	1,025	1,033	986
Chemicals, drugs .. .. .	1,777	1,817	1,821	1,840
Condiments, coffee .. .. .	1,165	1,113	1,158	1,138
Confectionery .. .. .	3,033	3,043	2,985	2,808
Cooperage .. .. .	251	253	256	254
Corsets, stays .. .. .	1,193	1,203	1,201	1,214
Cotton .. .. .	1,865	1,870	1,839	1,850
Cutlery and small tools .. .. .	696	689	655	632
Cycle and motor accessories .. .. .	1,259	1,229	1,195	1,158
Die sinking and engraving .. .. .	149	150	148	154
Distilleries .. .. .	113	114	88	91
Dressmaking .. .. .	7,438	7,787	8,077	8,209
Dried fruit .. .. .	608	559	472	475
Dyeworks and cleaning .. .. .	1,078	1,083	1,121	1,203
Earthenware, china, &c. .. .. .	1,127	1,122	1,131	1,143
Electric light—Government .. .. .	961	990	983	1,014
"    Local authority .. .. .	263	261	260	266
"    Companies .. .. .	80	80	80	80
Electrical apparatus .. .. .	3,268	3,196	3,182	3,158
Electrotyping and stereotyping .. .. .	93	96	97	98

messengers and all others engaged in work connected with manufacturing.

This information has been tabulated, and the monthly totals for each industry are set out in the following table :—

IN FACTORIES, 1938-39.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June
632	730	743	747	642	566	511	470
4,032	3,691	3,667	3,646	3,663	3,555	3,538	3,485
299	302	302	305	306	305	313	312
249	265	179	290	285	208	312	310
522	533	523	518	503	508	512	507
222	217	216	248	236	235	249	246
929	923	860	904	892	876	886	900
2,715	2,746	2,726	2,734	2,758	2,772	2,755	2,773
150	155	150	148	146	110	132	138
685	707	694	728	742	741	732	713
1,127	1,203	1,034	1,142	1,122	1,084	1,172	1,096
404	390	392	369	330	329	319	313
795	722	681	749	755	747	758	760
249	248	249	251	252	250	249	250
9,931	8,760	7,898	9,125	9,599	9,407	9,621	9,524
732	749	728	724	733	711	710	666
1,858	1,892	1,881	1,886	1,912	1,907	1,938	1,905
1,531	1,541	1,533	1,550	1,540	1,553	1,550	1,547
2,037	2,069	2,061	2,088	2,082	2,154	2,168	2,147
414	416	420	426	428	437	440	436
3,371	3,254	3,025	2,765	2,641	2,616	2,615	2,680
117	119	129	135	137	134	131	122
3,208	3,255	3,037	3,115	3,123	3,100	3,105	3,053
291	304	306	294	291	283	297	296
1,449	1,432	1,414	1,428	1,342	1,190	1,325	1,352
892	918	902	903	898	963	1,001	966
334	351	397	397	367	333	330	306
983	946	965	1,032	1,470	1,351	1,114	993
1,861	1,847	1,744	1,753	1,743	1,738	1,748	1,733
1,157	1,164	1,037	1,079	1,046	1,104	1,158	1,134
2,719	2,603	2,414	2,492	2,574	2,757	3,008	2,931
255	247	237	249	255	254	258	260
1,227	1,225	1,228	1,255	1,267	1,285	1,290	1,277
1,806	1,835	1,821	1,843	1,873	1,868	1,893	1,904
631	628	626	540	539	506	519	519
1,182	1,254	1,280	1,342	1,294	1,282	1,268	1,220
150	154	149	158	158	156	172	180
81	80	79	72	79	89	105	80
8,175	8,010	7,134	8,077	8,325	8,051	7,865	7,440
482	462	490	563	1,056	1,576	1,413	1,158
1,242	1,235	1,263	1,285	1,278	1,283	1,264	1,217
1,145	1,152	1,108	1,106	1,096	1,068	1,078	1,086
977	981	1,055	1,109	1,081	1,074	1,070	1,070
257	258	253	252	256	260	259	260
80	81	81	82	82	81	81	81
3,123	3,131	3,104	3,135	3,147	3,142	3,167	3,156
95	96	95	96	94	94	95	94

## VICTORIA—MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Engineering (not marine or electrical) ..	9,416	9,307	9,395	9,461
Explosives .. .. .	2,165	2,198	2,202	2,174
Extracting and refining—other metals ..	52	53	54	55
Fellmongery .. .. .	272	247	243	492
Furnishing, drapery .. .. .	501	498	513	523
Furriers .. .. .	695	731	711	735
Galvanized iron working .. .. .	2,791	2,856	2,917	3,014
Gas fittings and meters .. .. .	212	212	210	211
Gasworks—Local authorities .. .. .	76	75	74	74
"    Companies .. .. .	723	730	723	726
Glass (including bottles) .. .. .	1,271	1,294	1,248	1,266
Gold, silver, and electroplating .. .. .	1,122	1,105	1,090	1,096
Grain milling .. .. .	1,095	1,094	1,096	1,055
Handkerchiefs, ties, &c. .. .. .	485	495	500	509
Hats and caps .. .. .	1,468	1,529	1,494	1,477
Horse-drawn vehicles .. .. .	258	257	259	264
Hosiery and knitting .. .. .	12,169	12,176	12,255	12,391
Ice, refrigerating .. .. .	1,370	1,480	1,535	3,001
Ice cream .. .. .	114	134	210	279
Inks, polishes, &c. .. .. .	360	365	370	370
Jams and fruit preserving .. .. .	1,628	1,639	1,717	2,021
Jewellery .. .. .	553	562	562	555
Joinery .. .. .	1,469	1,508	1,549	1,534
Lime, plaster, and asphalt .. .. .	1,005	1,023	1,015	1,026
Machine belting .. .. .	65	65	65	64
Malting .. .. .	371	372	374	369
Margarine .. .. .	95	97	101	98
Marble, slate, &c. .. .. .	359	365	376	372
Matches .. .. .	762	752	735	725
Meat and fish preserving .. .. .	222	231	221	225
Millinery .. .. .	1,280	1,340	1,332	1,335
Modelling .. .. .	23	22	22	22
Motor body building .. .. .	3,131	2,986	2,933	2,911
Motor construction and assembly .. .. .	1,783	1,745	1,793	1,804
Motor repairs .. .. .	4,510	4,501	4,484	4,516
Musical instruments .. .. .	79	78	79	79
Newspapers .. .. .	2,483	2,443	2,489	2,497
Oils, mineral .. .. .	161	159	158	158
Oils, vegetable .. .. .	118	106	103	92
Paper, paper bags, and boxes .. .. .	2,700	2,705	2,536	2,571
Perambulators .. .. .	126	129	135	137
Photo engraving .. .. .	362	362	366	369
Pickles and sauces .. .. .	315	295	337	303
Picture frames .. .. .	41	45	45	42
Printing and bookbinding .. .. .	6,194	6,230	6,280	6,311
Rope and cordage .. .. .	1,104	1,091	1,077	1,060
Rubber tires, &c. .. .. .	2,320	2,288	2,288	2,252
Rubber goods (other) .. .. .	513	530	535	539
Saddlery, harness .. .. .	65	62	63	61
Salt refining .. .. .	113	111	116	116
Sausage Skins .. .. .	255	253	244	366
Sawmills—forest .. .. .	1,687	1,753	1,774	1,779

FACTORIES, 1938-39—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
9,366	9,314	9,278	9,219	9,215	9,107	9,144	9,179
2,263	2,336	2,440	2,854	3,145	3,361	3,704	3,766
58	57	56	55	60	57	59	59
581	578	386	310	280	249	270	256
511	498	476	479	481	473	465	485
746	744	723	783	804	808	809	745
3,039	3,114	3,024	2,971	2,972	2,853	2,836	2,766
210	210	212	212	212	213	216	216
74	77	76	77	76	76	76	75
737	762	772	762	770	776	780	773
1,257	1,270	1,143	1,120	1,248	1,303	1,310	1,287
1,094	1,097	1,006	1,065	1,096	1,102	1,173	1,139
935	1,014	1,220	1,153	1,128	1,103	1,075	1,001
490	456	386	454	460	452	467	456
1,488	1,458	1,405	1,468	1,536	1,521	1,498	1,479
265	270	275	272	267	262	260	264
12,494	12,424	12,141	12,340	12,266	12,137	12,153	12,139
3,775	3,481	2,960	2,427	1,840	1,707	1,541	1,587
323	340	363	348	224	173	121	119
372	380	368	381	389	389	388	378
1,939	2,065	2,088	4,600	5,358	4,461	1,981	1,725
565	563	502	545	548	534	507	509
1,559	1,545	1,490	1,538	1,548	1,517	1,580	1,570
1,026	1,015	1,003	997	1,014	1,099	1,067	1,052
63	64	62	62	62	62	63	63
383	372	312	305	272	299	376	368
107	103	105	106	108	97	99	97
375	376	362	366	369	370	356	337
718	676	705	663	661	661	685	680
248	296	303	299	273	282	286	283
1,286	1,132	1,100	1,269	1,287	1,248	1,097	1,046
21	21	20	20	19	17	17	16
2,852	3,087	3,240	3,171	3,317	3,398	3,576	3,402
1,750	1,774	1,781	1,920	1,978	2,098	1,977	1,810
4,499	4,527	4,584	4,596	4,581	4,563	4,558	4,565
78	79	77	76	81	79	80	81
2,446	2,468	2,424	2,446	2,418	2,413	2,423	2,408
165	160	158	159	159	159	154	155
80	72	69	77	97	107	137	138
2,568	2,644	2,542	2,536	2,561	2,654	2,608	2,659
139	141	136	134	128	128	127	121
367	369	365	379	378	374	376	379
286	277	296	341	365	349	301	296
41	42	39	41	39	37	39	36
6,361	6,261	6,145	6,175	6,197	6,202	6,220	6,218
1,050	1,069	1,048	1,076	1,114	1,111	1,142	1,163
2,267	2,259	2,246	2,271	2,302	2,351	2,344	2,330
578	608	594	596	629	612	627	594
60	61	58	59	62	75	74	72
131	149	159	162	135	119	116	110
417	398	365	321	266	269	269	254
1,842	1,772	1,367	1,309	1,403	1,363	1,531	1,541

## VICTORIA—MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Sawmills—town .. ..	1,770	1,802	1,802	1,831
Ship and boat building .. ..	529	452	477	530
Shirts, collars, &c. .. ..	4,601	4,606	4,662	4,690
Silk, natural and artificial .. ..	499	468	483	505
Smelting, iron rolling .. ..	4,437	4,374	4,283	4,266
Soap and candle .. ..	734	718	718	713
Stationery .. ..	974	980	999	989
Stoves and ovens .. ..	1,099	1,093	1,099	1,101
Surgical instruments .. ..	270	271	268	261
Tailoring .. ..	7,736	7,842	7,985	7,974
Tanning and leather dressing .. ..	2,189	2,197	2,183	2,163
Tents and sailmaking .. ..	196	197	210	210
Tobacco and cigarettes .. ..	2,184	2,206	2,262	2,292
Toys, games, &c. .. ..	764	771	819	811
Tram and railway workshops .. ..	6,016	5,995	5,934	5,887
Umbrellas .. ..	52	50	46	43
Watches and clocks .. ..	513	538	551	554
Waterproof clothing .. ..	320	311	334	337
White lead, paint, &c. .. ..	334	325	322	330
Window blinds, &c. .. ..	84	86	88	90
Wireless apparatus .. ..	1,185	911	1,013	919
Wireworking .. ..	1,067	1,079	1,067	1,067
Wood turning .. ..	442	426	419	435
Woolen mills .. ..	9,568	9,526	9,541	9,602
Other factories .. ..	5,210	5,171	5,331	5,457
All Industries .. .. Total	190,577	191,032	192,769	195,605

## BUILDING STATISTICS, 1938-39.

In view of the great importance of statistics of building and construction, their collection was undertaken in Victoria in 1929.

The particulars given below for the year 1938-39 were obtained from returns furnished by 953 builders.

The absence of any system of registration of builders makes it difficult to ensure that a return is obtained from every builder in the State. It is suspected that a number of builders do not render returns. The statistics presented hereunder cannot, therefore, be considered as an absolute measure of the value of the work done but merely as an indication of the trend of building operations. The figures, however, do provide valuable information relating to the division of the expenditure amongst the various trades engaged in and those dependent upon the industry, and also supply important data not otherwise available relating to the contribution of the building trade to the national income.

The value of building work done in each of the past five years, according to the returns received, was as follows :—

**FACTORIES, 1938-39—continued.**

of Employees in—

November.	December	January.	February.	March.	April.	May.	June.
1,848	1,830	1,731	1,787	1,803	1,763	1,789	1,805
460	408	359	338	376	432	440	376
4,677	4,547	3,631	4,441	4,453	4,373	4,424	4,431
529	529	519	517	540	541	569	565
4,256	4,244	4,182	4,197	4,116	3,966	4,040	4,035
718	708	647	691	684	684	707	703
997	1,009	979	987	992	960	945	944
1,112	1,114	1,104	1,127	1,158	1,167	1,198	1,182
266	270	263	263	272	271	276	274
7,981	7,974	7,496	7,821	7,916	7,851	7,825	7,701
2,183	2,071	2,042	2,210	2,223	2,218	2,214	2,237
220	220	211	210	205	204	207	208
2,305	2,302	2,154	2,205	2,203	2,183	2,179	2,148
833	791	718	699	686	686	696	696
5,884	5,907	5,565	5,708	5,795	5,586	5,755	5,691
44	46	44	48	48	51	53	48
529	500	453	432	384	398	406	402
349	359	351	354	364	367	387	380
331	330	338	339	337	333	331	335
91	90	87	87	86	85	85	84
993	1,082	1,065	1,116	1,053	1,054	1,195	1,111
1,068	1,100	1,066	1,068	1,080	1,102	1,109	1,102
424	437	421	439	434	413	423	458
9,787	9,812	9,932	9,992	10,053	10,121	10,153	10,029
5,583	5,647	5,561	5,832	5,966	5,922	6,280	6,137
196,616	194,933	187,684	195,413	197,863	196,054	195,308	192,395

**VICTORIA—VALUE OF BUILDING WORK.**

—	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
Number of returns..	877	965	982	962	953
	£	£	£	£	£
New buildings ..	3,714,072	4,759,178	5,378,287	5,951,979	6,480,488
Repairs and additions ..	1,105,798	1,369,274	1,417,867	1,651,290	1,426,982
Other construction..	170,514	138,679	226,111	211,511	315,723
Total ..	4,990,384	6,267,131	7,022,265	7,814,780	8,223,193

The number of persons employed and the total salaries and wages paid are shown hereunder for the year 1938-39.

† Persons Employed.	Number.	Salaries and Wages Paid.	Average Salary or Wage.
		£	£ s. d.
Working proprietors .. ..	1,053	288,126	273 12 6
Managers .. ..	142	53,876	379 8 2
Clerks—			
Male .. ..	96	19,285	200 17 8
Female .. ..	69	6,329	91 14 6
Others .. ..	6,041	1,409,939	233 7 11

† Excluding Sub-contractors and their Employees.

## VICTORIA—PAYMENTS TO SUB-CONTRACTORS, 1938-39.

Plasterers, including fibrous	£ 383,525	Bricklayers .. ..	£ 191,720
Plumbers .. ..	379,777	Tilers .. ..	105,306
Painters .. ..	181,034	Others .. ..	508,820
Electricians .. ..	164,821		
Carpenters and Joiners ..	225,345	Total .. ..	2,140,348

The term "Others" in this statement includes sub-contractors for excavations, concreting, asphaltting, &c. The term "sub-contractor" is intended to mean sub-contractor for "labour and material" only. Persons compiling returns were instructed to include sub-contractors for "labour only" under the heading of "persons employed," and the amount of the contract under "wages paid."

**Materials used.**

The following statistics should be read in conjunction with the preceding table. The values of the various materials set out hereunder are exclusive of those supplied by sub-contractors for labor and material.

Materials.	Value.				
	1934-35.	1935-36.	1936-37.	1937-38.	1938-39.
	£	£	£	£	£
Timber .. ..	771,914	948,150	1,225,656†	1,315,540†	1,323,486†
Bricks .. ..	359,921	463,113	472,547	500,426	491,988
Iron and Steel .. ..	*	301,538	384,747	537,007	602,307
Tiles .. ..	82,975	104,725	106,675	117,874	100,632
Cement and lime .. ..	209,812	257,597	324,496‡	391,501‡	381,992‡
Other materials .. ..	1,042,863	943,201	913,332	829,282	912,065
Total .. ..	2,467,485	3,018,324	3,427,453	3,691,630	3,812,470

\* Included in "Other materials." † Includes joinery. ‡ Includes sand.

In addition to payments for wages, materials, and sub-contracts, there are numerous other expenses incidental to building, such as fuel, insurance, building fees of various kinds, &c. These have been included under the heading of "Other expenses," and totalled £46,586 in 1934-35, £59,496 in 1935-36, £73,629 in 1936-37, £78,921 in 1937-38, and £118,607 in 1938-39.

Capital invested in plant and machinery amounted to £92,890 in 1934-35, £83,695 in 1935-36, £103,390 in 1936-37, £114,759 in 1937-38, and to £147,623 in 1938-39; capital invested in land and buildings used as workshops amounted to £83,397 in 1934-35, £68,514 in 1935-36, £78,349 in 1936-37, £74,418 in 1937-38, and to £96,905 in 1938-39.

The following table is an analysis of the buildings completed during the years 1935-36 to 1938-39. As some of these buildings were doubtless commenced in the previous year, the total value is not a measure of the value of building construction for each respective year. The table published at the beginning of this review shows the total value of construction and repair work done for those years.

VICTORIA—BUILDINGS COMPLETED, 1935-36 TO 1938-39.

	1935-36.		1936-37.		1937-38.		1938-39.	
	Number.	Value.	Number.	Value.	Number.	Value.	Number.	Value.
Business premises ..	421	£ 1,445,080	484	£ 1,514,018	513	£ 1,790,363	405	£ 1,866,262
Other buildings ..	..	896,384	..	1,141,676	..	1,218,497	..	1,298,362
Dwellings—								
Brick ..	1,433	1,580,634	1,388	1,729,927	1,376	1,756,265	1,461	1,824,240
Wood ..	1,049	604,405	1,316	818,424	1,577	992,120	1,544	992,070
Total Value ..	..	4,526,503	..	5,204,045	..	5,757,245	..	5,980,934

Information collected with regard to dwellings was confined to those constructed of brick and of wood as representative of the most common types of houses built in Victoria.

The table hereunder summarizes the result.

VICTORIA—DWELLINGS CONSTRUCTED, 1938-39.

Number of Rooms.	Brick Dwellings.			Wooden Dwellings.		
	Number.	Value.	Average Value per Dwelling.	Number.	Value.	Average Value per Dwelling.
		£	£		£	£
Three rooms ..	15	8,462	564	68	18,542	273
Four rooms ..	107	75,151	702	326	156,962	481
Five rooms ..	712	667,336	938	913	613,716	672
Six rooms ..	313	372,341	1,189	195	151,323	776
Seven rooms ..	89	140,038	1,573	27	29,721	1,101
Eight rooms ..	78	143,685	1,842	6	6,233	1,039
Nine rooms ..	25	63,434	2,537	3	2,947	982
Ten rooms ..	70	139,024	1,986	4	9,326	2,331
Over ten rooms..	52	214,769	4,130	2	3,300	1,650
Total ..	1,461	1,824,240	1,249	1,544	992,070	6,425