

# Principal Agricultural and Pastoral Features of the various Districts of the State of Victoria, Season 1931-32.

District.	Area occupied.	Number of Occupiers.	CULTIVATION.							PASTORAL.							PRODUCE.			
			Wheat.	Oats.	Barley.	Potatoes.	Onions.	Maize for Grain.	Vines.	Cattle and Sheep from the State.	Dairy Cows.	Other Cattle.	Horses.	Pigs.	Sheep.	Wheat.	Butter.	Wool.	Honey.	
Central ..	2,732,041	16,786	Arms. 30,834	Arms. 13,067	Arms. 23,930	24,037	Arms. 1,690	Arms. 1,315	Arms. 73	26,205	No. 150,110	No. 130,645	No. 73,227	No. 46,523	No. 1,217,128	471,728	17,471,524	10,965,083	57,972	
North Central ..	2,223,543	6,403	14,292	8,606	1,889	14,093	30	9	81	4,052	37,289	52,188	17,150	11,509	1,218,730	147,601	7,111,971	12,918,496	216,681	
Western ..	6,735,301	12,118	63,760	33,228	5,676	10,572	3,066	..	17	1,871	106,209	152,763	49,063	45,813	4,722,709	826,026	23,797,908	43,782,990	216,649	
Wimmera ..	6,085,412	6,191	942,035	105,055	7,835	144	..	..	1,071	3,819	21,296	21,027	51,016	6,549	2,064,766	14,874,837	1,093,114	24,632,882	840,873	
Malice ..	6,120,139	8,253	2,004,183	170,022	9,008	12	..	40	30,421	4,307	21,491	19,006	35,489	18,626	906,218	19,148,438	2,041,353	8,179,748	20,183	
Northern ..	6,376,140	12,006	462,025	90,417	8,812	63	3	4	1,785	20,876	103,003	114,419	68,210	47,676	2,756,130	5,902,123	30,111,883	23,826,890	440,375	
North-Eastern ..	3,056,779	5,263	20,028	6,341	561	1,186	..	1,119	4,817	1,775	77,146	102,871	24,679	35,103	1,601,501	246,642	14,088,712	11,444,344	278,092	
Gippsland ..	4,019,697	8,972	18,332	3,861	6,860	6,822	227	13,227	..	1,364	168,845	197,493	22,526	92,099	1,184,845	328,411	36,412,647	9,008,610	92,994	
Total for State	37,876,044	74,906	3,565,873	439,626	66,381	60,929	5,306	16,714	39,319	75,506	775,028	901,992	375,430	286,780	16,576,317	41,968,556	132,131,812	165,301,745	2,186,770	

Minor Crops of Special Interest:—Acres: Chicory, 434; Hops, 167; Tobacco, 12,191; Millet (Broom), 637; Sugar Beet, 3,173; Beans, 2,101; these are confined to the Central, North-Eastern, and Gippsland Districts.

Year.	1927	1928	1929	1930	1931	1932
Area.	1,000	1,000	1,000	1,000	1,000	1,000
Wheat.	1,000	1,000	1,000	1,000	1,000	1,000
Oats.	1,000	1,000	1,000	1,000	1,000	1,000
Barley.	1,000	1,000	1,000	1,000	1,000	1,000
Potatoes.	1,000	1,000	1,000	1,000	1,000	1,000
Onions.	1,000	1,000	1,000	1,000	1,000	1,000
Maize.	1,000	1,000	1,000	1,000	1,000	1,000
Vines.	1,000	1,000	1,000	1,000	1,000	1,000
Cattle.	1,000	1,000	1,000	1,000	1,000	1,000
Sheep.	1,000	1,000	1,000	1,000	1,000	1,000

TOTALS.									
Year.	Average Rainfall.	WHEAT.			Wool, Total Production.	LIVE STOCK.		Average Rainfall.	Year.
		Area.	Stock.	lb.		Cattle.	Sheep.		
1927	18-38	3,054,172	8-54	118,308,026	1,227,077	15,057,067	15,057,067	18-38	1927
1928	30-04	3,718,904	12-30	149,878,288	1,304,439	18,489,326	18,489,326	30-04	1928
1929	21-90	3,565,135	7-15	146,056,889	1,335,242	17,427,200	17,427,200	21-90	1929
1930	23-72	4,009,800	11-20	133,611,495	1,439,930	16,477,998	16,477,998	23-72	1930
1931	29-38	3,565,872	11-77	145,291,743	1,637,838	16,376,237	16,376,237	29-38	1931

## VICTORIA.

Showing

Statistics of Wheat, Wool, Live Stock, and Rainfall in each District for 5 years; and Agricultural and Pastoral Statistics in detail, for the Season 1931-32.

Scale of Miles

Map of Victoria, 1931-32

# **PRODUCTION.**

## **LAND SETTLEMENT, ETC.**

The total area of the State is 56,245,760 acres. This comprises—

	Acres.
Lands alienated in fee-simple .. ..	26,383,623
Lands in process of alienation .. ..	7,167,797
Crown lands .. ..	22,694,340
Total .. ..	<u>56,245,760</u>

The Crown lands comprise—

Permanent forests (under Forests Act) ..	3,942,163
Timber reserves (under Forests Act) ..	735,889
State forests and Timber reserves (under Land Act) .. ..	330,135
Water reserves .. ..	312,723
Reserves for Agricultural Colleges, &c. ..	87,003
Reserves in the Mallee .. ..	410,000
Other reserves .. ..	367,719
Roads .. ..	1,794,218
Water frontages, beds of rivers, lakes, &c.; } unsold land in cities, towns, and boroughs }	3,523,319
Land in occupation under—	
Perpetual leases .. ..	88,005
Other leases and licences .. ..	46,120
Temporary grazing licences .. ..	5,189,589
Unoccupied .. ..	<u>5,867,457</u>
Total .. ..	<u>22,694,340</u>

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.

### ALIENATION OF CROWN LANDS, 1926 to 1931.

Year.	Area of Crown Lands Sold.			Crown Lands alienated in Fee-simple.	
	Absolutely, at Auction, &c.	Conditionally to Selectors.		Area.	Purchase Money.
		Mallee.	Other.		
	Acres.	Acres.	Acres.	Acres.	£
1926 ..	2,832	388,559	93,469	125,765	87,740
1927 ..	3,824	214,609	85,409	214,173	203,414
1928 ..	5,807	344,571	68,686	213,519	188,339
1929 ..	4,825	310,174	65,294	187,752	114,965
1930 ..	5,344	137,242	40,691	111,564	89,703
1931 ..	5,892	131,691	58,575	67,331	215,526

From the period of the first settlement of the State to the end of 1931 the amount realized by the sale of Crown lands was £35,535,409, which represents an average of £1 1s. 2d. per acre for all lands alienated or in process of alienation. Payment of a considerable portion of this amount extended over a series of years without interest, upon very easy terms.

Lands  
remaining for  
disposal.

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

# **CROWN LANDS REMAINING FOR DISPOSAL ON 31st DECEMBER, 1931.**

Location.		Classification.					Total.	
		Agricultural and Grazing.						Auri-ferous.
		First.	Second.	Third.	Fourth.	Pastoral.		
County.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	
Buffa Buffa ..	7,617	57,857	111,728	160	..	1,579	178,441	
Croajingolong ..	2,400	1,500	548,670	..	834,576	13,628	1,400,774	
Dargo ..	..	..	95,378	..	431,100	7,000	533,473	
Tambo ..	..	..	200,653	..	364,550	800	566,003	
Tanfil ..	..	..	106,087	..	360,650	66,500	533,237	
Wonnangatta ..	..	..	145,267	..	941,563	..	1,086,830	
Bogong ..	339	12,826	189,211	4,802	185,760	83,558	476,496	
Benambra ..	..	403	269,930	1,960	228,575	87,810	533,678	
Delatite ..	480	17,072	187,625	14,735	133,190	60,416	413,423	
Moirs ..	546	83	7,056	1,225	..	2,000	10,910	
Anglesey ..	..	2,366	69,156	..	..	120	71,686	
Bourke ..	..	162	25	..	..	..	187	
Dalhousie ..	37	710	1,672	..	150	455	3,038	
Evelyn ..	19	11,420	..	..	..	..	11,439	
Merrington ..	..	1,469	11,993	..	..	1,579	14,141	
Bendigo ..	63	537	3,771	..	..	3,684	8,055	
Rodney ..	160	295	..	..	..	2,234	2,669	
Borong ..	..	502	49,716	..	..	3,815	54,033	
Gladstone ..	551	1,861	2,649	2,495	..	10,592	18,148	
Lowan ..	..	654	145,566	25,000	9,614	..	180,834	
Kara Kara ..	92	166	2,352	..	..	3,524	6,134	
Talbot ..	347	787	182	..	..	21,842	23,158	
Tatchera ..	255	70	..	..	..	..	325	
Heytesbury ..	..	685	125,283	..	..	..	125,968	
Polwarth ..	16,686	15,623	24,075	142	..	..	56,526	
Grant ..	..	335	2,709	..	..	7,979	11,023	
Grenville ..	..	871	70	..	..	4,200	5,141	
Ripon ..	..	380	23,257	..	..	3,716	27,353	
Normanby ..	..	..	121,000	..	..	..	121,000	
Dundas ..	..	..	69,000	4,799	15,754	..	89,553	
Villiers ..	..	..	2,058	..	..	..	2,058	
Follett ..	..	..	138,340	..	29,136	..	167,476	
Karkaree ..	..	39	..	..	..	..	39	
Total ..	29,592	128,167	2,653,579	55,318	3,534,537	387,031	6,788,224	
Throughout the State	Swamp or reclaimed lands .. .. .						1,945	
" " "	Lands which may be sold by auction .. .. .						6,221	
The north-western portion of the State	{ Mallee lands available for selection .. .. .						89,670	
	{ " " (such as are suitable to be eventually classified for selection) .. .. .						4,221,886	
Total area remaining for disposal .. .. .							11,057,046	

Much of the land included in the above statement is temporarily licensed under grazing licences.

The Lands Inquiry Branch gives information as to persons eligible to select under the Land Acts, area and conditions of selection, and concessions to land seekers.



**Transfer of Land Act.** 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 transferring of land. It gives a title to the transferee free of any latent defect and reduces the cost of dealing in real estate by reason of the simplicity of the procedure. All land parted with by the Crown since 1862 is under the operation of the Transfer of Land Act, and the Crown grant issues through the Titles Office; but, to bring under the Act land that was parted with prior to that year (5,142,321 acres), application must be made accompanied by strict proofs of the applicant's interest in the property. During 1931 there were submitted 142 applications to have brought under the Act land amounting to 6,617 acres in extent, and to £194,403 in value; while the land actually brought under the Act during the year by application was 36,740 acres valued at £1,032,254. Up to the end of 1931 there had been brought under the Act 3,236,408 acres valued at £71,058,019. The area of the land still under the Old Law System at the end of 1931 was 1,905,913 acres.

**Assurance Fund.** When application is made to have land brought under the Transfer of Land Act, a contribution to the assurance fund of  $\frac{1}{4}$ d. in the £1 on the value of the land is levied on the applicant to assure and indemnify the Government in granting a clear title against all the world, as some other person may have a latent interest in the property, and it may be necessary for the Government to recompense such person out of the fund for the loss of his interest. Receipts during 1931-32 comprised contributions £2,158, and interest on stock £4,670. During the year £624 was paid out of the fund in settlement of claims, and £5,095 as interest on securities under the *Special Funds Act* 1920, No. 3067. The balance at the credit of the Assurance Fund on 30th June, 1932, was £161,432. The amount paid up to 30th June, 1932, as compensation and for judgments recovered, including costs, was £9,623.

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

Details relating to the operations of the Closer Settlement Board and to the conditions under which settlers may acquire blocks and advances will be found on pages 507 to 510 of the 1928-29 issue of this work.

**Estates  
purchased.**

A complete statement of all estates acquired by the Closer Settlement Board including those purchased by the State Rivers and Water Supply Commission (i.e., estates in irrigable areas), will be found in the report of the Closer Settlement Board for the year ended 30th June, 1930. No properties were purchased during the years ended 30th June, 1931 and 1932.

A summary of the lands acquired is given in the following statement :—

**LANDS ACQUIRED FOR CLOSER SETTLEMENT AND  
DISCHARGED SOLDIERS' SETTLEMENT TO 30TH JUNE,  
1932.**

	Closer Settlement.		Discharged Soldiers' Settlement.	
	Area.	Cost.	Area.	Cost.
	acres.	£	acres.	£
Lands purchased .. ..	1,061,949	8,629,469	1,843,506	14,174,297
Crown Lands taken over ..	112,734	55,305	669,436	545,518
Total area and cost of purchase .. ..	1,174,683	8,684,774	2,512,942	14,719,815
Expenses prior to disposal ..	..	92,124	..	115,768
Public Works effected ..	..	509,100	..	1,000,320
Interest capitalized ..	..	61,548	..	132,480
Total cost to 30th June, 1932 .. ..	..	9,347,546	..	15,968,383
Less land transferred to—				
Discharged Soldiers' Settlement .. ..	80,268	813,086	..	..
Closer Settlement ..	..	..	242,609	2,559,794
Total net area and cost ..	1,094,415	8,534,460	2,270,333	13,408,589

**Financial Sum-  
mary of Closer  
Settlement and  
Discharged Soldiers'  
Settlement.**

The liabilities and assets of Closer Settlement and Discharged Soldiers' Settlement at 30th June, 1932, are shown in the following statement :—

# FINANCIAL SUMMARY OF CLOSER SETTLEMENT AND DISCHARGED SOLDIERS' SETTLEMENT AT 30TH JUNE, 1932.

	Closer Settlement.	Discharged Soldiers' Settlement.	Total.
Number of settlers—			
At present receiving assistance .. ..	8,139	5,654	13,793
Repaid in full .. ..	4,066	545	4,611
Cancelled, transferred and surrendered ..	4,324	5,211	9,535
Total settlers who have received assistance	16,529	11,410	27,939
Loan Liability—	£	£	£
Loans raised—State .. ..	11,359,479	12,928,447	24,287,926
Commonwealth .. ..	857,201	11,968,176	12,825,377
Total .. ..	12,216,680	24,896,623	37,113,303
Redemptions .. ..	1,355,582	174,101	1,529,683
Outstanding liability .. ..	10,861,098	24,722,522(a)	35,583,620
Repayment of principal used for payment of interest and working expenses	1,088,077	4,259,069	5,347,146
Payments to State Loans Repayment Fund ..	632,850	656,251	1,289,101
Average rate of interest payable on loans at 30th June, 1932 .. ..	£4 1s. 9d. %	£4 11s. 11d. %	..
Principal outstanding on land, advances and consolidated debts—			
Selling value of land .. ..	9,338,317	12,772,424	22,110,741
Advances to settlers .. ..	5,233,443	7,558,693	12,792,136
Consolidated Debt Accounts .. ..	4,319	5,032,981	5,037,300
	14,581,079	25,364,098	39,945,177
Less arrears of interest included in Consolidated Debt Accounts .. ..	852	576,473	577,325
	14,580,227	24,787,625	39,367,852
Less Principal repaid .. ..	4,401,756(c)	5,748,444(b)	10,150,200
Outstanding Capital Liability of settlers	10,178,471	19,039,181	29,217,652
Total payments by settlers—			
Principal .. ..	3,895,925	4,863,710	8,759,635
Interest .. ..	4,023,334	3,830,263	7,853,597
Total .. ..	7,919,259	8,693,973	16,613,232
Arrears of settlers—			
Principal .. ..	1,335,707	1,431,620	2,767,327
Interest .. ..	1,340,894	2,213,800	3,554,694
Total .. ..	2,676,601	3,645,420	6,322,021
Amounts written off settlers' accounts—			
Interest—Adverse circumstances .. ..	..	1,337,884	1,337,884
Excess cost of buildings .. ..	..	40,717	40,717
Reduction in valuation of land and improvements .. ..	193,669	239,100	432,769
Bad debts .. ..	211,438	1,517,885	1,729,323
	405,107	3,135,586	3,540,693
For financial year 1931-1932—			
Interest paid .. ..	568,013	1,084,676	1,652,689
Administration expenses .. ..	76,697	80,692	157,389
Interest due by settlers and others .. ..	533,350	1,014,077	1,547,427
Interest paid by settlers and others .. ..	359,974	576,282	936,256

NOTES.—(a) Includes £2,160,960 to be written off liability to Commonwealth Government. Interest is not being charged on this amount.

(b) Includes—	£
(i) Payment by Closer Settlement for land taken over ..	884,734
(ii) Payment by settlers .. ..	4,863,710
	5,748,444
(c) Includes—	
(i) Payment by soldier settlement for land taken over ..	505,831
(ii) Payment by settlers .. ..	3,895,925
	£4,401,756

Extent of  
Closer  
Settlement.

The extent of the settlement effected by the Board up to 30th June, 1932, is given in the next statement:—

SUMMARY OF CLOSER SETTLEMENT TO 30TH JUNE, 1932.

Classification of Holdings.	Number.	Average Capital Value.	Average Area.	Total Area.
	No.	£	Acres.	Acres.
<b>Dry Areas.</b>				
Areas settled—				
Farms .. .. .	3,545	1,612	245	868,680
Agricultural Labourers' Allotments ..	154	131	16	2,593
Workmen's Homes .. .. .	1,080	89	$\frac{3}{4}$	796
Allotments granted to Discharged Soldiers and disposed of under the Closer Settlement Act, Part II. ..	188	1,874	256	48,172
Public Competition, Auction, &c. ..	..	..	..	48,578
Total area of land settled .. .. .				968,819
Area of land available for—				
Farm Lands and Agricultural Labourers' Allotments ..				27,969
Workmen's Homes .. .. .				8
Public Competition, Auction, &c. ..				713
Area of land acquired but not yet available ..				..
Loss of area on subdivision (roads, channels, reserves, &c.) ..				1,597
Total dry areas acquired .. .. .				999,106
<b>Irrigation Areas.</b>				
Areas settled—				
Farms .. .. .	2,221	882	59	131,035
Agricultural Labourers' Allotments ..	152	116	6	916
Allotments granted to Discharged Soldiers and disposed of under the Closer Settlement Act, Part II. ..	503	916	64	32,095
Public Competition, Auction, &c. ..	..	..	..	5,763
Total area of land settled .. .. .				169,809
Area of land available for—				
Farm Lands and Agricultural Labourers' Allotments ..				1,139
Public Competition, Auction, &c. ..				475
Area of land acquired but not yet available ..				1,920
Loss of area on subdivision (roads, channels, reserves, &c.) ..				2,234
Total irrigation areas acquired .. .. .				175,577
TOTAL AREAS acquired to 30th June, 1932 ..				1,174,683

Extent of  
Soldier  
Settlement.

The extent of settlement at 30th June, 1932, is given in the table which follows :—

### SUMMARY OF DISCHARGED SOLDIERS' SETTLEMENT TO 30TH JUNE, 1932.

—	Dry Areas.	Irrigation Areas.
	acres.	acres.
Area of land settled—Soldiers .. .. .	2,107,641	71,450
Area of land settled—Civilians (Closer Settlement Acts) .. .. .	220,631	21,978
Area of land available .. .. .	1,280	680
Area of land acquired but not yet available ..	..	19,483
Sales by Auction, &c. .. .. .	64,405	5,394
Total land acquired to 30th June, 1932 ..	2,393,957	118,985
Farms, Number of .. .. .	7,710	1,961
Average area—acres .. .. .	302	48
Average capital value .. .. .	£1,707	£809

Inquiry into  
Soldier Land  
Settlement.

The condition of Soldier Land Settlement in Victoria was the subject of an inquiry by a Royal Commission appointed in 1925, and was followed by an investigation into the position in all the States by His Honour Mr. Justice Pike, who was appointed by the Commonwealth Government in 1927.

Particulars of the findings of the various Boards, and their recommendations, will be found in the Annual Reports of the Closer Settlement Board.

### WATERWORKS.

State  
Expenditure  
on  
Waterworks.

All Victorian waterworks are controlled by official bodies, either State or local. In the following table is given a statement of 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 their receiving free grants, large sums have been written off the liabilities of local bodies. The following information has been largely taken from the Annual Report of the State Rivers and Water Supply Commission.

## STATE EXPENDITURE ON WATERWORKS TO 30TH JUNE, 1932.

	Total Advances, including Cost of Loan Flotation.	Redem- ption Paid.	Capital Written Off.	Free Head- works.	Amount standing at Debit, 30th June, 1932.
State Rivers and Water Supply Com- mission—	£	£	£	£	£
Completed Works—					
Waterworks Districts ..	5,033,203	49,775	175,055	..	4,808,373
Irrigation and Water Supply Districts ..	4,494,918	31,772	575,152	..	3,887,994
Goulburn Channel Works (Free Headworks excluded) ..	1,424,394	106	..	..	1,424,288
Pyke's Creek, Melton and Dis- tributary Works ..	236,027	..	..	..	236,027
Uncompleted or Unallotted Works—					
Mornington Peninsula ..	849,580	..	..	..	849,580
Koo-wee-rup, Cardinia, and other Flood Protection Schemes ..	401,749	..	..	..	401,749
Eildon Reservoir and Waranga Reservoir Enlargement ..	2,515,775	1,000	..	..	2,514,775
Maffra-Sale Irrigation and Water Supply Districts ..	1,237,458	..	..	..	1,237,458
Millewa Waterworks Districts ..	516,570	..	..	..	516,570
Red Cliffs Irrigation and Water Supply District ..	783,322	..	..	..	783,322
Bellarine Peninsula ..	354,323	..	..	..	354,323
Campaspe and Loddon River Storages (proposed) ..	108,312	..	..	..	108,312
Free Headworks ..	1,261,331	420	..	1,260,911	..
River Murray Agreement Works ..	2,313,528	..	..	..	2,313,528
Surveys, &c. ..	301,488	..	..	..	301,488
Total State Rivers and Water Supply Commission ..	21,831,978	83,073	750,207	1,260,911	19,737,787
First Mildura Irrigation Trust and Mildura Urban Trust ..	123,126	45,590	18,416	..	59,120
Other Waterworks Trusts ..	2,028,251	310,205	316,537	..	1,401,509
Ballarat Water Commissioners ..	365,064	54,926	2,111	..	308,027
Other Local Bodies (Municipalities) ..	494,604	89,400	161,649	..	243,555
Abolished Irrigation and Waterworks Trusts ..	32,754	30	32,724	..	..
Free Grants to Local Authorities ..	147,046	..	..	147,046	..
Melbourne and Metropolitan Board of Works ..	3,189,934	3,189,934*	..	..	..
Geelong Waterworks and Sewerage Trust ..	265,000	265,000†	..	..	..
Total ..	28,477,757	4,038,158	1,281,644	1,407,957	21,749,998

\* Of this amount £800,000 was provided out of Consolidated Revenue, the balance being payments by the Melbourne and Metropolitan Board of Works.

† The Geelong Waterworks were sold by the Government to the Geelong Waterworks and Sewerage Trust in 1908 for £265,000, the total expenditure on the works to that date being £455,082. The balance of £190,082, which was written off, is included above in the figures for "Other Waterworks Trusts."

In addition to the capital written off, as shown above, an amount of £579,786 representing arrears of interest was written off by Act No. 1625 of 1899, making the total actually written off the liabilities of the Trusts (Irrigation and Waterworks) and Municipal Corporations, £1,861,430.

The State expenditure on waterworks, as shown in the above table, does not include large sums which have been spent by other controlling bodies out of their own funds. Up to 30th June, 1932, the additional

capital expenditure of the bodies mentioned was as follows :—Melbourne and Metropolitan Board of Works, £7,836,208 ; Geelong Waterworks and Sewerage Trust, £420,615 ; and the Ballarat Water Commissioners, £250,197. Smaller amounts have been expended by other municipalities, details of which are not readily available.

## IRRIGATION.

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, the *Ballarat Water Commissioners Act* 1921, and Section 5 (2) of the *Closer Settlement Act* 1922.

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

	At 30th June, 1907.	At 30th June, 1932.
<b>Irrigation Districts—</b>		
Number of Districts administered ..	10	33
Number of Districts having Water Rights ..	Nil	25
Total of such Water Rights .. ..	Nil	421,700 ac. ft.
Area under Irrigated Culture .. ..	108,000 acres	418,400 acres
Valuation for Rating purposes .. ..	£196,000	£790,500
<b>Rural Waterworks Districts—</b>		
Number of Districts administered (excluding Coliban) .. ..	3	32
Valuation for Rating purposes .. ..	£125,000	£1,711,000
<b>Urban Districts—</b>		
Number of Districts administered .. ..	1	77
Valuation for Rating purposes .. ..	£5,600	£575,000

An illustration of the influence of closer settlement and the allotment of water rights in extending irrigation is contained in the following table, which shows, for the districts having water rights, most of which are directly affected by the Commission's Closer Settlement policy, the areas irrigated in 1909-10—the year in which these two factors were first put into operation—and the average areas for the last five years :—

### PROGRESS OF IRRIGATION IN CLOSER SETTLEMENT AREAS.

District (having allotted Water Rights).	Area Irrigated.	
	1909-10.	Average for last Five Years.
	acres.	acres.
Supplied from the Goulburn—		
Shepparton .. .. .	..	15,255
South Shepparton .. .. .	..	4,526
Rodney .. .. .	32,356	64,090
Stanhope .. .. .	2,000	13,251
Tongala .. .. .	3,000	21,160
Rochester .. .. .	500	46,539
Echuca North .. .. .	..	4,663
Dingee .. .. .	..	4,257
Tragowel Plains .. .. .	20,000	49,143
Supplied from the Werribee—		
Bacchus Marsh .. .. .	31	2,869
Werribee .. .. .	..	7,820
Supplied from the Macallister—		
Maffra (four years) .. .. .	..	7,667
Sale (four years) .. .. .	..	4,552
Supplied from the Murray—		
Leitchville .. .. .	..	3,966
Cohuna .. .. .	12,000	22,563
Gannawarra .. .. .	7,825	19,947
Koondrook .. .. .	5,029	19,476
Swan Hill .. .. .	5,410	18,595
Nyah .. .. .	569	2,779
Red Cliffs (four years) .. .. .	..	10,613
Merbein .. .. .	202	7,487
Third Lake .. .. .	..	3,165
Mystic Park .. .. .	..	2,946
Tresco .. .. .	..	1,277
Fish Point .. .. .	..	1,849
Total .. .. .	88,922	380,365



The area under irrigated culture for all kinds of crops in 1931-32 was 418,415 acres, being 44,683 acres less than the area irrigated in the previous year, and 58,665 acres below the average of the previous five years.

The subjoined table shows the total extent of irrigated land in the State in 1909-10 and each of the last five years, and the purposes for which the land was utilized:—

### IRRIGATED AREAS: HOW UTILIZED.

Crop.	1909-10.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
	acres.	acres.	acres.	acres.	acres.	acres.
Cereals .. ..	23,715	91,538	60,880	93,803	69,694	27,928
Lucerne .. ..	24,124	121,540	122,441	135,111	136,502	125,615
Sorghum and other annual fodders ..	8,094	60,104	41,130	59,401	29,787	30,479
Pastures .. ..	50,541	118,153	154,459	186,249	144,903	150,478
Vineyards and orchards	17,524	71,043	70,681	70,265	68,426	68,430
Fallow .. ..	4,988	6,727	11,120	12,596	6,447	7,042
Miscellaneous ..	785	8,395	10,984	9,152	7,339	8,443
<b>Total ..</b>	<b>129,771</b>	<b>477,500</b>	<b>471,695</b>	<b>566,577</b>	<b>463,098</b>	<b>418,415</b>

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

Of the total area irrigated in 1931-32—418,415 acres—the percentages devoted to different purposes were as follows:—Pastures, 36; lucerne, 30; vineyards, orchards, and gardens, 16; sorghum and other annual fodder crops, 7; cereals, 7; fallows and miscellaneous, 4.

Notwithstanding that the Commission did not purchase any additional land for settlement during the year 1931-32, 45 applications from new settlers for irrigation farms were approved on farm allotments which from time to time became available. Additional areas were granted to 19 established settlers.

Applications from 132 leaseholders for transfer and 30 who desired to sub-let their farms were approved.

A statement showing the total area of irrigable land purchased and subdivided by the State, and the extent of settlement on each estate, appears on page 359 of the *Year-Book* for 1929-30.

Closer Settlement in irrigation areas commenced in 1909, and under the *Closer Settlement Act* 1912, administration in these areas was placed under the direct control of the State Rivers and Water

Supply Commission. At 30th June, 1932, 236,170 acres had been purchased, and 4,085 families settled, or nearly 17 times as many as resided thereon prior to their subdivision for Closer Settlement.

Dairying is still the main source of production in the irrigation areas, and these areas are proving most suitable for this industry. In the Standard Herd Test conducted by the Department of Agriculture for pure bred herds, there were 23 herds whose average yield per cow of butter fat exceeded 450 lb., and 8 of these were from the irrigation areas, though these areas contain less than 10 per cent. of the cows in the State.

Tobacco is being profitably grown in the Goulburn Valley Irrigation district, and a great expansion in the area planted has taken place.

As a result of the extremely unfavourable weather prior to harvesting, yields of dried grape fruits were much lighter than anticipated, but the total pack, 36,500 tons, exceeded that of last year by over 5,000 tons. It was, however, substantially lower than 1929 and 1930, when the yields were 48,000 and 47,500 tons respectively, but the improved prices which were first manifested late in 1930 have more than been maintained, and this factor, together with the "exchange" benefit has ensured to the grower a monetary return which is more than equal to that obtained in 1929 and 1930.

Still further expansion in the marketing of this product has followed the Trade Treaty made with Canada, and the total exports to that country for 1932 exceeded 15,000 tons as against 10,000 tons in 1931 and 776 tons in 1926.

In the production of citrus, the 1932 crops are lighter on account of the large yields obtained during the two preceding seasons.

In addition to waterworks for purposes of irrigation, 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 within the State so supplied is approximately 24,234 square miles—about 28 per cent. of the total area of the State. The major portion so supplied is in the Mallee and Wimmera districts.

The number of towns supplied with water, exclusive of the City of Melbourne and its suburbs, is as follows:—96 towns of a total population of 119,700 supplied by the Commission, 109 towns with a total population of 193,800 supplied by Waterworks Trusts, and 17 towns with a total population of 78,000 supplied by Local Governing Bodies.

### STORAGE AND SUPPLY SCHEMES.

In 1902 the total capacity of storages in the State was 172,000 acre feet. The present capacity is 1,351,860 acre feet. When the Wimmera Storages, Glenmaggie, and Eumemmerring Reservoirs are completed, the total capacity will be

Total Storages  
in State.

about 1,437,270 acre feet. The Hume Reservoir, in course of construction, will, unless otherwise decided by the Commonwealth and State Governments, 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. The following statement sets out the capacities of the various storages in the State:—

EXISTING STORAGES.						Capacities in Acre Feet.
<i>Goulburn System—</i>						
Goulburn Weir	..	..	..	..	..	20,700
Waranga	..	..	..	..	..	333,400
Eildon (200,000 acre feet during repair)	..	..	..	..	..	306,000
						<hr/> 660,100
<i>Murray-Loddon System—</i>						
Hume Reservoir (part of 2,000,000 acre feet—half share)						127,500
Kew Swamp	..	..	..	..	..	40,860
Laanecoorie	..	..	..	..	..	14,000
Kerang North-west Lakes	..	..	..	..	..	92,000
Lake Boga	..	..	..	..	..	28,000
Long Lake	..	..	..	..	..	3,820
						<hr/> 306,180
<i>Wimmera-Mallee System—</i>						
Lake Lonsdale	..	..	..	..	..	45,480
Wartook	..	..	..	..	..	23,800
Fyans Lake	..	..	..	..	..	17,100
Taylor's Lake	..	..	..	..	..	30,000
Pine Lake (part of 62,000 acre feet)	..	..	..	..	..	52,000
Lower Wimmera Weirs	..	..	..	..	..	2,870
Batyo Catyo (Avon Regulator)	..	..	..	..	..	5,000
Lake Whitton	..	..	..	..	..	1,300
Earthen Storages, Township Reservoirs, and Mallee Tanks						<hr/> 5,710
						183,260
<i>Maffra-Sale System—</i>						
Glenmaggie Reservoir (part of 150,000 acre feet)	..	..	..	..	..	<hr/> 104,500
<i>Coliban System—</i>						
Upper Coliban	..	..	..	..	..	25,700
Malmsbury	..	..	..	..	..	12,300
Subsidiary Reservoirs	..	..	..	..	..	<hr/> 6,930
						44,930
<i>Werribee—</i>						
Pykes Creek	..	..	..	..	..	21,000
Melton	..	..	..	..	..	<hr/> 17,000
						38,000
<i>Bellarine Peninsula System—</i>						
Wurdee Bolue	..	..	..	..	..	10,000
Service Basins	..	..	..	..	..	<hr/> 600
						10,600
<i>Mornington Peninsula System—</i>						
Beaconsfield, Frankston, and Mornington Reservoirs	..	..	..	..	..	1,560
Service Basins	..	..	..	..	..	180
Eumemmerring Reservoir (part of 3,100 acre feet)	..	..	..	..	..	<hr/> 1,000
						2,740
<i>Miscellaneous—</i>						
Wonthaggi	..	..	..	..	..	<hr/> 1,550
Total capacity of existing Storages	..	..	..	..	..	<hr/> 1,351,860

ADDITIONAL STORAGE BEING PROVIDED BY WORKS IN COURSE  
OF CONSTRUCTION.

	Capacities in Acre Feet.
<i>Wimmera-Mallee System—</i>	
Lake Lonsdale Enlargement .. ..	7,810
Pine Lake (balance of 62,000 acre feet) .. ..	10,000
Green Lake .. ..	20,000
	<hr/> 37,810
<i>Maffra-Sale System—</i>	
Glenmaggie Reservoir (balance of 150,000 acre feet) .. ..	45,590
<i>Mornington Peninsula System—</i>	
Eumemmerring Reservoir (first stage—balance of 3,100 acre feet)	2,100
<i>Murray System—</i>	
Hume Reservoir, at junction with Mitta River, half-share of balance of 2,000,000 acre feet .. ..	872,500
	<hr/>
Total capacity of storages when works in hand are com- pleted .. ..	2,309,770

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 1923-29 (pp. 526 to 534).

**Mildura Irrigation Settlement.** The Mildura Irrigation Settlement, on the River Murray was established in 1887 under the management of the Chaffey Brothers Limited, and in 1895 the control of the water supply was vested in the First Mildura Irrigation Trust. Water is obtained by pumping from the river. The extent of watering done represented 48,536 acres in 1927-28, 52,726 acres in 1928-29, 51,780 acres in 1929-30, 47,418 acres in 1930-31, and 48,200 acres in 1931-32.

The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1932, were as follows :—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION  
TRUST, 1931-32.

<i>Receipts.</i>	£	<i>Payments.</i>	£
Horticultural Rates ..	39,112	Wages and Salaries ..	15,500
Special Waterings, &c ..	2,230	Firewood ..	8,573
Miscellaneous ..	11,837	Interest, Sinking Fund and Depreciation ..	4,363
		Redemption of Loans ..	14,100
		Miscellaneous ..	9,127
Total ..	<hr/> 53,179	Total ..	<hr/> 51,663

## 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 of the years 1929, 1930, and 1931, and the average yearly amount of rainfall deduced from all available records to December, 1931, in each of the 26 river basins or districts constituting the State of Victoria:—

## RAINFALL.—YEARLY RECORDS AND AVERAGES.

Basin or District.	Rainfall.			
	During the Year—			Yearly Average to December, 1931.
	1929.	1930.	1931.	
	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	26.89	28.65	25.66	26.38
Fitzroy, Eumeralla, and Merri Rivers	30.80	28.53	28.17	28.09
Hopkins River and Mt. Emu Creek ..	26.25	28.79	27.76	25.01
Mt. Elephant and Lake Corangamite	25.25	27.48	26.54	25.81
Cape Otway Forest ..	45.84	38.14	42.92	39.41
Moorabool and Barwon Rivers ..	23.95	25.90	23.99	23.90
Werribee and Maribyrnong Rivers ..	23.55	26.21	25.89	23.55
Yarra River and Dandenong Creek ..	39.56	37.20	41.92	34.18
Koo-wee-rup Swamp ..	37.80	33.78	41.82	35.87
South Gippsland ..	38.35	36.98	31.94	38.60
Latrobe and Thomson Rivers ..	39.73	39.67	37.08	38.22
Macallister and Avon Rivers ..	20.80	27.76	24.25	24.34
Mitchell River ..	21.11	28.49	27.60	26.06
Tambo and Nicholson Rivers ..	22.76	30.42	28.96	27.44
Snowy River ..	31.95	31.74	32.49	34.28
Murray River ..	14.62	18.45	20.49	16.88
Mitta Mitta and Kiewa Rivers ..	25.56	31.03	42.93	33.37
Ovens River ..	27.75	34.70	48.07	33.85
Goulburn River ..	22.25	27.24	31.42	26.34
Campaspe River ..	18.76	26.64	26.93	22.91
Loddon River ..	15.35	22.30	23.32	20.10
Avoca River ..	11.13	20.45	20.46	17.04
Avon and Richardson Rivers ..	10.63	18.64	17.68	15.37
Eastern Wimmera ..	18.72	23.33	23.53	21.29
Western Wimmera ..	17.97	21.74	18.05	19.90
Mallee ..	8.23	15.48	14.04	12.58
Weighted Averages ..	21.80	25.78	26.38	24.20

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 it averages 12.58 inches per annum, as compared with 24.20 inches for the whole State.

An estimate of the areas of the State, in square miles, subject to different degrees of rainfall was first made in 1910. More comprehensive data has since become available, and in 1925 the Commonwealth Meteorologist issued the following revised figures:—

### DISTRIBUTION OF AVERAGE RAINFALL.

Rainfall.						Area.
Inches.						Square Miles.
Under 15 ..	..	..	..	..	..	19,270
15 to 20 ..	..	..	..	..	..	13,492
20 to 25 ..	..	..	..	..	..	14,170
25 to 30 ..	..	..	..	..	..	15,579
30 to 40 ..	..	..	..	..	..	14,450
40 to 50 ..	..	..	..	..	..	7,338
50 to 60 ..	..	..	..	..	..	2,980
Over 60 ..	..	..	..	..	..	605

The rainfall recorded for each quarter of 1931 and the quarterly averages up to 1931 deduced from all available records are as follows:—

### RAINFALL—QUARTERLY RECORDS AND AVERAGES.

Basin or District.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.	
	Amount.	Average.	Amount.	Average.	Amount.	Average.	Amount.	Average.
	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	3.72	3.63	10.28	7.86	8.72	9.02	2.94	5.87
Fitzroy, Eumeralla, and Merri Rivers ..	4.88	4.29	10.12	8.23	9.55	9.41	3.62	6.16
Hopkins River and Mt. Emu Creek ..	5.50	4.24	10.91	7.14	7.63	7.76	3.72	5.87
Mt. Elephant and Lake Corangamite ..	4.71	4.59	9.80	7.07	7.83	7.99	4.20	6.16
Cape Otway Forest ..	8.26	6.00	14.91	11.69	13.37	13.16	6.38	8.56
Moorabool and Barwon Rivers ..	5.18	4.77	7.79	6.44	6.35	6.74	4.67	5.95
Werribee and Maribyrnong Rivers ..	5.96	5.16	8.90	6.15	5.39	6.18	5.64	6.06
Yarra River and Dandenong Creek ..	12.27	7.13	12.15	8.75	9.33	9.15	8.17	9.15
Koo-wee-rup Swamp ..	11.87	6.90	12.33	9.83	10.89	9.99	6.73	9.15
South Gippsland ..	7.43	7.83	9.37	10.68	9.48	11.11	5.66	8.98
Latrobe and Thomson Rivers ..	7.88	7.25	10.67	9.80	11.30	11.04	7.23	10.13
Macallister and Avon Rivers ..	6.37	6.35	4.57	5.48	4.40	5.85	8.91	6.66
Mitchell River ..	7.90	6.69	6.50	5.92	5.09	6.60	8.11	6.85
Tambo and Nicholson Rivers ..	8.07	7.00	7.49	6.55	4.38	6.55	9.02	7.84
Snowy River ..	8.66	8.05	9.32	8.98	5.76	8.83	8.75	8.42
Murray River ..	3.20	3.24	10.76	4.99	3.39	4.74	3.14	8.91
Mitta Mitta and Kiewa Rivers ..	9.93	6.14	18.41	9.06	8.34	10.25	6.25	7.92
Ovens River ..	7.17	5.50	22.73	10.14	12.10	10.81	6.07	7.40
Goulburn River ..	6.80	4.74	12.80	7.58	6.95	7.86	4.87	6.16
Campaspe River ..	3.89	4.06	13.53	6.89	6.52	6.92	2.99	4.94
Loddon River ..	3.74	3.59	11.62	6.00	5.35	6.09	2.61	4.42
Avoca River ..	2.04	2.85	10.53	5.19	4.55	5.29	3.34	3.71
Avon and Richardson Rivers ..	1.61	2.49	8.73	4.63	3.97	4.87	3.37	3.38
Eastern Wimmera ..	2.53	2.98	11.49	6.48	6.29	7.09	3.22	4.74
Western Wimmera ..	1.64	2.48	8.21	6.17	6.71	6.95	1.49	4.30
Mallee District ..	2.18	2.25	7.57	3.66	2.83	3.71	1.46	2.96
The whole State ..	5.09	4.42	10.56	6.83	6.47	7.25	4.26	5.70

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 ..	29·970	29·923	30·081	30·077
Monthly range of pressure of air—Inches	0·891	0·763	0·815	0·973
Mean temperature of air in shade—°Fahr.	57·7	66·6	59·3	50·0
Mean daily range of temperature of air in shade—°Fahr. ..	18·6	21·1	17·3	13·9
Mean relative humidity. Saturation=100	66	60	69	75
Mean rainfall in inches ..	7·23	5·92	6·61	5·77
Mean number of days of rain ..	38	24	34	43
Mean amount of spontaneous evaporation in inches ..	10·28	17·34	7·90	3·68
Mean daily amount of cloudiness—Scale 0 to 10 ..	6·0	5·1	5·9	6·4
Mean number of days of fog ..	1	1	6	12

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1931 and for the last 76 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.

Meteorological Elements.	Yearly Averages and Extremes.			
	Year 1931.	Average for 76 Years.	Extremes between which the Yearly Average Values have oscillated in 76 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ..	30·019	30·013	30·106	29·945
Highest .. ..	30·496	30·606	30·770	30·488
Lowest .. ..	29·422	29·252	29·495	28·942
Range (inches) ..	1·074	1·354	1·719	1·074
Mean temperature of air in shade (°Fahr.) ..	57·7	58·4	59·9	57·3
Mean daily maximum .. (°Fahr.)	66·4	67·3	69·0	65·4
Mean daily minimum .. ..	48·9	49·6	51·2	47·2
Absolute maximum .. ..	104·4	105·0	111·2	96·6
Absolute minimum .. ..	32·5	30·9	34·2	27·0
Mean daily range .. ..	17·5	17·7	20·4	15·0
Absolute annual range .. ..	71·9	74·2	82·6	66·0
Solar Radiation (mean maxima) ..	118·2	117·7	127·6	106·0
Terrestrial Radiation (mean minima) .. (°Fahr.)	42·8	43·9	46·8	39·5
Rainfall (in inches) .. ..	28·63	25·53	38·04	15·61
Number of wet days .. ..	164	139	171	102
Year's amount of free evaporation (in inches) .. ..	39·81	39·20	45·66	31·59
Percentage of humidity (saturation =100) .. ..	65	68	76	61
Cloudiness (scale 10 = overcast, 0 = clear) .. ..	6·2	5·9	6·4	4·8
Number of days of fog .. ..	36	20	48	5

## 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 Agricultural, Pastoral, Fruit and Dairying Industries of the State, and in giving instructions to those engaged therein. The Department publishes a monthly journal.

**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. 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. The remaining two years are devoted to a more specialized study of agriculture and allied subjects on a scientific basis.

**Government Experimental Farms.** The Department of Agriculture conducts research and experimental work at the State Research Farm at Werribee, the Rutherglen Experimental Farm, the Longerenong Agricultural College, and at the School of Primary Agriculture, Burnley. In addition, there are experiments and demonstrations conducted on 43 selected farms throughout the State.

At the State Research Farm, Werribee, the main work is the improvement of wheat and other cereals, grasses, clovers and various economic plants, investigations into the methods and problems relating to irrigated agriculture, and the breeding and feeding of dairy cattle, horses, sheep and poultry.

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. At the substation at Longerenong experiments are conducted on wheat and oat cultivation for Wimmera conditions. At the School of Primary Agriculture, Burnley, a Plant Research Laboratory mainly devoted to plant pathological and entomological research has been established. Extension research work on the breeding and selection of grasses and clovers is also carried on.

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



The pasture experiments are largely responsible for recent rapid advances made in pasture improvement throughout Victoria, in which approximately 1,000,000 acres are now annually topdressed with an estimated increase of approximately 50 per cent. in carrying capacity.

**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:—

**GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1931-32.**

Particulars.	Central Research Farm, Werribee.	Rutherglen Farm, &c.	Dookie Agricultural College.	Longerenong Agricultural College.	Burnley School of Primary Agriculture, &c.
	acres.	acres.	acres.	acres.	acres.
Area under crop .. .. .	1,014	405	666	1,279	13
Other arable land .. .. .	1,137	618	1,504	949	14
Balance of area .. .. .	60	330	3,756	158	6
Total area of farm .. .. .	2,211	1,353	5,926	2,386	33
	£	£	£	£	£
Value of produce for year .. .. .	5,725	1,700	9,146	5,964	1,250
Receipts—					
Government Grant .. .. .	10,200	3,100	5,440	2,979	2,200
Council of Agricultural Education Grant .. .. .					
Other .. .. .					
	5,842	1,984	10,389	7,194	990
Total receipts .. .. .	16,042	5,084	15,829	10,173	3,190
Total expenditure .. .. .	10,502	5,460	15,829	10,173	3,277
Number of students .. .. .	12	..	92	53	80

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

The orchards, nurseries, and gardens of the State are systematically inspected by the officers of the Horticultural Division of the Department of Agriculture. Nurseries are inspected periodically, and action is taken in accordance with the

condition of the plants in relation to disease or freedom therefrom. Old, worn-out, and infected orchards are destroyed.

The fear of introducing the fruit-flies and diseases arising from other causes has necessitated a thorough examination of fruit from Queensland, New South Wales, and elsewhere.

Plants and cuttings coming from foreign parts are subject to strict examination and to fumigation where it is considered necessary.

**Forestry.** The State forests are controlled by a Commission of three, which was first appointed in 1919. The State has a wooded area of about 14,000,000 acres, of which 4,688,279 acres are set aside as permanent State forests and timber reserves.

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.

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 of £40,000 (reduced to £32,000 under the provisions of the *Financial Emergency Act 1931*) out of the Consolidated Revenue to the Fund, and also half of the amount in excess of £80,000 received from royalties, leases, licences, and permits.

The revenue derived from forest sources during the financial year 1931-32 was £77,189, and the expenditure was £152,870—£11,870 of which was paid out of the Unemployment Relief Fund, £68,178 out of the Consolidated Revenue, £22,791 under the Forests Loan Act No. 3386, and the balance—£50,031—from the Forestry Fund. The balance at the credit of the Fund at 30th June, 1932, was £5,628.

It is estimated that the quantity of timber produced in the rough from Crown Lands in 1931-32 was 4,633,012 cubic feet. In addition, 303,870 tons measurement (15,193,475 cubic feet) of fuel timber and 271,992 tons measurement (1,359,960 cubic feet) of miscellaneous timber were produced.

Particulars of sawn timber and firewood, from all sources, will be found on pages 393 and 394 of this volume.

**Agriculture—  
expenditure  
and revenue  
connected  
with.**

The State has rendered substantial assistance to the various branches of the agricultural and pastoral industries during past years. The items of State expenditure from consolidated revenue by the responsible departments in connexion with these industries, and the amount of revenue received by them, during the last five years, are summarized in the appended table:—

**EXPENDITURE AND REVENUE CONNECTED WITH  
AGRICULTURE, 1927-28 to 1931-32.**

	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
<i>Expenditure.</i>	£	£	£	£	£
Administrative Branch ..	13,770	13,142	13,338	13,125	11,908
Agricultural Branch ..	38,018	36,330	37,400	33,327	33,132
Horticultural Branch ..	31,763	31,740	29,655	24,453	17,745
Stock and Dairy Branch ..	89,077	99,232	103,924	83,899	69,798
Maffra Beet Sugar Factory ..	89,941	73,288	90,553	135,650	127,951
Technical Agricultural and Viti- cultural Education, &c. ..	27,294	27,009	27,134	21,282	18,297
Development of Export Trade ..	60,946	62,625	56,425	53,996	51,506
Rabbit and Vermin Extermina- tion .. ..	85,200	81,377	71,277	57,168	50,985
Advances to Settlers for losses by bush fires, floods, &c. ..	21,150	14,004	5,241	3,918	2,000
Grants to Agricultural and Horticultural Societies, &c. ..	675	675	500	..	..
Miscellaneous .. ..	488	2,222	498	195	20
<b>Total .. ..</b>	<b>458,322</b>	<b>441,644</b>	<b>435,945</b>	<b>427,013</b>	<b>383,342</b>
<i>Revenue.</i>					
Maffra Beet Sugar Factory ..	58,900	84,183	81,694	138,929	188,006
Victoria Dock Cool Stores ..	28,205	52,558	34,486	45,382	51,419
Interest on and Repayment of Loans .. ..	15,334	22,087	13,763	27,809	52,031
All Other .. ..	50,432	58,908	54,478	59,015	59,864
<b>Total .. ..</b>	<b>152,871</b>	<b>217,736</b>	<b>184,421</b>	<b>271,135</b>	<b>351,320</b>

In addition to the expenditure shown, various sums have been advanced from loans and votes for the purpose of aiding closer settle-  
ment, for the resumption of mallee lands, for relief to farmers on  
account of bush fires and flood losses, and for purchase of seed wheat  
and fodder. These advances are gradually being repaid.

The expenditure from Loan Funds and on account of Loans in  
1931-32 was £801,837—£215,810 having been expended on discharged  
soldiers' land settlement, £313,657 on closer settlement, £24,070 on  
wire netting, and £248,300 on cultivation advances.

# AGRICULTURE.

Progress of  
cultivation.

All divisions of the State are suitable for cultivation. The area cultivated in 1931-32 was 7,552,928 acres, as compared with 9,306,289 acres in the previous season, and an annual average of 7,616,031 acres for the seasons 1925-30, 5,032,359 acres for the seasons 1905-15, and 3,547,111 acres for the seasons 1895-1905, Notwithstanding the great increase in the area cultivated, the dairying and pastoral industries show a considerable expansion. This is evidenced by a comparison of the exports of the principal products to oversea countries in the year 1900 with the annual average in the last five seasons. The values have risen as follows:—Butter and cheese from £1,252,277 to £3,070,745; milk and cream from £5,455 to £958,729; and meats from £502,285 to £1,638,479.

The following table shows the progress of cultivation from period to period during the last 77 years:—

## ACREAGE CULTIVATED ANNUALLY, 1855 to 1932.

Period or Year (ended March).	Annual Average.		
	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

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay. The following tables contain particulars of the average annual area, production, and yield per acre for periods from 1855 to 1925, and for each of the last seven seasons:—

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

# ACREAGE, PRODUCTION, AND AVERAGE YIELD OF FIVE PRINCIPAL CROPS, 1855 TO 1932.

Period or Year (ended March).	Wheat.*	Oats.*	Barley.	Potatoes.	Hay.
AVERAGE 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
1926 ..	2,513,494	437,696	103,395	63,369	1,013,613
1927 ..	2,915,315	303,424	88,896	66,185	1,080,993
1928 ..	3,064,172	529,392	76,768	77,649	908,804
1929 ..	3,718,904	347,021	75,451	68,412	1,005,063
1930 ..	3,566,135	630,234	97,678	58,789	865,015
1931 ..	4,600,200	371,024	87,518	67,690	1,277,398
1932 ..	3,565,872	439,626	66,381	69,929	955,839
AVERAGE 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	1,187,007	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
1926 ..	29,255,534	4,998,165	1,774,963	160,729	929,068
1927 ..	46,886,020	4,884,006	1,920,722	162,909	1,387,971
1928 ..	26,160,814	4,682,724	1,552,109	230,348	1,001,251
1929 ..	46,818,833	5,602,409	1,556,118	140,158	1,267,437
1930 ..	25,412,587	5,058,541	2,183,325	171,747	963,089
1931 ..	53,814,369	6,893,827	1,983,130	173,341	1,605,900
1932 ..	41,955,886	6,450,281	1,256,678	206,489	1,069,276
AVERAGE ANNUAL YIELD PER ACRE.					
	bushels.	bushels.	bushels.	tons.	tons.
1855-65 ..	18.48	24.83	21.39	2.60	1.46
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
1926 ..	11.64	11.42	17.17	2.54	0.92
1927 ..	16.08	16.10	21.61	2.46	1.29
1928 ..	8.54	8.85	20.22	2.97	1.10
1929 ..	12.59	16.14	20.62	2.05	1.26
1930 ..	7.13	8.03	22.35	2.92	1.11
1931 ..	11.70	18.58	22.66	2.56	1.26
1932 ..	11.77	14.67	18.93	2.95	1.12

\* For grain.

The area and produce of the principal crops per head of population are given in the next table for each of the principal crops compared with population. last five years :—

**AREA AND PRODUCTION OF FIVE PRINCIPAL CROPS  
PER HEAD OF POPULATION, 1927-28 to 1931-32.**

Year ended March—			Wheat.	Oats.	Barley.	Potatoes.	Hay.
			Area per Head of Population.				
			acres.	acres.	acres.	acres.	acres.
1928	..	..	1·76	·30	·04	·04	·52
1929	..	..	2·11	·20	·04	·04	·57
1930	..	..	2·01	·35	·05	·03	·49
1931	..	..	2·59	·21	·05	·04	·72
1932	..	..	1·98	·24	·04	·04	·53
			Produce per Head of Population.				
			bushels.	bushels.	bushels.	tons.	tons.
1928	..	..	15·02	2·69	·89	·13	·57
1929	..	..	26·59	3·18	·88	·08	·72
1930	..	..	14·30	2·85	1·23	·10	·54
1931	..	..	30·28	3·88	1·12	·10	·90
1932	..	..	23·29	3·58	·70	·11	·59

Except in the three seasons 1895-96, 1902-03, and 1914-15, the wheat produced during each year since 1870 has been more than sufficient to supply home consumption.

Values of  
five principal  
crops.

The following table gives the annual value of each of the five principal crops, based upon prices realized upon farms, also the value of each crop per acre for each of the last five years :—

### VALUES OF FIVE PRINCIPAL CROPS.

Year ended March—			Annual Value of—				
			Wheat.	Oats.	Barley.	Potatoes.	Hay.
			£	£	£	£	£
1928	..	..	4,724,369	688,804	297,327	388,537	3,683,272
1929	..	..	8,364,675	627,521	222,504	1,189,349	3,502,862
1930	..	..	3,559,063	554,547	300,202	691,273	2,998,282
1931	..	..	3,600,190	340,673	154,853	328,305	2,369,865
1932	..	..	5,386,602	416,961	138,286	583,154	2,128,125
			Annual Value Per Acre of—				
			Wheat.	Oats.	Barley.	Potatoes.	Hay.
			£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1928	..	..	1 10 10	1 6 0	3 17 6	5 0 1	4 1 1
1929	..	..	2 5 0	1 16 2	2 19 0	17 7 8	3 9 8
1930	..	..	1 0 0	0 17 7	3 1 6	11 15 2	3 9 4
1931	..	..	0 15 8	0 18 4	1 15 5	4 17 2	1 17 1
1932	..	..	1 10 3	0 19 0	2 1 8	8 6 9	2 4 6

The value of the five principal crops was £8,653,128 in 1931-32, as against £6,793,886 in 1930-31, £8,103,367 in 1929-30, £13,906,911 in 1928-29, and £9,782,309 in 1927-28.

Wheat  
growing in  
counties.

The principal wheat growing areas are the Wimmera, Mallee, and Northern districts. 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 production of wheat for grain in different counties for each of the last three seasons is shown in the following table:—

### WHEAT YIELDS IN COUNTIES FOR THE LAST THREE SEASONS.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1930.	1931.	1932.	1930.	1931.	1932.	1930.	1931.	1932.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
<b>Central—</b>									
Bourke ..	19,142	20,597	8,616	465,098	311,968	122,095	24.30	15.15	14.17
Grant ..	27,679	33,747	21,403	661,521	597,817	340,011	23.90	17.71	15.89
Morrong ..	5,696	7,224	760	132,083	120,773	8,886	23.19	16.72	11.69
Bvelyn ..	277	192	55	5,880	2,848	736	21.23	14.83	13.38
<b>Total ..</b>	<b>52,794</b>	<b>61,760</b>	<b>30,834</b>	<b>1,264,582</b>	<b>1,033,406</b>	<b>471,728</b>	<b>23.95</b>	<b>16.73</b>	<b>15.30</b>
<b>North-Central—</b>									
Anglesey ..	1,187	2,002	881	21,185	41,534	7,819	17.85	20.75	8.88
Dalhousie ..	2,626	2,399	1,011	51,658	37,552	9,388	19.67	15.65	9.29
Talbot ..	24,713	31,072	12,370	424,746	654,017	130,444	17.19	21.05	10.55
<b>Total ..</b>	<b>28,526</b>	<b>35,473</b>	<b>14,262</b>	<b>497,589</b>	<b>733,106</b>	<b>147,651</b>	<b>17.44</b>	<b>20.67</b>	<b>10.35</b>
<b>Western—</b>									
Grenville ..	17,330	21,704	12,244	437,147	404,672	163,513	25.22	18.65	13.35
Poiwarth ..	427	434	214	12,792	7,375	2,951	29.99	16.99	13.79
Heytesbury ..	47	13	..	1,089	98	..	23.17	7.54	..
Hampden ..	18,062	23,624	13,266	492,035	497,173	149,797	27.24	21.05	11.29
Ripon ..	43,712	52,240	32,523	1,364,893	1,220,062	460,175	31.22	23.35	14.15
Villiers ..	2,502	3,116	1,110	63,647	53,734	9,847	25.44	17.24	8.87
Normanby ..	1,769	3,196	1,302	38,393	42,998	13,834	21.70	13.46	10.63
Dundas ..	4,322	6,819	2,949	88,917	103,475	23,628	20.57	15.17	8.01
Follett ..	205	679	173	4,060	8,500	2,281	19.80	12.62	12.81
<b>Total ..</b>	<b>88,376</b>	<b>111,825</b>	<b>63,786</b>	<b>2,502,973</b>	<b>2,338,087</b>	<b>826,026</b>	<b>28.32</b>	<b>20.91</b>	<b>12.95</b>
<b>Wimmera—</b>									
Lowan ..	225,450	268,979	235,366	4,117,933	5,153,926	3,391,907	18.27	19.16	16.15
Borong ..	458,327	631,666	525,166	3,312,575	9,090,659	8,632,457	7.23	13.74	16.44
Kara Kara ..	159,996	233,882	181,503	951,862	2,419,685	2,440,473	5.96	10.35	13.45
<b>Total ..</b>	<b>843,773</b>	<b>1,164,527</b>	<b>942,035</b>	<b>8,382,370</b>	<b>16,664,270</b>	<b>14,474,837</b>	<b>9.93</b>	<b>14.31</b>	<b>15.79</b>
<b>Mallee—</b>									
Millewa ..	222,320	268,975	220,836	5,460	2,975,594	1,838,398	0.02	11.06	8.32
Weeah ..	240,707	298,159	238,461	598,709	3,012,842	2,345,840	2.49	10.10	9.84
Karkaroo ..	870,597	1,117,592	974,141	1,963,605	9,006,939	9,124,627	2.26	8.06	9.37
Tatchera ..	494,448	672,561	570,745	1,136,326	5,236,513	5,839,579	2.30	7.79	10.23
<b>Total ..</b>	<b>1,828,072</b>	<b>2,357,287</b>	<b>2,004,183</b>	<b>3,704,100</b>	<b>20,231,888</b>	<b>19,148,438</b>	<b>2.03</b>	<b>8.58</b>	<b>9.55</b>



WHEAT YIELDS IN COUNTIES FOR THE LAST THREE  
SEASONS—*continued*.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1930.	1931.	1932.	1930.	1931.	1932.	1930.	1931.	1932.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
<b>Northern—</b>									
Gunbower ..	38,569	40,950	23,541	278,260	316,755	278,772	7·21	7·74	11·84
Gladstone ..	128,972	188,422	122,164	722,520	2,628,574	1,211,100	5·60	13·94	9·91
Bendigo ..	143,679	167,123	71,816	1,216,389	2,556,167	781,763	8·47	15·30	10·89
Rodney ..	89,706	103,900	48,736	1,170,328	1,629,794	601,130	13·05	15·69	12·33
Moir ..	257,234	291,962	196,345	4,156,583	4,168,011	3,029,358	16·16	14·28	15·43
<b>Total ..</b>	<b>658,160</b>	<b>792,357</b>	<b>462,602</b>	<b>7,544,080</b>	<b>11,297,201</b>	<b>5,902,123</b>	<b>11·46</b>	<b>14·26</b>	<b>12·76</b>
<b>North-Eastern—</b>									
Delatite ..	7,987	9,797	5,232	191,098	181,746	46,123	23·93	18·55	8·82
Bogong ..	32,846	39,270	24,514	732,952	806,875	197,883	22·31	21·08	8·07
Benambra ..	300	279	192	7,606	4,582	2,636	25·35	16·42	13·73
Wonnangatta ..	..	..	..	..	..	..	..	..	..
<b>Total ..</b>	<b>41,133</b>	<b>43,346</b>	<b>29,938</b>	<b>931,656</b>	<b>993,203</b>	<b>246,642</b>	<b>22·65</b>	<b>20·54</b>	<b>8·24</b>
<b>Gippsland—</b>									
Croajingolong ..	22	17	1	323	296	16	14·68	17·41	16·00
Tambo ..	312	537	210	9,464	7,534	3,916	30·33	14·03	18·65
Dargo ..	1,324	1,731	1,028	39,068	35,769	13,859	29·51	20·66	13·48
Tanjil ..	21,191	23,677	15,945	488,018	431,677	306,137	23·03	18·23	19·20
Bulu Bulu ..	2,452	2,663	1,048	48,364	47,835	14,483	19·72	17·06	13·82
<b>Total ..</b>	<b>25,301</b>	<b>28,625</b>	<b>18,232</b>	<b>585,237</b>	<b>523,111</b>	<b>338,411</b>	<b>23·13</b>	<b>18·27</b>	<b>18·56</b>
<b>Total (State)</b>	<b>3,566,135</b>	<b>4,600,200</b>	<b>3,565,872</b>	<b>25,412,587</b>	<b>53,814,369</b>	<b>41,955,856</b>	<b>7·13</b>	<b>11·70</b>	<b>11·77</b>

The production of wheat in the other Australian States in 1931-32 was as follows:—New South Wales, 54,966,000 bushels; South Australia, 48,093,102 bushels; Western Australia, 41,521,245 bushels; Queensland, 3,863,894 bushels; and Tasmania, 186,500 bushels. The total production for the Commonwealth was 190,615,775 bushels.

**Varieties of  
Wheat, etc.,  
and Manure  
used.**

Australian wheat is noted for its hard, white, and dry qualities, and, on account of the whiteness of the flour made therefrom, it is much sought after by oversea millers for the purpose of mixing with other wheats. To assist the Agricultural Department in advising growers as to the most suitable varieties and the quantities to use in particular districts, inquiries have been made

yearly regarding the area sown under each variety of wheat, and the quantity of seed sown and manure used per acre. As a measure of economy these inquiries were not made concerning the 1932-33 season.

Analyses of the replies of the growers (approximately 70 per cent replied) are given in the appended tables:—

### VARIETIES OF WHEAT SOWN IN VICTORIA IN THE SEASONS 1928-29 TO 1931-32.

Variety.	1928-29.		1929-30.		1930-31.		1931-32.	
	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.	Relative Order of Importance.	Percentage (according to acreage) of total area in the State.
Free Gallipoli ..	2	10.56	1	22.20	1	34.53	1	39.01
Ranee ..	3	10.10	3	12.74	3	13.13	2	13.70
Federation ..	1	33.41	2	19.80	2	13.93	3	7.23
Sepoy ..	17	.88	8	2.95	4	5.66	4	6.76
Nabawa ..	19	.47	16	1.34	10	1.85	5	4.49
Major ..	6	4.52	5	5.38	5	4.56	6	3.60
Nizam ..	7	3.23	7	3.69	8	3.27	7	3.11
Currawa ..	4	7.76	4	7.02	6	4.36	8	2.81
Penny ..	5	4.58	6	4.22	7	3.68	9	2.16
Rajah ..	8	2.95	10	2.44	11	1.65	10	2.01
Gluyas ..	12	2.05	14	1.61	15	.92	11	1.32
Joffre ..	10	2.69	9	2.48	9	1.95	12	1.28
Wannon ..	11	2.19	13	1.63	14	.99	13	1.09
Bald Early ..	9	2.80	12	1.75	13	1.13	14	.95
Ghurka ..	31	.13	21	.29	18	.60	15	.90
Waratah ..	18	.47	20	.48	20	.53	16	.84
Mac's White ..	15	1.42	15	1.57	17	.74	17	.80
Huf's Imperial ..	14	1.85	17	1.13	13	.78	18	.78
Yandilla King ..	13	2.00	11	1.90	12	1.37	19	.69
Strongbolt ..	27	.15	19	.49	21	.46	20	.49
Turvey ..	16	1.30	18	.94	19	.59	21	.41
Bena ..	25	.18	22	.29	22	.39	22	.33
Pusa ..	52	.03	35	.09	45	.05	23	.12
Union ..	36	.09	38	.07	30	.10	24	.11
Warden ..	24	.20	30	.13	28	.13	25	.10
Other Varieties ..	..	3.94	..	3.37	..	2.65	..	1.91
..	..	100.00	..	100.00	..	100.00	..	100.00

Approximately 100 varieties of wheat were sown. The number of these which were tried in the Mallee greatly exceeded the number 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 each district, can be obtained on application to the Government Statist.

### ESTIMATED PERCENTAGE OF TOTAL AREA UNDER WHEAT, AND SEED AND MANURE USED, 1931-32.

District.	Percentage (according to acreage) of total area in the State.	Weight per acre of—	
		Seed Sown.	Manure Used.
	per cent.	lbs.	lbs.
Central .. .. .	1·09	89	93
North Central .. .. .	0·66	88	83
Western .. .. .	2·57	86	119
Wimmera .. .. .	25·46	71	66
Mallee .. .. .	54·90	55	48
Northern .. .. .	13·69	69	71
North Eastern .. .. .	1·01	76	85
Gippsland .. .. .	0·62	84	82
Total State .. .. .	100·00	63	59

The rate of sowing, in the principal wheat growing counties, ranged from 44 lbs. of seed per acre in the County of Millewa to 88 lbs. in Ripon. Manure used varied from 38 lbs. per acre in Millewa to 125 lbs. in Ripon.

The weight of an imperial bushel of wheat is 60 lbs., but the actual weight of a bushel of Victorian wheat of the fair average quality standard annually fixed by the Chamber of Commerce was  $62\frac{3}{4}$  lbs. for the season 1931-32 and 61.5 lbs. on the average of the last ten years. In 1931, the weight of a bushel (f.a.q.) was fixed at  $58\frac{1}{2}$  lbs., and this was the only time since 1872 (59 lbs.) that the weight of a bushel of Victorian wheat had been lower than that of an imperial bushel.

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

### WHEAT AND FLOUR ON HAND, 1928 to 1932.

At 31st October—	Quantity in Bushels.		
	Wheat.	Flour (equivalent in Wheat).	Total.
1928 .. .. .	2,995,000	995,400	3,990,400
1929 .. .. .	4,362,300	1,090,100	5,452,400
1930 .. .. .	6,126,500	1,305,400	7,431,900
1931 .. .. .	6,800,694	1,040,463	7,841,157
1932 .. .. .	4,735,603	1,537,840	6,273,443

In addition to the area under oats harvested for grain last season as shown in the table on page 338, there were 781,932 acres cut for hay, so that the total area sown with oats was 1,221,558 acres. Enquiries in regard to the different kinds of oats

sown for the 1931-32 season showed that, of those growers who supplied the information, 87 per cent. planted principally Algerian, and 4 per cent. Mortgage Lifter oats, and 2 per cent. Mulga.

The area under barley in 1931-32 was 66,381 acres, of which 51,193 were under malting, and 15,188 under other barley. The figures in the subjoined table show the acreage, production, and yield per acre, for each of the last five years :—

BARLEY PRODUCTION, 1927-28 to 1931-32.

Year ended March—	Area under Crop.		Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels.
1928 ..	50,005	26,763	866,213	685,896	17·32	25·63	20·22
1929 ..	49,345	26,106	945,865	610,253	19·17	23·38	20·62
1930 ..	65,740	31,938	1,378,022	805,303	20·96	25·21	22·35
1931 ..	60,800	26,718	1,401,306	581,824	23·05	21·78	22·66
1932 ..	51,193	15,188	952,418	304,260	18·60	20·03	18·93

During 1931-32, 1,105,860 bushels of barley were used locally in the production of 1,085,416 bushels of malt.

Of the total area under hay in 1931-32, as shown in the table on page 338, 781,932 acres under oats produced 867,457 tons, 139,683 acres under wheat produced 150,242 tons, and 34,224 acres under lucerne and other crops produced 51,577 tons; the yields per acre of these varieties of hay were 1.11, 1.08, and 1.51 tons respectively. The quantity of straw returned for the season 1931-32 was 14,565 tons.

Information is obtained direct from growers in regard to the prices of the leading agricultural products. The following table gives the average price of each product (value to the producer) for each of the last five seasons :—

PRICES OF AGRICULTURAL PRODUCTS, 1927-28 to 1931-32.

Average Prices realized for Season.	Wheat.	Oats.	Barley.		Hay.	Potatoes.	
			Malting.	Other.		Early Crop.	Main Crop (after March).
	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 ton. s. d.
1927-28 ..	3 1½	2 5½	4 0½	3 1½	70 0	84 0	28 0
1928-29 ..	3 3	2 0	3 0	2 1½	52 0	158 0	169 0
1929-30 ..	2 3½	1 9½	2 9½	2 3	59 0	143 0	71 0
1930-31 ..	1 1	0 10½	1 7½	0 11½	27 5	79 0	30 0
1931-32 ..	*2 4½	1 2	2 1½	1 7½	38 1	93 0	52 0

\* Includes bonus of 4½d. per bushel.

NOTE.—The above prices represent the f.o.b. values, less the following deductions :—Freight and handling charges, and cost of bags, seed, and manure.

Metropolitan  
prices of  
agricultural  
and pastoral  
products.

In the foregoing table, the value of agricultural products to the producer is given, after making allowance for certain deductions. The metropolitan (or seaboard) prices for the principal agricultural and pastoral products are shown in the following statement:—

### METROPOLITAN PRICES OF AGRICULTURAL AND PASTORAL PRODUCTS, 1927-28 to 1931-32.

Average Prices realized for Season—	Wheat.	Oats.	Barley.		Hay.	Potatoes.	Wool.	Butter.
			Malting.	Other.				
	per bushel.	per bushel.	per bushel.	per bushel.	per ton.	per ton.	per lb.	per lb.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1927-28 ..	5 4	4 2	5 3	4 2	92 6	82 0	1 8.56	..
1928-29 ..	4 9	3 1	4 2	3 2½	75 0	217 0	1 5.37	1 8.66
1929-30 ..	4 4	3 4	3 9	3 1	85 0	115 0	0 10.30	1 6.35
1930-31 ..	2 6	1 9½	2 6	1 9	53 0	72 0	0 8.65	1 2.43
1931-32 ..	3 2½	2 0	3 0½	2 5½	45 11	92 0	0 8.76	1 1.05

The area under other than principal crops and the production since March, 1929, are shown in the subjoined table:—

### OTHER THAN PRINCIPAL CROPS, 1929-30 to 1931-32.

Crop.	1929-30.		1930-31.		1931-32.	
	Area.	Production.	Area.	Production.	Area.	Production.
	acres.	bushels.	acres.	bushels.	acres.	bushels.
Maize, for grain	17,640	533,719	16,227	692,896	15,714	611,902
Rye .. ..	854	11,068	959	10,199	754	7,966
Peas .. ..	8,438	193,640	7,724	153,124	7,345	114,701
		tons.		tons.		tons.
Mangel-wurzel ..	486	5,539	360	5,167	416	5,067
Beet, Carrots, Parsnips and Turnips	243	1,798	248	3,003	193	2,179
Onions .. ..	7,828	43,646	6,286	41,193	5,306	17,946
Green Forage ..	169,253	..	126,347	..	119,006	..
		bushels.		bushels.		bushels.
Grass and Clover		25,696		28,744		31,442
Seeds .. ..	1,670	cwt.	2,000	cwt.	3,278	cwt.
Hops .. ..	201	3,713	185	2,660	167	1,892
Tobacco .. ..	1,822	11,353	2,650	11,335	12,191	59,451
Vines—Grapes	40,594	4,040,230	38,720	2,639,902	38,215	3,215,831
		cwt.		cwt.		cwt.
Flax .. ..	703	2,840 seed	1,216	3,823 seed	921	2,500 seed
		760 fibre		2,340 fibre		585 fibre
		980 tow		2,100 tow		1,600 tow
Gardens and Orchards	80,820	..	79,490	..	76,834	..
Minor Crops* ..	9,645	..	9,321	..	9,336	..
Land in Fallow	2,482,662	..	2,590,629	..	2,145,819	..
Lucerne† .. ..	138,781	..	133,610	..	130,357	..
Artificial Grasses†	1,002,376	..	1,101,002	..	1,282,489	..

\* For details see page 353.

† Not cut for seed or hay.

**Maize.** The area under maize for grain in 1931-32 was 15,714 acres, and the production was 611,902 bushels, which represented a yield of 38·94 bushels per acre. Of the total production for last season 92 per cent. was obtained from the Gippsland district. The area, total production, and produce per acre are given in the next table for each of the last five seasons.

**MAIZE PRODUCTION, 1927-28 to 1931-32.**

Period or Year (ending in June)				Area under Maize for Grain.	Production.	Produce per Acre.
				acres.	bushels.	bushels.
1928	..	..	..	17,645	757,780	42·95
1929	..	..	..	16,077	679,810	42·28
1930	..	..	..	17,640	533,719	30·26
1931	..	..	..	16,227	692,896	42·70
1932	..	..	..	15,714	611,902	38·94

On the average of the last five seasons the yield per acre was 39·33 bushels, as against 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.

**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 4,030 tons from 1,155 acres; in Villiers, 3,278 tons from 1,133 acres; in Bourke, 3,133 tons from 532 acres; in Polwarth, 2,657 tons from 718 acres; in Grant, 2,350 tons from 802 acres; in Buln Buln, 1,263 tons from 510 acres; and in Mornington, 1,025 tons from 351 acres. The following statement shows the area and yield for each of the last five years:—

**ONION PRODUCTION, 1927-28 to 1931-32.**

Year ended March—				Area.	Production.	Produce per Acre.
				acres.	tons.	tons.
1928	..	..	..	7,659	32,936	4·30
1929	..	..	..	7,673	29,700	3·87
1930	..	..	..	7,828	43,646	5·58
1931	..	..	..	6,286	41,193	6·55
1932	..	..	..	5,306	17,946	3·38

The value of onions grown was £179,425 in 1931-32, as compared with £52,018 in 1930-31, £74,704 in 1929-30, £187,233 in 1928-29, and £188,186 in 1927-28.

**Tobacco.** Prior to the year 1931-32 the maximum yield of tobacco for any year was in 1880-81, when 17,333 cwt. of dry leaf was produced from 1,990 acres. Since that period great variations have taken place in area and produce, but during the last five years there has been a considerable advance in the industry. In 1931-32, following on the imposition of the emergency tariff rates, a great increase occurred in the acreage planted, the production for the season being the highest recorded in the history of the State. The total acreage was 12,191 acres and the yield therefrom 59,451 cwt., as compared with an area of 2,650 acres and a yield of 11,335 cwt. in the previous year. The yields in the principal counties in 1931-32 were:—Delatite, 23,027 cwt. from 4,571 acres; Bogong, 20,715 cwt. from 3,762 acres; Moira, 6,510 cwt. from 1,391 acres; Borung, 3,309 cwt. from 997 acres; Rodney, 1,331 cwt. from 408 acres; and Gunbower, 2,084 cwt. from 369 acres. The average yield per acre for the State was 546·17 lbs., and the average price per acre £55 19s. 5d. Particulars relating to the cultivation of tobacco for each of the last five years are as follows:—

#### TOBACCO PRODUCTION, 1927-28 to 1931-32.

Year ended June—					Area.	Production.	Produce per Acre.
					acres.	cwt. (dry).	cwt. (dry).
1928	..	..	..	..	1,176	9,055	7·70
1929	..	..	..	..	1,317	9,375	7·12
1930	..	..	..	..	1,822	11,353	6·78
1931	..	..	..	..	2,650	11,335	4·28
1932	..	..	..	..	12,191	59,451	4·88

**Vine Production.** The area under vines and the number of growers have shown a fairly large increase over the last fifteen years.

Vineyards are distributed fairly well over the State, and there are certain districts where the principal industries are connected with vine-growing. The Shire of Mildura produced last season 2,681,654 cwt. of

grapes; Swan Hill, 344,795 cwt.; and Rutherglen, 116,131 cwt. At Mildura the crop is principally dried for raisins and currants. The results of five years' operations are given below:—

VINE PRODUCTION, 1927-28 to 1931-32.

Year ended 30th June—	Number of Growers.	Area.		Produce.				
		Bearing.	Not Bearing.	Grapes gathered.	Wine made.	Dried Produce Made.		
						Raisins.		Currants.
						Lexias.	Sultanas.	
		acres.	acres.	cwt.	gallons.	cwt.	cwt.	cwt.
1928 ..	2,774	37,974	3,014	2,275,770	2,353,890	75,672	326,649	73,101
1929 ..	2,746	38,689	2,876	4,117,757	1,942,701	94,520	676,599	189,985
1930 ..	2,701	38,327	2,267	4,040,230	1,363,575	95,255	688,399	178,226
1931 ..	2,610	37,528	1,192	2,639,902	1,254,615	84,210	363,336	156,689
1932 ..	2,560	36,861	1,354	3,215,831	1,530,061	65,151	528,893	156,651

Of the total quantity of grapes gathered in 1931-32, it is estimated that 218,977 cwt. were used for making wine and spirits, 2,920,714 cwt. for raisins and currants, and 76,140 cwt. for table consumption and export.

Of the dried fruit made, 61,437 cwt. of lexias, 456,870 cwt. of sultanas, and 146,347 cwt. of currants were made in the Mildura shire, and 3,650 cwt. of lexias, 70,940 cwt. of sultanas, and 9,409 cwt. of currants were made in the Swan Hill shire.

Raisins and currants are produced in Victoria upon a scale far in excess of the State's requirements. During 1931-32 the following quantities were exported oversea:—Sultanas, 402,510 cwt., valued at £923,854; lexias, 37,630 cwt., valued at £60,811; raisins, other, 2,543 cwt., valued at £4,163; and currants, 129,025 cwt., valued at £288,050.

The area of orchards growing fruit for sale in 1931-32 —75,280 acres—showed a decrease of 2,560 acres as compared with the area for the previous year. Orchards are distributed over the whole State, and the counties having the largest areas in the season 1931-32 were as follows:—Mornington, 14,387 acres; Bourke, 11,869 acres; Evelyn, 10,463 acres; Rodney,

Orchards  
growing fruit  
for sale.



9,358 acres; Moira, 7,516 acres; Talbot, 3,951 acres; and Bendigo, 2,779 acres. Details of the produce from such orchards in the last five years are given in the subjoined statement:—

**ORCHARDS GROWING FRUIT FOR SALE,  
1927-28 to 1931-32.**

Year ended March—	Number of Fruit-growers.	Area of Gardens and Orchards.	LARGE FRUITS GATHERED.					
			Apples.	Pears.	Quinces.	Plums.	Prunes.	Cherries.
		acres.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1928	7,209	79,293	3,712,350	1,053,481	115,606	231,728	79,481	47,795
1929	7,119	77,622	626,294	772,213	76,868	165,658	76,237	51,765
1930	7,241	79,000	2,779,107	1,166,418	84,894	204,583	86,298	46,060
1931	7,057	77,840	1,515,419	707,145	66,544	203,062	94,578	46,256
1932	7,049	75,280	1,015,169	878,171	41,836	106,113	31,021	25,009

Large Fruits Gathered—continued.								
	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Nectarines.	Passion.	Other.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1928	1,350,701	416,277	378,101	162,860	18,125	23,142	22,072	3,608
1929	1,043,840	468,536	354,817	137,684	18,776	12,451	38,105	1,656
1930	1,191,253	447,131	385,106	114,081	17,898	19,210	13,063	6,313
1931	1,028,493	305,717	516,133	134,479	16,414	14,349	27,436	2,884
1932	697,204	267,121	647,410	224,144	18,852	4,995	13,392	4,578

	BERRY FRUITS GATHERED.					NUTS GATHERED.			
	Rasp-berries.	Straw-berries.	Goose-berries.	Logan-berries.	Other.	Almonds.	Walnuts.	Filberts.	Chest-nuts.
	cwt.	cwt.	cwt.	cwt.	cwt.	lbs.	lbs.	lbs.	lbs.
1928	3,295	4,958	4,449	4,859	1,760	66,783	30,236	148	26,066
1929	2,210	6,522	3,038	3,403	1,269	115,835	47,094	205	22,965
1930	3,056	12,047	6,456	5,395	1,783	63,332	24,244	654	18,476
1931	3,014	9,184	4,121	3,642	1,032	97,538	26,999	433	21,048
1932	1,506	1,770	1,632	600	545	80,537	54,013	412	19,227

Of the large types of fruits, pome fruits have fluctuated more in yield than fruits of other classes.

In 1927-28, following on the "thrips" visitation in 1926-27, the yield for all fruits was exceptionally heavy, that for pome and citrus

fruits constituting a record. In the three succeeding seasons normal yields were obtained from all classes with the exception of the pome fruits, the yields from these fruits being very low in 1928-29, high in 1929-30, and low in 1930-31. In 1931-32, owing to a return of the "thrips" pest, yields of all fruits, citrus excepted, were below normal. The citrus crop for 1931-32 was the highest on record.

In addition to the fruits shown, large quantities of melons, rhubarb, and tomatoes were produced in the orchards, the following being the quantities returned for 1931-32:—Melons, 8,504 cwt. ; rhubarb, 17,855 dozen bundles ; and tomatoes, 170,441 bushels. There were also 1,554 acres laid down in gardens growing fruit for private use; the value of the produce from these was estimated at about £7,770.

The following is a statement of the number of bearing and not bearing fruit trees and plants for the seasons 1928-29 and 1931-32 :—

RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS WHERE FRUIT WAS GROWN FOR SALE, 1928-29 AND 1931-32.

Fruit.	Number of Trees, Plants, &c.					
	1928-29.			1931-32.		
	Bearing.	Not Bearing.	Total.	Bearing.	Not Bearing.	Total.
Apples .. ..	2,358,422	740,772	3,099,194	2,361,472	680,239	3,041,711
Pears .. ..	814,847	200,517	1,015,364	826,854	188,546	1,015,400
Quinces .. ..	83,991	7,875	91,866	74,492	11,735	86,227
Plums .. ..	306,585	57,438	364,023	283,770	72,999	356,769
Prunes .. ..	83,292	23,343	106,635	79,773	4,790	84,563
Cherries .. ..	93,408	34,118	127,526	79,471	55,046	134,517
Peaches .. ..	926,060	270,587	1,196,647	871,919	252,348	1,124,267
Apricots .. ..	406,864	51,628	458,492	339,526	41,033	380,559
Nectarines .. ..	16,676	4,318	20,994	14,896	5,737	20,633
Oranges .. ..	411,502	154,650	566,152	452,368	101,232	554,000
Lemons .. ..	141,895	47,246	189,141	141,030	40,441	181,071
Loquats .. ..	3,334	963	4,297	2,861	792	3,653
Figs .. ..	28,834	5,725	34,559	29,602	7,421	37,023
Perseimons .. ..	581	135	716	575	62	637
Total Large Fruits	5,676,291	1,599,315	7,275,606	5,558,609	1,462,421	7,021,030
Raspberries .. ..	319,425	..	319,425	339,761	..	339,761
Loganberries .. ..	218,168	..	218,168	143,325	..	143,325
Strawberries .. ..	4,574,587	..	4,574,587	6,011,409	..	6,011,409
Gooseberries .. ..	160,776	..	160,776	152,669	36,085	188,754
Mulberries .. ..	896	135	1,031	774	103	877
Currants (Red, White, and Black) .. ..	25,627	1,118	26,745	27,023	9,124	36,147
Olives .. ..	1,244	38	1,282	4,064	114	4,178
Passion-fruit .. ..	82,041	32,593	114,634	69,986	40,710	110,696
Almonds .. ..	30,176	7,024	37,200	28,929	9,297	38,226
Walnuts .. ..	6,287	3,680	9,967	7,172	3,208	10,380
Filberts .. ..	157	423	580	527	1,804	2,331
Chestnuts .. ..	443	330	773	523	271	794
Total Nuts	37,063	11,457	48,520	37,151	14,580	51,731

According to prices received by growers the value of fruit which reaches market was estimated to be £1,189,356 in 1927-28, £1,093,434 in 1928-29, £927,723 in 1929-30, £751,716 in 1930-31, and £790,018 in 1931-32. This, of course, does not represent the actual value of all the fruit grown, as large quantities are privately consumed in various ways. No very reliable estimate of the value of such fruit can be prepared, but it may be set down at about £40,000.

The area under market gardens in the year 1931-32 was 19,786 acres. As these gardens are generally situated near large centres of population, the producers are able to dispose of the bulk of their goods with a minimum loss from waste, &c. An average return of £50 per acre is regarded as a fair estimate of their value, and on this basis the total value of the produce may be given as approximately £1,000,000. This does not include crops of one acre and over of potatoes, onions, mangel-wurzel, beet, carrots, parsnips, and turnips grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

The quantity of dried fruit (weight after drying) was first collected in 1895-96, when 179,460 lbs. were returned. During 1931-32, owing to the recurrence of the "thrips" pest, the quantity produced—386,650 lbs.—was only 35.7 per cent. of the production for the previous season, and was well below the returns for any season since 1918-19. The production of the various kinds of dried fruit, with the exception of raisins and currants, the particulars of which appear on page 349, is shown in the following statement for each of the last five seasons :—

## DRIED FRUIT, 1927-28 to 1931-32.

Year ended June—	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Pears.	Nectarines.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1928 ..	3,351	610,073	305,984	188,085	10,245	85,396	4,424	1,207,558
1929 ..	2,194	760,216	136,033	586,140	7,685	71,591	4,269	1,568,128
1930 ..	3,424	848,811	234,032	343,490	6,878	82,267	860	1,519,762
1931 ..	2,444	853,535	184,883	360,893	20,120	45,419	1,566	1,468,860
1932 ..	1,542	115,905	32,470	176,844	3,864	56,025	..	386,650

The following is a return of the minor crops for the last two seasons. The items do not in all cases represent the whole of the respective crops grown, but refer only to such as were taken cognisance of by the collectors. The return, therefore, indicates the nature of the crops rather than the full extent of their cultivation:—

MINOR CROPS, 1930-31 AND 1931-32.

Crop.	1930-31.		1931-32.	
	Area.	Produce.	Area.	Produce.
	acres.		acres.	
Artichokes .. ..	6	20 tons	4	17 tons
Beans .. ..	1,587	18,813 bushels	2,101	28,209 bushels
Chicory .. ..	344	358 tons (dry)	434	368 tons (dry)
Flowers .. ..	417	..	442	..
Garlic .. ..	..	..	2	7 tons
Herbs and Scent Plants..	48	..	48	..
Millet—Broom ..	1,232	{ 5,441 cwt. fibre 4,678 cwt. seed }	637	{ 1,749 cwt. fibre 1,090 cwt. seed }
Nurseries .. ..	1,266	..	1,163	..
Pumpkins .. ..	1,078	5,865 tons	996	5,758 tons
Seeds—Agricultural and Garden ..	121	..	116	..
Sugar Beet .. ..	3,045	{ 38,291 tons clean beet, producing 5,095 tons market- able sugar }	3,173	{ 43,209 tons clean beet, producing 5,428 tons market- able sugar }
Sunflowers .. ..	102	898 cwt.	220	1,862 cwt.
Total .. ..	9,246	..	9,336	..

The increase in the acreage in fallow and in the proportion of farmers using manures indicates the popularity and the value of these methods of treating the soil. The following table shows the acreage in fallow and the number of farmers using manure, and the quantity used, in various years :—

Land in  
fallow and  
manure used.

## LAND IN FALLOW AND MANURE USED, 1901-02 TO 1931-32.

Season ended March—	Land in Fallow.	Manure used.			
		Number of Farmers using.	Area used on.	Natural.	Artificial.
	acres.		acres.	tons.	tons.
1902 ..	681,778	11,439	556,777	153,611	23,535
1912 ..	1,469,608	26,159	2,676,408	205,739	82,581
1922 ..	2,052,964	37,835	3,848,184	161,683	150,012
1928 ..	2,692,044	43,682	5,148,144	140,410	240,715
1929 ..	2,683,462	43,962	5,753,116	114,345	257,498
1930 ..	2,482,662	45,426	6,022,951	120,991	269,967
1931 ..	2,590,629	44,989	6,898,718	104,732	274,420
1932 ..	2,145,819	38,844	3,927,208	98,375	163,234

NOTE.—The average weight of manure used per acre in each district will be found on page 344.

Nearly all of the fallowed area is devoted to wheat production. Of the 2,145,819 acres in fallow last season, 796,393 were in the Mallee, 666,144 in the Wimmera, and 431,882 in the Northern district. The total for these three districts represented 88 per cent. of the land fallowed in the State.

Portion of the increase in later years in the area on which manure is used is accounted for by the increasing practice of treating pastures with artificial fertilizers. The collapse in the prices of primary products and the smaller acreage under cultivation resulted in a considerable decrease in the area on which fertilizers were used in the season 1931-32. The financial stress was responsible also for a reduced quantity of manure being used per acre, the average amount used on wheat lands falling from 71 lbs. per acre in 1930-31 to 59 lbs. per acre in 1931-32. During 1931-32 the quantity of fertilizers imported into Victoria from overseas countries was 96,259 tons valued at £123,802. This included 95,911 tons of rock phosphates valued at £121,078, most of which came from the Pacific Islands. The quantities of fertilizers imported in previous years were:—165,272 tons in 1930-31, 199,233 tons in 1929-30, and 252,004 tons in 1928-29.

Persons employed on Farming, Dairying, and Pastoral Holdings. Information is obtained by the collectors of agricultural statistics each year as to the number of persons ordinarily employed upon the land occupied. For the last five years the numbers were as follows :—

**NUMBER OF PERSONS EMPLOYED UPON FARMING, DAIRYING, AND PASTORAL HOLDINGS, 1927-28 to 1931-32.**

Year ending March.	Males.	Females.	Total.
1928 .. ..	95,639	13,841	109,480
1929 .. ..	98,296	14,508	112,804
1930 .. ..	101,044	11,553	112,597
1931 .. ..	103,227	10,906	114,133
1932 .. ..	105,732	9,605	115,337

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 not included in the above tabulation, neither are domestic servants nor cooks. Only females who are wholly engaged in outdoor duties are included. It is estimated that the temporary labour employed on farms and pastoral holdings is equivalent to about 30,000 men employed continuously throughout the year.

Wages—agricultural and pastoral. In the next return will be found particulars of the rates of wages paid (with rations) upon farms and pastoral holdings during 1931-32. The information has been furnished by the occupiers of holdings.

**WAGES, AGRICULTURAL AND PASTORAL, 1931-32.**

Occupations.	Range.	Prevailing Rate.
Ploughmen .. ..	20s. to 50s. per week ..	32s. 6d. per week
Farm labourers .. ..	20s. to 60s. per week ..	30s. per week
Threshing machine hands ..	9d. to 15d. per hour ..	12d. per hour
Harvest hands .. ..	5s. to 10s. per day ..	8s. per day
Milkers .. ..	20s. to 30s. per week ..	25s. 6d. per week
Maize pickers (without rations)	5d. to 9d. per bag ..	6d. per bag
Married couples .. ..	30s. to 60s. per week ..	46s. per week
Female servants .. ..	10s. to 30s. per week ..	19s. per week
Shearers, hand (without rations)	30s. to 35s. per 100 sheep	32s. 6d. per 100 sheep
„ machine (without rations) .. ..	30s. to 40s. per 100 sheep	32s. 6d. per 100 sheep
Gardeners, market .. ..	20s. to 40s. per week ..	30s. per week
„ orchard .. ..	25s. to 60s. per week ..	40s. per week
Vineyard hands .. ..	25s. to 66s. per week ..	45s. per week

## PASTORAL AND DAIRYING INDUSTRIES.

**Live Stock.** The pastoral and dairying industries have always been important sources of wealth to the State, and their increasing value in recent years, despite the larger areas devoted to cultivation, indicates that both pastures and stock are, on the whole, steadily improving. The progress of stock breeding is shown in the next table, which gives the numbers of horses, dairy cows, other cattle, sheep and pigs, and their numbers per head of population and per square mile, in each of the last seven census years, also in the years 1931 and 1932:—

## LIVE STOCK IN VICTORIA, 1861 to 1932.

At 31st March—			Cattle—		Sheep.	Pigs.
			Horses (including Foals).	Dairy Cows.	Other.	
			number.	number.	number.	number.
1861	..	..	76,536	197,332	525,000	5,780,896
1871	..	..	209,025	212,193	564,534	10,477,976
1881	..	..	275,516	329,198	957,069	10,360,285
1891	..	..	436,469	395,192	1,387,689	12,692,843
1901	..	..	392,237	521,612	1,080,772	10,841,790
1911	..	..	472,080	668,777	878,792	12,882,665
1921	..	..	487,503	620,005	955,154	12,171,084
1931	..	..	379,872	669,132	760,788	16,477,995
1932	..	..	375,459	775,538	861,992	16,376,217
<i>Per Head of Population.</i>						
1861	..	..	·14	·37	·97	10·70
1871	..	..	·29	·29	·77	14·32
1881	..	..	·32	·38	1·11	12·01
1891	..	..	·38	·35	1·22	11·13
1901	..	..	·33	·43	·90	9·03
1911	..	..	·36	·51	·67	9·79
1921	..	..	·32	·41	·63	7·99
1931	..	..	·21	·38	·43	9·27
1932	..	..	·21	·43	·48	9·09
<i>Per Square Mile.</i>						
1861	..	..	·87	2·25	5·97	65·78
1871	..	..	2·38	2·41	6·42	119·22
1881	..	..	3·14	3·75	10·89	117·88
1891	..	..	4·97	4·50	15·79	144·43
1901	..	..	4·46	5·94	12·30	123·36
1911	..	..	5·37	7·61	10·00	146·59
1921	..	..	5·55	7·05	10·87	138·49
1931	..	..	4·32	7·61	8·66	187·50
1932	..	..	4·27	8·82	9·81	186·34

By reducing horses and cattle to an equivalent in sheep on the assumption that each head of large stock will eat as much as ten sheep, interesting comparisons of the stock carried on the land at different periods may be instituted. Calculations made on this basis show that each square mile carried an equivalent of 415 sheep in 1932, as compared with 373 in 1921, 350 in 1901, and 296 in 1881.

On pages 572 to 575 of the 1928-29 issue of this work will be found detailed information relating to the number and size of holdings and the live stock, cultivation, &c., on different sized holdings for the year 1929, also certain comparative figures for the years 1913, 1919, and 1925.

Land occupied  
in different  
districts.

The following tables give information relating to land occupied in each district in March, 1932 :—

### LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1932.

(Areas of 1 acre and upwards.)

Districts.	Total Area of Districts.	Number of Occupiers.	Acres Occupied.				
			For Agricul- tural Purposes.	For Pasture.		Unpro- ductive.	Total.
				Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
	acres.						
Central ..	4,065,280	16,786	399,522	266,787	1,870,329	215,403	2,752,041
North-Central ..	2,929,920	5,405	118,124	36,793	2,016,591	52,037	2,223,545
Western ..	8,775,040	12,118	347,064	400,935	5,434,202	553,100	6,735,301
Wimmera ..	7,394,560	6,191	1,882,692	25,440	3,764,069	411,211	6,083,412
Mallee ..	10,784,000	8,255	3,314,141	10,288	2,500,176	304,524	6,129,129
Northern ..	6,837,280	12,006	1,194,361	155,453	3,966,054	60,272	5,376,140
North-Eastern ..	7,220,480	5,263	123,292	28,120	3,101,672	703,695	3,956,779
Gippsland ..	8,739,200	8,972	173,732	489,030	2,132,466	1,224,469	4,019,697
Total ..	56,245,760	74,996	7,552,928	1,412,846	24,785,559	3,524,711	37,276,044
PERCENTAGE OF TOTAL OCCUPIED IN EACH DISTRICT.							
Central ..	..	..	14.52	9.69	67.96	7.83	100.00
North-Central ..	..	..	5.31	1.66	90.69	2.84	100.00
Western ..	..	..	5.15	5.95	80.68	8.22	100.00
Wimmera ..	..	..	30.95	0.42	61.87	6.76	100.00
Mallee ..	..	..	54.07	0.17	40.79	4.97	100.00
Northern ..	..	..	22.22	2.89	73.77	1.12	100.00
North-Eastern ..	..	..	3.12	0.71	78.39	17.78	100.00
Gippsland ..	..	..	4.32	12.17	53.05	30.46	100.00
Total ..	..	..	20.26	3.79	66.49	9.46	100.00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.							
Central ..	7.23	22.38	5.29	18.88	7.55	6.11	7.38
North-Central ..	5.21	7.21	1.56	2.61	8.14	1.48	5.97
Western ..	15.60	16.16	4.60	28.38	21.93	15.69	18.07
Wimmera ..	13.14	8.25	24.93	1.80	15.19	11.67	16.32
Mallee ..	19.17	11.01	43.88	0.73	10.09	8.64	16.44
Northern ..	11.27	16.01	15.81	11.00	16.00	1.71	14.42
North-Eastern ..	12.84	7.02	1.63	1.99	12.50	19.96	10.62
Gippsland ..	15.54	11.96	2.30	34.61	8.60	34.74	10.78
Total ..	100.00	100.00	100.00	100.00	100.00	100.00	100.00

It will be seen from these tables that the largest areas under cultivation and the largest proportions of cultivation to land occupied are found in the Mallee, Wimmera, and Northern districts. Of the occupied land, 54 per cent. in the Mallee, 31 per cent. in the Wimmera, and



22 per cent. in the Northern districts were devoted to agriculture in 1931-32, and these divisions supplied over 85 per cent. of the 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 in these are found 82 per cent. of all the sown grasses of the State. In 1914, 60 per cent. of the sown grasses were in Gippsland.

Areas occupied  
and stock  
thereon, in  
districts.

The next table contains particulars of the distribution of horses, cattle, and sheep on agricultural and pastoral lands in March, 1932:—

### AREA OCCUPIED AND STOCK THEREON, 1932.

Districts.	Area Occupied for—		Number of—				
	Agriculture.	Pasture.	Horses.	Dairy Cattle.	Other Cattle.	Sheep.	
	acres.	acres.					
Central ..	399,522	2,137,116	73,527	150,110	130,645	1,317,128	
North-Central ..	118,124	2,053,384	17,760	37,289	52,188	1,518,730	
Western ..	347,064	5,835,137	49,053	198,353	183,783	4,722,799	
Wimmera ..	1,882,692	3,789,509	51,016	21,296	21,027	2,504,766	
Mallee ..	8,314,141	2,510,464	58,489	21,491	19,606	968,318	
Northern ..	1,194,361	4,121,507	63,210	103,003	114,419	2,758,130	
North-Eastern ..	123,292	3,129,792	24,879	77,146	152,871	1,401,011	
Gippsland ..	173,732	2,621,496	32,535	166,845	187,453	1,184,845	
Total ..	7,552,928	26,198,405	375,459	775,538	861,992	16,376,217	

The area occupied does not include 3,524,711 acres which are mostly in an unproductive state.

Live stock  
in Victoria.  
1928 to 1932.

The following return shows the live stock in Victoria in each of the last five years:—

### LIVE STOCK IN VICTORIA, 1928 to 1932.

Live Stock.		1928.	1929.	1930.	1931.	1932.
Horses (including foals) ..	..	428,666	412,877	393,015	379,872	375,459
Cattle—						
Dairy Cows ..	..	626,139	615,092	619,416	669,132	775,538
Other (including calves) ..	..	700,938	680,334	715,826	760,788	861,992
Sheep ..	..	15,557,067	16,498,222	17,427,203	16,477,995	16,376,217
Pigs ..	..	212,785	222,084	265,978	281,245	286,780

Comparing 1932 with 1931, cattle increased by 14·5 per cent., and pigs by 2·0 per cent., while sheep decreased by ·6 per cent., and horses by 1·2 per cent.

The peak period for horses was 562,331 in 1914, since when, owing to the increased use of motor vehicles for transport and tractors on farms, there has been a fairly constant decrease in the number each year. The decline in the last ten years amounted to 24 per cent.

The number of sheep in the State in 1930, 17,427,203, established a record.

In the subjoined table will be found a statement of the average and the range of prices of live stock ruling in Melbourne during the years 1930-31 and 1931-32. The information has been extracted from the Melbourne *Stock and Station Journal*.—

**PRICES IN MELBOURNE OF LIVE STOCK,  
1930-31 AND 1931-32.**

Stock.	Prices in 1930-31.			Prices in 1931-32.		
	Average.	Range.		Average.	Range.	
<i>Horses.</i>	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Extra heavy draught	37 5 0	35 0 0 to 40 0 0	39 0 0	35 0 0 to 40 0 0		
Medium draught ..	26 1 0	24 0 0 to 28 0 0	29 13 4	25 0 0 to 31 10 0		
Delivery cart ..	14 0 0	..	15 3 4	14 0 0 to 16 0 0		
Indian Remounts ..	17 6 0	17 0 0 to 18 0 0	17 0 0	17 0 0 to 17 0 0		
Saddle and harness	7 10 0	..	7 10 0	7 10 0 to 7 10 0		
Ponies ..	7 10 0	..	9 3 4	7 10 0 to 9 10 0		
Order cart ..	12 0 0	..	12 11 8	12 0 0 to 13 0 0		
<i>Fat Cattle.</i>						
Bullocks—						
Extra prime ..	18 5 9	13 9 4 to 24 18 9	12 9 10	11 9 4 to 13 15 11		
Prime ..	16 5 9	12 4 5 to 22 9 8	11 8 6	10 10 10 to 12 10 8		
Good ..	14 15 0	11 7 10 to 19 10 4	10 13 5	10 2 6 to 11 11 10		
Good light and handy weights	13 4 0	10 4 7 to 16 17 6	9 19 11	8 19 2 to 11 8 9		
Second ..	10 6 0	8 13 8 to 13 0 0	8 10 9	7 12 6 to 9 10 0		
<i>Cows—</i>						
Best ..	12 1 0	9 7 6 to 15 15 1	8 15 8	7 15 0 to 10 7 10		
Others ..	8 3 0	6 15 8 to 10 5 8	6 17 2	4 15 0 to 7 18 0		
<i>Fat Sheep.</i>						
<i>Wethers (cross)—</i>						
Extra prime ..	1 1 11	0 17 2 to 1 12 4	0 19 4	0 15 3 to 1 2 0		
Prime ..	0 19 0	0 14 10 to 1 8 7	0 16 10	0 14 3 to 0 19 11		
Good ..	0 15 8	0 11 11 to 1 4 2	0 14 11	0 12 6 to 0 17 10		
<i>Ewes (cross)—</i>						
Extra prime ..	0 17 8	0 12 5 to 1 6 5	0 14 9	0 11 9 to 0 18 5		
Prime ..	0 14 11	0 11 0 to 1 2 7	0 13 6	0 10 8 to 0 17 0		
Good ..	0 11 0	0 7 4 to 0 17 0	0 11 1	0 8 5 to 0 14 8		
<i>Wethers (merino)—</i>						
Extra prime ..	..	0 11 10 to 1 6 2	0 17 4	0 14 5 to 1 1 6		
Prime ..	0 16 8	0 15 6 to 0 18 10	0 15 6	0 12 6 to 0 18 10		
Good ..	0 13 6	0 8 11 to 1 0 9	0 13 4	0 11 2 to 0 16 9		
<i>Fat Lambs.</i>						
Extra prime ..	1 0 2	0 15 5 to 1 6 6	0 17 0	0 15 0 to 1 0 8		
Prime ..	0 17 5	0 13 11 to 1 2 10	0 15 0	0 13 4 to 0 18 0		
Good ..	0 14 3	0 11 6 to 0 18 3	0 13 1	0 11 6 to 0 16 3		
<i>Pigs.</i>						
<i>Back Fattens—</i>						
Extra heavy prime	8 6 3	5 4 0 to 11 5 0	6 19 4	5 17 0 to 7 16 9		
Prime medium and weighty ..	5 0 5	3 2 11 to 7 14 9	4 6 8	2 19 1 to 5 16 8		
<i>Baconers—</i>						
Medium and weighty ..	3 8 10	2 13 10 to 4 10 4	2 16 4	2 8 5 to 3 6 3		
Light ..	2 14 2	2 1 9 to 3 14 1	2 0 4	1 15 9 to 2 9 8		
Porkers ..	1 13 1	1 5 4 to 2 3 11	1 7 9	1 2 10 to 1 12 3		

NOTE.—Prices for dairy cattle are not available.

**Stock Slaughtered.** The following is a statement of the stock slaughtered on farms and stations, as well as in municipal abattoirs, during the last five years.

### STOCK SLAUGHTERED, 1927-28 TO 1931-32.

Year ended June—			Number Slaughtered.		
			Sheep and Lambs.	Cattle.	Pigs.
1928	..	..	4,732,494	469,610	358,135
1929	..	..	5,286,642	466,576	354,339
1930	..	..	6,024,702	387,662	347,688
1931	..	..	5,945,475	328,032	399,241
1932	..	..	5,678,182	375,380	392,457

The purposes for which the slaughtered animals were used were as follows :—

### PURPOSES FOR WHICH STOCK WERE SLAUGHTERED, 1928-29 TO 1931-32.

Year ended June—			For Butcher and Private Use.*			For Export.		
			Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1928	..	..	3,800,938	460,668	147,224	915,545	4,877	81
1929	..	..	3,681,251	456,829	156,049	1,590,573	6,297	..
1930	..	..	4,162,987	331,743	128,557	1,825,019	1,946	81
1931	..	..	4,228,033	323,945	176,753	1,697,947	2,700	13,606
1932	..	..	3,806,938	368,082	183,936	1,863,375	5,322	10,030

Year ended June—			For Preserving and Salting.			For Boiling Down.		
			Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1928	..	..	2,830	2,353	210,547	13,181	1,712	283
1929	..	..	6,470	1,298	198,131	8,348	2,152	159
1930	..	..	9,931	126	218,799	26,765	3,847	251
1931	..	..	7,568	72	208,593	11,927	1,315	289
1932	..	..	1,659	329	198,212	6,210	1,647	279

\* Including carcasses held in Cool Stores at end of year.

Of the sheep and lambs slaughtered in Victoria in 1931-32, 33 per cent. were frozen, as compared with 29 per cent. in 1930-31, 30 per cent. in 1929-30 and 1928-29, and 19 per cent. in 1927-28. In 1931-32, the oversea exports included 11,816,831 lbs. of mutton, valued at £190,621, and 53,730,762 lbs. of lamb, valued at £1,186,155.

**Frozen Mutton and Lamb Exported.** The importance of the mutton and lamb export trade to Victorian sheep owners is evidenced by the figures in the following statement showing the particulars of exports in each of the last five years.

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

### FROZEN MUTTON AND LAMB EXPORTED.

Year ended June—	Carcasses Exported.					
	Mutton.			Lamb.		
	Number.	Average Weight.	Value.	Number.	Average Weight.	Value.
		lbs.	£		lbs.	£
1928.. ..	137,484	44	117,200	778,061	28	639,486
1929.. ..	422,215	50	431,440	1,168,358	32	1,096,891
1930.. ..	309,903	44	248,021	1,515,116	31	1,279,836
1931.. ..	291,382	44	186,903	1,403,565	31	1,075,532
1932.. ..	247,639	48	190,621	1,615,736	33	1,186,155

**Dairying.** The dairying industry is one of the principal sources of the wealth of the community. The value of dairy produce in 1932 was £10,136,350, as compared with £10,013,166 in 1931, £10,923,180 in 1930, £11,959,500 in 1929, and £11,186,070 in 1928. The following table shows the numbers of cowkeepers and cows at the end of, and the total production of butter and cheese, in each of the last five years :—

### DAIRYING, 1927-28 TO 1931-32.

Year ended 31st March—	Number of Cow-keepers.	Number of Dairy Cows.	Butter made.*	Cheese made.*
			lbs.	lbs.
1928 .. ..	55,356	626,139	84,270,812	5,621,945
1929 .. ..	54,814	615,092	93,728,516	5,505,932
1930 .. ..	54,131	619,416	90,639,652	6,953,949
1931 .. ..	54,684	669,132	110,006,619	8,064,463
1932 .. ..	56,184	775,538	132,131,812	7,723,328

\* Year ended 30th June.

Of the 56,184 cowkeepers in 1931-32, 23,616 had less than 5 cows, 10,779 had from 5 to 9, 5,642 from 10 to 14, 3,623 from 15 to 19, 5,331 from 20 to 29, 4,592 from 30 to 49, 2,240 from 50 to 99, and 361 had 100 cows or over. Information relating to the classification of sizes of dairy herds on various holdings appears in the 1928-29 issue of this work, page 581. Similar particulars for subsequent years may be had on application to the Government Statist.

Areas of holdings and numbers and sizes of dairy herds.

Butter and  
cheese made  
on farms.

The quantities of butter and cheese made on farms in the last five years were as follows:—

**BUTTER AND CHEESE MADE ON FARMS,**  
1927-28 TO 1931-32.

Year ended June—					Butter.	Cheese.
					lbs.	lbs.
1928	..	..	..	..	3,592,264	217,495
1929	..	..	..	..	3,464,539	246,854
1930	..	..	..	..	3,469,804	206,055
1931	..	..	..	..	3,761,087	218,630
1932	..	..	..	..	4,150,044	68,509

Butter and  
cheese made  
in factories.

The quantities of butter, cheese, and concentrated, condensed, powdered milk, and casein made, and of cream sold, in factories during the last five years were as follows:—

**BUTTER, CHEESE, ETC., MADE IN FACTORIES,**  
1927-28 TO 1931-32.

Year ended June—	Butter made.	Cream sold.	Cheese made.	Concentrated, Condensed, and Powdered Milk made.	Casein made.
	lbs.	gallons.	lbs.	lbs.	lbs.
1928 ..	80,678,548	381,794	5,404,450	53,876,662	2,619,855
1929 ..	90,263,977	471,729	5,259,078	53,948,559	3,340,171
1930 ..	87,169,848	496,628	6,747,894	51,581,802	2,568,956
1931 ..	106,245,532	421,451	7,845,833	45,665,474	2,555,410
1932 ..	127,981,768	422,903	7,656,819	41,409,540	1,364,816

The quantities of milk, in gallons, received at factories and creameries were 212,983,200 in 1927-28, 226,228,350 in 1928-29, 220,977,700 in 1929-30, 259,676,705 in 1930-31, and 307,700,133 in 1931-32.

Exports of  
butter and  
cheese.

In 1931-32, there were exported from Victoria to countries outside Australia 81,068,322 lbs. of butter, valued at £3,972,723, all of which was Australian produce. The quantity sent to the United Kingdom was 71,642,500 lbs., valued at £3,484,527. The quantity of cheese exported to oversea countries was 1,764,946 lbs., and the value thereof, £59,347.

Information relating to the wool clip is obtained direct from the growers, and an allowance is made for the wool on Victorian skins, both stripped and exported. On this basis the production of wool in 1931-32 and earlier seasons was as follows:—

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION.

Districts.		Wool Clip, 1931-32.			
		Sheep.	Lambs.	Total.	
		lbs.	lbs.	lbs.	
Central	.. ..	7,730,550	609,364	8,339,914	
North-Central	.. ..	10,234,683	753,258	10,987,941	
Western	.. ..	32,735,561	1,786,549	34,522,110	
Wimmera	.. ..	18,232,733	1,133,058	19,365,791	
Mallee	.. ..	5,988,803	468,282	6,457,085	
Northern	.. ..	16,948,786	1,857,346	18,806,132	
North-Eastern	.. ..	8,183,457	850,443	9,033,900	
Gippsland	.. ..	6,599,143	508,100	7,107,243	
Total Clip	{	1931-32	106,653,716	7,966,400	114,620,116
		1930-31	98,462,714	6,070,436	104,533,150
		1929-30	109,318,424	8,477,465	117,795,889
		1928-29	116,076,806	8,292,541	124,369,347
		1927-28	89,113,548	5,920,098	95,033,646
—		1928-29.	1929-30.	1930-31.	1931-32.
		lbs.	lbs.	lbs.	lbs.
Wool clip	.. ..	124,369,347	117,795,889	104,533,150	114,620,116
Wool stripped from Victorian skins and on Victorian skins exported (estimated)	.. ..	25,509,241	28,261,000	28,978,316	30,581,627
Total production	.. ..	149,878,588	146,056,889	133,511,466	145,201,743
Total value	.. ..	£10,252,002	£5,694,019	£4,374,932	£4,813,663

Of the total quantity of wool produced, the amounts used in manufacturing for each of the last four years were as follows:—1928-29, 25,008,506 lbs.; 1929-30, 26,008,800 lbs.; 1930-31, 21,413,372 lbs. and 1931-32, 21,392,347 lbs. Of the total production, the quantity used in manufacturing represented 16·7 per cent. in 1928-29, 17·8 per cent. in 1929-30, 16·0 per cent. in 1930-31, and 14·7 per cent. in 1931-32.

**Sheep shorn.** In 1931-32 there were 13,244,104 sheep and 3,579,475 lambs shorn, as compared with 13,619,450 sheep and 2,935,685 lambs in 1930-31, 14,204,743 sheep and 3,620,557 lambs in 1929-30, 13,005,239 sheep and 3,565,737 lambs in 1928-29, and 12,809,537 sheep and 2,747,400 lambs in 1927-28.

Weight of  
a fleece.

The next table shows the production of wool per sheep and per lamb shorn in each of the last five years :—

### WEIGHT OF A FLEECE, 1927-28 to 1931-32.

Year.	Weight of a Fleece.		
	Sheep.	Lambs.	Sheep and Lambs combined.
	lbs.	lbs.	lbs.
1927-28 .. .. .	6·96	2·15	6·11
1928-29 .. .. .	8·93	2·33	7·51
1929-30 .. .. .	7·70	2·34	6·61
1930-31 .. .. .	7·23	2·07	6·31
1931-32 .. .. .	8·05	2·23	6·81

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 Melbourne wool brokers :—

### PRICES OF WOOL, 1929-30 to 1931-32.

Class of Wool.	Average Price per lb. in—		
	1929-30.	1930-31.	1931-32.
<b>GREASY MERINO.</b>			
Extra Super (Western District)	19d. to 21d.	15d. to 18d.	14d. to 16d.
Super .. .. .	16d. to 18d.	13d. to 15d.	13d. to 15d.
Good .. .. .	14d. to 15d.	11d. to 12d.	11d. to 12d.
Average .. .. .	12d. to 13d.	9d. to 11d.	8d. to 10d.
Wasty and Inferior .. .. .	8d. to 9d.	6d. to 7d.	6d. to 7d.
Extra Super Lambs .. .. .	20d. to 22d.	16d. to 19d.	15d. to 17d.
Super Lambs .. .. .	15d. to 17d.	12d. to 14d.	10d. to 12d.
Good Lambs .. .. .	11d. to 13d.	9d. to 11d.	7d. to 9d.
Average Lambs .. .. .	6d. to 10d.	5d. to 8d.	4d. to 6d.
Inferior Lambs .. .. .	4d. to 6d.	3d. to 4d.	2d. to 3d.
<b>GREASY CROSSBRED.</b>			
Extra Super Comebacks .. .. .	16d. to 19d.	13d. to 16d.	13d. to 15d.
Super Comebacks .. .. .	14d. to 15d.	12d. to 13d.	12d. to 13d.
Fine Crossbred .. .. .	12d. to 14d.	10d. to 12d.	10d. to 12d.
Medium Crossbred .. .. .	9d. to 11d.	7d. to 9d.	7d. to 9d.
Coarse Crossbred and Lincoln	6d. to 8d.	4d. to 6d.	4d. to 5d.
Super Fine Crossbred Lambs .. .. .	15d. to 17d.	12d. to 14d.	10d. to 12d.
Good Crossbred Lambs .. .. .	11d. to 12d.	9d. to 10d.	6d. to 8d.
Coarse and Lincoln Lambs .. .. .	8d. to 9d.	5d. to 7d.	4d. to 5d.

## PRICES OF WOOL, 1929-30 TO 1931-32—continued.

Class of Wool.	Average Price per lb. in—		
	1929-30.	1930-31.	1931-32.
<b>SCOURED.</b>			
Extra Super Fleece .. ..	24d. to 26d.	20d. to 22d.	19d. to 21d.
Super Fleece .. ..	22d. to 24d.	18d. to 20d.	17d. to 19d.
Good Fleece .. ..	18d. to 19d.	15d. to 17d.	14d. to 16d.
Average Fleece .. ..	15d. to 17d.	12d. to 14d.	10d. to 12d.
<b>RECORD PRICES FOR THE SEASON.</b>			
Greasy Merino Fleece .. ..	37½d.	31½d.	38½d.
„ Comeback Fleece .. ..	21d.	18½d.	18d.
„ Merino Lambs .. ..	24½d.	18½d.	23½d.
„ Comeback Lambs .. ..	22d.	17½d.	17½d.
Scoured Fleece .. ..	35½d.	34½d.	32½d.

Tables containing information relating to the numbers of flocks in districts, the sizes of flocks, and the number and sizes of flocks on various holdings, will be found on pages 586 to 588 of the 1928-29 *Year-Book*.

In the following statement are given the numbers of horses, cattle, sheep and pigs in the various Australian States and New Zealand, according to the latest available figures :—

## LIVE STOCK IN AUSTRALASIA.

State, &c.	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	Other.		
Victoria .. ..	375,459	775,538	861,992	16,376,217	286,780
New South Wales .. ..	524,751	1,150,877	1,842,709	52,986,000	385,846
Queensland .. ..	469,474	775,301	4,775,098	22,324,278	222,686
South Australia .. ..	185,222	127,756	137,568	6,608,981	109,780
Western Australia .. ..	156,489	99,287	727,245	10,098,104	120,521
Tasmania .. ..	30,659	81,855	150,715	2,012,055	41,459
Northern Territory	33,442	749,745		18,867	665
Federal Capital Territory .. ..	925	4,752		194,391	108
New Zealand .. ..	280,994	1,702,070	2,370,313	28,691,788	513,416



**Bee-keeping.** The returns for 1931-32 show that there were in that year 2,167 bee-keepers, who owned 52,097 frame and 2,874 box hives, producing 2,137,517 and 22,253 lbs. of honey respectively, and 26,239 lbs. of beeswax. The number of bee-keepers owning 20 hives and upwards was 597, as compared with 561 in the previous season. In 1931-32, the quantity of honey produced in the Wimmera district was 840,873 lbs., in the Northern district 440,375 lbs., in the North-Eastern district 278,092 lbs., in the North-Central district 216,951 lbs., and in the Western district 216,559 lbs. The more important particulars of the industry for the last-five years are given below :—

## BEE-KEEPING, 1927-28 to 1931-32.

Season ended May—			Number of Bee-keepers.	Number of Hives.	Honey produced.	Beeswax produced.
					lbs.	lbs.
1928	..	..	2,521	52,748	2,992,860	34,358
1929	..	..	2,284	55,247	4,181,571	49,675
1930	..	..	2,394	53,715	3,097,805	29,632
1931	..	..	2,375	61,161	2,804,186	30,478
1932	..	..	2,167	54,971	2,159,770	26,239

**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. The following are the amounts spent during the last five years :—

## EXPENDITURE ON DESTRUCTION OF VERMIN AND NOXIOUS WEEDS, 1927-28 TO 1931-32.

Year.				From Revenue.	Wire Netting Advances from Loan Funds.
				£	£
1927-28	..	..	..	99,184	37,847
1928-29	..	..	..	91,377	54,858
1929-30	..	..	..	76,277	38,268
1930-31	..	..	..	61,086	21,877
1931-32	..	..	..	52,985	24,070

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 are made from Loan Funds.

A complete system, administered by an officer called the Superintendent under the Vermin Destruction Act, exists for effectually keeping rabbits under control.

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

The quantity of rabbits, hares, and wild-fowl sold at the Melbourne Fish Market in each of the last five years was as shown in the following statement :—

RABBITS, HARES, AND WILD-FOWL SOLD AT THE  
MELBOURNE FISH MARKET, 1927-28 to 1931-32.

Year ended June—					Rabbits and Hares.	Wild-fowl.
					pairs.	brace.
1928	..	..	..	..	1,697,316	9,054
1929	..	..	..	..	1,594,020	11,316
1930	..	..	..	..	1,347,168	7,422
1931	..	..	..	..	935,396	1,368
1932	..	..	..	..	904,932	2,448

Frozen  
rabbits, &c.,  
exported.

Large quantities of frozen rabbits and hares and of rabbit and hare skins have been exported to overseas countries, the numbers and values for each of the last five years being as follows :—

RABBITS AND HARES AND RABBIT AND HARE SKINS  
EXPORTED OVERSEA, 1927-28 to 1931-32.

Year ended June—					Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
					Quantity.	Value.	Quantity.	Value.
					pairs.	£	lbs.	£
1928	..	..			527,988	44,563	2,896,685	549,802
1929	..	..			1,624,279	136,273	2,682,567	604,842
1930	..	..			1,474,898	123,492	2,604,601	441,074
1931	..	..			2,308,703	157,665	2,231,117	143,672
1932	..	..			2,549,163	148,058	2,255,125	126,088

## 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 1931-32 :—

VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED,  
1931-32.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet .. ..	10	7	322	287
Apollo Bay .. ..	11	6	384	97
Barwon Heads and Ocean Grove ..	9	5	1,050	87
Brighton .. ..	14	7	549	99
Corner Inlet, Welshpool, Toora, and Port Franklin .. ..	82	56	6,877	3,320
Dromana and Rosebud .. ..	29	15	1,130	243
Frankston .. ..	24	18	484	450
Geelong .. ..	116	49	4,525	1,295
Gippsland Lakes .. ..	162	116	8,325	4,190
Kerang .. ..	8	3	29	76
Lake Boga .. ..	..	..	..	..
Lorne .. ..	13	5	257	68
Mentone .. ..	19	7	132	95
Mordialloc, Chelsea, and Carrum ..	91	39	1,828	1,109
Mornington .. ..	36	27	2,286	690
Portarlington and St. Leonards ..	68	49	4,833	1,359
Portland .. ..	49	27	5,724	438
Port Albert .. ..	52	35	3,100	884
Port Campbell .. ..	2	2	136	12
Port Fairy .. ..	66	41	10,597	648
Port Melbourne .. ..	54	19	1,748	377
Queenscliff .. ..	119	62	15,646	1,643
Sandringham and Black Rock ..	126	20	1,107	348
Sorrento, Portsea, and Rye ..	58	40	3,911	760
St. Kilda .. ..	29	14	788	1,384
Torquay .. ..	15	9	455	109
Warrnambool .. ..	22	11	628	122
Werribee .. ..	11	7	338	103
Waranga Basin .. ..	7	4	38	38
Western Port (Cowes, Hastings, Grantville, Flinders, San Remo, and Tooradin)	155	119	13,478	3,012
Williamstown and Altona .. ..	50	18	1,059	349
Wonthaggi .. ..	11	5	148	33
Total .. ..	1,518	842	91,912	23,725

The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1930-31 and 1931-32 were as shown in the next table :—

**FISH SOLD IN THE MELBOURNE FISH MARKET,  
1930-31 AND 1931-32.**

			1930-31.		1931-32.	
			Quantity.	Value.	Quantity.	Value.
				£		£
Fresh Fish (Victorian)	lbs.		11,768,225	147,103	10,962,885	137,036
Crayfish ..	doz.		36,459	18,229	40,678	20,339
Imported Fish (fresh or frozen)	..	lbs.	3,530,582	87,483	2,411,912	57,162
Oysters ..	..	bags	9,575	19,150	7,020	14,040
Total ..	..	..	..	271,965	..	228,577

In addition to the above, 540 cwt. of smoked fish, and 62,450 lbs. of prawns were sold in this market in 1931-32.

The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and elsewhere in 1931-32 were as follows :—

**VICTORIAN FISH SOLD IN 1931-32.**

Markets.			Quantity.		Value.	
			Fish.	Crayfish.	Fish.	Crayfish.
			lbs.	doz.	£	£
Melbourne ..	..	..	10,962,885	12,180	137,036	6,090
Ballarat ..	..	..	476,324	728	5,954	364
Other ..	..	..	270,050	560	3,375	280
Total ..	..	..	11,709,259	13,468	146,365	6,734

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

## FISH IMPORTED, 1930-31 AND 1931-32.

	1930-31.		1931-32.	
	Quantity.	Value.	Quantity.	Value.
<b>Fish—</b>		£		£
Fresh or Frozen .. .. lbs.	1,746,584	42,083	1,197,846	25,514
Smoked or Dried (not Salted) .. .. "	9,861	760	6,049	543
Oysters in the Shell .. .. cwt.	3,793	1,815	140	47
Potted or Concentrated, &c. .. lbs.	102,147	9,897	125,437	10,746
Preserved in tins, &c. .. .. "	3,453,151	126,897	3,769,552	116,786
N.E.I. .. .. cwt.	1,999	5,232	1,036	2,018
<b>Total .. ..</b>	<b>..</b>	<b>186,684</b>	<b>..</b>	<b>155,654</b>

Of the 1931-32 oversea imports of fish preserved in tins, 2,836,332 lbs. came from Canada, 557,848 lbs. from the United Kingdom, and 254,850 lbs. from Norway.

The figures relating to agriculture and live stock in Victoria and Great Britain (England, Wales, and Scotland) in 1931 are, for comparative purposes, placed side by side in the table which follows:—

## AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1931.

	Victoria.	Great Britain.
Area .. .. acres	56,245,760	56,208,959
Wheat .. .. bushels	41,955,856	37,128,000
Oats .. .. "	6,450,281	104,856,000
Barley .. .. "	1,256,678	35,608,000
Peas .. .. "	114,701	1,888,000
Potatoes .. .. tons	206,489	3,154,000
Turnips and swedes .. .. "	2,179*	12,416,000
Mangolds .. .. "	5,067	4,549,000
Hay .. .. "	1,069,276	8,918,000
Horses .. .. No.	375,459	1,091,162
Cattle .. .. "	1,637,530	7,273,890
Sheep .. .. "	16,376,217	25,580,022
Pigs .. .. "	286,780	2,945,211

\* Includes beet, carrots, and parsnips.

## 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 be obtained in the prescribed manner, and mining leases giving the right to enter on private land for mining purposes may be issued to another than the owner.

**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 on payment of a sum of 2s. 6d. per annum and remains in force for any number of years not exceeding fifteen. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands, which is called a "claim." The revenue in 1931-32 from miners' rights was £3,286.

**Mining Leases.** Leases 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. For mining leases of land to be worked by means of dredging or hydraulic sluicing the yearly rent is 5s. per acre. Other mineral and coal mining leases are also issued at varying rates. The revenue from these sources in 1931-32 was £6,269.

**Area occupied for Mining.** The area of Crown and private lands under occupation for mining purposes on 31st December, 1931, was 76,728 acres. The subjoined table shows the area being worked for different minerals :—

**AREA UNDER OCCUPATION FOR MINING PURPOSES, 31st DECEMBER, 1931.**

(Crown Land and Private Land.)

Nature of Mineral, &c.	Area.	Nature of Mineral, &c.	Area.
Gold .. ..	10,799	Limestone .. ..	27
Coal (ordinary) .. ..	10,145*	Limestone and Clay .. ..	27
Coal (brown) .. ..	544	Magnesite .. ..	114
Coal (black and brown) .. ..	100	Marblestone .. ..	6
Bauxite .. ..	71	Mineral Water and Gas .. ..	1
Bluestone .. ..	27	Molybdenite .. ..	30
Calcite .. ..	2	Oil .. ..	173
Cement Gravel .. ..	6	Oil and Gas .. ..	52,415
Clay .. ..	40	Quicksilver .. ..	61
Clay and Schist .. ..	4	Sand .. ..	29
Clay and Slate .. ..	3	Silicate of Alumina .. ..	51
Clay, Pigments, and Infusorial Earth .. ..	9	Silver, Lead, and Gold .. ..	28
Copper .. ..	80	Tin .. ..	850
Dolomite and Clay .. ..	1	Tin and Gold .. ..	9
Granite .. ..	12	Sand and Gravel .. ..	8
Gypsum .. ..	325	Tailings Licences .. ..	230
Kaolin .. ..	22	Water Right Licences .. ..	449
Kaolin and Gold .. ..	20		
Kaolin and Quartz Grit .. ..	10	Total .. ..	76,728

\* Includes State Coal Mine Area.

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

Mining  
development.

The mining industry has been well fostered by the Government, not only in the way of financial assistance but also by means of geological surveys and boring. Apart from the annual expenditure of the Mines Department from consolidated revenue, of which a statement is appended, portions of surplus revenues of past years amounting to £85,000 had been expended or advanced for developmental purposes from 1st July, 1899, to 30th June, 1932. Since 1st July, 1899, £520,421 has been apportioned from loan receipts and expended on mining development; but, apart from £249,399 expended on the State Coal Mine during the years 1909 to 1925, no loan money has been allotted for development for 26 years.

STATE EXPENDITURE AND REVENUE CONNECTED WITH  
MINING, 1927-28 TO 1931-32.

Item.	Expenditure from Consolidated Revenue.				
	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
<b>EXPENDITURE.</b>					
	£	£	£	£	£
Mines Department .. ..	24,900	23,649	23,182	21,556	17,650
State Coal Mine .. ..	621,316	729,820	688,253	551,990	481,609
Coal Mines Regulation—Sinking Fund and Depreciation Fund	73,567	41,847	130,279	19,829	..
Diamond drills for prospecting ..	13,323	15,519	9,955	5,811	2,094
Testing plants .. ..	2,980	3,372	3,443	2,499	5,134
Geological and underground surveys of mines .. ..	3,973	3,917	3,567	2,681	2,500
Mining Development—					
Advances to companies, &c., boring for gold, coal, &c. ..	5,309	3,029	4,753	635	597
Miscellaneous .. ..	1,708	1,786	1,943	1,909	1,758
<b>Total .. ..</b>	<b>747,076</b>	<b>822,939</b>	<b>865,375</b>	<b>606,920</b>	<b>511,342</b>
<b>REVENUE.</b>					
State Coal Mine .. ..	705,307	776,246	872,967	576,007	416,955
All other .. ..	14,756	14,773	13,917	15,124	18,145
<b>Total .. ..</b>	<b>720,063</b>	<b>791,019</b>	<b>886,884</b>	<b>591,131</b>	<b>435,100</b>

The advances from loan moneys and revenue to mining companies to 30th June, 1932, for the development of mining, totalled £285,705 (£62,740 from loan moneys, and £222,965 from revenue) of which sum £43,767 had up to that date been repaid, £54,218 realized, and £165,585 written off, leaving £22,135 outstanding. Interest received during 1931-32 amounted to £6, and interest outstanding on 30th June, 1932, to £5,082.

Total  
mineral  
production.

The mineral production of the State (excluding salt) is summarized in the subjoined statement, which contains particulars of the recorded production of all metals and minerals up to the end of the year 1931 :—

TOTAL MINERAL PRODUCTION TO 31st DECEMBER, 1931.

Metals and Minerals.	Recorded during 1931.		Total Recorded to end of 1931.	
	Quantity.	Value.	Quantity.	Value.
	Fine ozs.	£	Fine ozs.	£
Gold .. .. .	43,637	262,488	71,392,561	303,332,745
Silver .. .. .	1,512*	99	1,469,967*	223,203
Platinum .. .. .	..	..	30,577	7,880
Diamonds .. .. .	..	..	311	1,671
Sapphires, &c. ..	..	..	..	128
	tons.		tons.	
Coal, black .. ..	571,342	362,284	15,171,529	12,004,966
„ brown .. .. .	2,194,453	251,511	11,527,200	1,678,263
Ore—copper .. ..	..	..	18,740	218,620
„ tin .. .. .	5	440	17,102½	978,081
„ antimony .. ..	..	..	104,276½†	612,078
„ silver-lead .. ..	..	..	804	5,992
„ iron .. .. .	..	..	5,434	12,540
„ manganese .. ..	..	..	422	2,009
Wolfram .. .. .	..	..	118	11,785
Gypsum .. .. .	1,565	428	153,436	101,326
Magnesite .. .. .	50	190	2,101	6,502
Kaolin .. .. .	2,973	2,730	42,102	53,293
Diatomaceous earth ..	..	..	8,657	33,137
Pigment clays .. ..	..	..	4,496	5,503
Phosphate rock .. ..	..	..	15,781	16,704
Molybdenite .. ..	..	..	868½†	30,911
Fluorspar .. .. .	..	..	623	1,888
Jarosite (Red Oxide) ..	..	..	109	1,359
Bauxite .. .. .	1,384	2,164	3,833	6,252
Bluestone, freestone, granite, &c.‡	..	213,422	..	11,673,124
Limestone, &c.§	..	..	..	..
Total .. .. .	..	1,095,756	..	331,020,590

\* Extracted from gold at the Melbourne Mint. † Concentrates. ‡ From 1866 only.  
§ Record from 1900.

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



Gold raised  
in Victoria.

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

### GOLD RAISED IN VICTORIA, 1851 to 1931.

Period.	Quantity * (Gross ozs.).	Period.	Quantity (Fine ozs.).
1851-60 .. ..	23,334,263	1921-25 .. ..	421,250
1861-70 .. ..	16,276,566	1926 .. ..	49,078
1871-80 .. ..	10,166,297	1927 .. ..	38,538
1881-90 .. ..	7,103,448	1928 .. ..	33,917
1891-1900 .. ..	7,476,038	1929 .. ..	26,275
1901-10 .. ..	7,095,061	1930 .. ..	24,119
1911-15 .. ..	2,161,349	1931 .. ..	43,637
1916-20 .. ..	905,561		

\* Gross ozs. 1851-1900.

From 1906 until 1930 the yield of gold continued to decrease, that for 1930 being the lowest since 1851. Towards the close of 1930, when the depression was becoming general, the governments endeavoured to encourage prospecting as a means of at once absorbing a proportion of the unemployed and of reviving the industry. The Commonwealth Gold Bounty Act (subsequently modified under the *Financial Emergency Act* 1931) was brought into operation on 1st January, 1931, and at the State Mines Department a scheme was inaugurated of equipping and directing parties of unemployed (sustenance) workers for mining and prospecting. The increase in the rate of exchange and an enhanced world price of gold further stimulated the industry, with the result that the yield in 1931 exceeded that of 1930 by 19,518 fine ounces, or by 81 per cent. The quantities in fine ounces raised in the other principal gold-producing States in 1931 were 510,572 ounces in Western Australia, 13,147 ounces in Queensland, and 19,673 ounces in New South Wales. The total production of the Commonwealth was 466,593 fine ounces in 1930 and 595,123 fine ounces in 1931. The total production of gold in the world, as shown in the United States Mint Report, was 20,836,318 fine ounces in 1930 and 22,818,700 fine ounces in 1931.

Mining  
district  
gold yields.

The yield of gold (given in gross ounces) for 1930 and 1931 in each mining district of the State, as estimated by the mining registrars, is shown in the following table:—

# **DISTRICT YIELDS OF GOLD, ALLUVIAL AND QUARTZ, 1930 AND 1931.**

Mining District.	1930.			1931.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Ararat and Stawell ..	188	402	590	668	408	1,076
Ballarat ..	578	439	1,017	4,367	2,987	7,354
Beechworth ..	1,898	4,506	6,404	3,464	1,850	5,314
Bendigo ..	688	13,927	14,615	3,867	15,344	19,211
Castlemaine ..	1,242	984	2,226	4,717	3,837	8,554
Gippsland ..	275	148	423	794	450	1,244
Maryborough ..	475	340	815	2,712	1,973	4,685
Total ..	5,344	20,746	26,090	20,589	26,849	47,438

**Government  
batteries,  
cyanidation,  
and dredging  
and sluicing.**

Particulars relating to the operations of Government batteries, cyanide works, and dredging and sluicing plants for the five years 1927 to 1931 are as follows:—

## **GOVERNMENT BATTERIES, CYANIDATION, AND DREDGING AND SLUICING, 1927 TO 1931.**

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.	Tin Obtained.
		tons.	oz.		tons.	oz.		cu. yds.	oz.	tons.
1927	31	643	999	8	11,080	1,672	9	900,500	4,440	44
1928	31	1,369	1,405	8	6,397	1,199	6	1,227,000	5,689	61
1929	31	1,810	1,478	10	4,047	772	6	682,400	1,774	14
1930	33	2,700	1,817	..	..	..	6	193,000	828	1
1931	33	6,155	3,293	14	8,933	807	7	182,306	1,277	9 cwt.

The first battery was erected in 1897, since which date 88,244 tons of ore have been crushed for 61,853 ounces of gold.

Up to the end of 1930, 16,041,068 tons of tailings had been treated by the cyanide and other processes, and 1,287,502 ounces of gold had been won therefrom.

Since the inception of dredge mining, 1,905,103 ounces of gold and 1,797 tons of tin have been won by this system.

**Coal mining.** Bituminous coal is found in three main areas in the southern portion of the State, viz., the Wannon, the Otway, and South Gippsland. The Wannon area is comparatively unprospected, owing to almost the whole of the land having been sold. In the Otway area bores have been sunk without disclosing seams of payable thickness. The South Gippsland area occupies about 2,000 square miles, and coal mining is being carried on at Wonthaggi, Kilcunda, Outtrim, Jumbunna, and Korumburra.

**Brown coal.** The brown coal beds of Victoria have an approximate area of 1,200 square miles, and are reputed to be the thickest known. At Morwell, 780 feet of coal were passed through in a bore 1,010 feet deep. It is estimated that the average thickness of the coal in the deposits at Morwell, Alberton, and Altona is 50 feet, and that the total deposits in the State amount to 11,000,000,000 tons. These deposits are practically untouched, as the total output of brown coal for all years has been only 11,527,200 tons, valued at £1,678,263, nearly all of which has been produced at the mines at Morwell and Yallourn under the control of the State Electricity Commission.

**The State coal-field.** The State Coal Mine at Wonthaggi, on the Powlett River, was opened in November, 1909. In June, 1911, the control of the mine was transferred to the Railways Commissioners. The area reserved for mining is about 17 square miles. Boring has proved that about 28,000,000 tons of coal existed in the central area of 5 square miles. The output of coal for the year ended 31st December, 1931, was 532,003 tons, valued at £325,852. The total output up to the end of 1931 was 10,467,069 tons, valued at £8,917,409. The average number of men employed at the mine throughout the year ended 31st December, 1931, was 1,703.

**Victorian coal production and value.** The quantity of coal, exclusive of brown coal, raised in Victoria up to the end of 1931 was 15,171,529 tons, valued at £12,004,966. The total quantity raised prior to 1892, the average annual production for different periods from 1892 to 1931, and the value per ton at the pit's mouth, are given in the following table:—

#### COAL PRODUCTION AND VALUE PER TON.

Period.				Average Annual Production.	Average Annual Value per ton at pit's mouth.
				tons.	s. d.
Prior to 1892	..	..	..	*77,914	18 8
1892-1900	..	..	..	184,517	9 11
1901-10	..	..	..	168,548	11 8
1911-15	..	..	..	608,512	9 2
1916-20	..	..	..	437,833	15 11
1921-25	..	..	..	520,705	22 8
1926	..	..	..	591,001	22 3
1927	..	..	..	684,245	22 4
1928	..	..	..	658,323	22 2
1929	..	..	..	703,828	23 1
1930	..	..	..	703,487	23 0
1931	..	..	..	571,342	12 8

\* Total production up to date mentioned.

The quantities of coal produced in the other States in 1931 were as follows:—New South Wales, 6,432,382 tons; Queensland, 841,308 tons; Western Australia, 432,400 tons; and Tasmania, 123,828 tons.

The numbers of fatal and non-fatal accidents in gold and coal mines during the last 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.

## MINING ACCIDENTS, 1927 TO 1931.

Year.	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1927 .. ..	1,126	1	1	2,492	4	7
1928 .. ..	655	2	1	2,224	2	5
1929 .. ..	864	2	..	2,251	2	8
1930 .. ..	942	..	1	2,267	2	13
1931 .. ..	4,258*	1	1	2,156	2	14

\* These are mainly individual prospectors and small parties; alluvial, 3,110; quartz, 1,148.

As a result of gold mining accidents during the last five years 6 persons were killed, and 4 were injured and rendered unfit for work for a period of at least fourteen days. Coal mining accidents during the same period accounted for 12 deaths, and 47 injuries resulting in disablement for at least fourteen days.

The quantity and value of stone raised from Victorian quarries during the last five years were as set forth in the following table:—

## QUARRIES, 1927-28 TO 1931-32.

Year ended June—	Number of Quarries.	Quantity of Stone Operated on—				Approximate Value of Stone Raised.
		Bluestone.	Sand-stone.	Granite.	Limestone.	
		c. yds.	c. yds.	tons.	c. yds.	£
1928 ..	108	1,797,523	3,904	5,091	289,478	652,800
1929 ..	99	1,487,410	3,633	6,893	250,253	602,900
1930 ..	84	1,515,559	8,307	10,846	255,015	624,600
1931 ..	81	828,406	6,471	8,666	145,913	324,800
1932 ..	70	645,030	1,150	4,133	86,176	213,422

In 1931-32 the number of persons employed in quarries was 725 and the wages paid amounted to £141,455. For 1931 and 1932, the figures do not include the employees and wages connected with asphaltting and tar-paving works, particulars of which will be found on page 383.

### MANUFACTURING IN VICTORIA.

It can be said with confidence that the State of Victoria has advantages which should make possible great development in manufacturing industries.

A comparatively compact territory with a temperate climate producing a rich variety of raw materials, an intelligent labour supply supported by almost unlimited power resources, and a growing home market served by an ever-increasing network of railways and other communications leave few other essential requirements except the attraction of capital into the industries, the efficient organization of production, and the extension of markets for the product.

**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 home market, until in 1931-32 the total number of factories was 8,204, employing 128,265 persons.

Figures for the past four years show a decreasing tendency sharply accentuated in the year 1930-31 owing to the severe fall in prices which caused much depression throughout trade and industry.

The reduction in wages which are largely regulated by the cost of living index, and the lower costs of raw materials, are reflected in reduced values of output of manufactured products.

Statistics for the year 1931-32 show a further fall in value of output to the extent of £37,178 (·04 per cent.). That this is an indication of lower prices rather than a sign of decreased activity in manufacturing is proved by the increases in the number of factories (4), of persons employed (2,249), and of value of materials used (£1,347,575, 2·7 per cent.) since the previous year.

Increased production is most noticeable in factories manufacturing textiles, clothing, skins and leather, rubber goods, and miscellaneous products; and the greatest decreases are shown in factories producing industrial metals, machines, implements, and conveyances.

The appended table summarizes particulars which indicate the growth of manufacturing industry since 1912. The figures for the past five 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 the last five years with those of previous years.

## 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
			£	£	£	£
1912 ..	5,263	116,108	19,457,795	10,102,244	27,002,302	45,410,773
1913 ..	5,613	118,744	20,775,738	10,714,336	28,465,699	47,936,647
1914 ..	5,650	118,399	21,975,646	11,099,940	28,986,694	49,439,985
1915 ..	5,413	113,834	22,529,072	11,036,345	30,728,743	51,466,093
1916-17..	5,445	116,970	23,784,289	11,833,517	37,103,350	60,047,284
1917-18..	5,627	118,241	25,460,282	12,502,601	42,133,636	67,066,715
1918-19..	5,720	122,349	27,318,735	14,080,403	52,098,737	80,195,677
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

NOTE.—Up to the year 1915 inclusive the statistics relate to the calendar year; for subsequent years they relate to the year ending 30th June.

Prior to 1924-25, column 5, Salaries and Wages Paid, was not inclusive of amounts taken by working proprietors as drawings.

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 VII., "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*.

**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 an inaccurate idea would be obtained by using the total value of output of manufacturing industries in year to year comparisons, 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. 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.

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. Another important factor is the quantity and efficiency of the machinery used in the process of manufacture.

The following table shows the value added per person employed in each class of manufacturing industry for the year ended 30th June, 1932 :—

## VALUE ADDED, 1931-32.

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 ..	1,317	604,754	459 3 10
2. Bricks, pottery, glass, &c. ..	1,781	505,177	283 12 11
3. Chemicals, dyes, explosives, paint, oils, and grease ..	4,855	2,501,324	515 4 1
4. Industrial metals, machines, implements and conveyances ..	24,250	6,370,655	262 14 2
5. Precious metals, jewellery, and plate ..	936	232,119	247 19 10
6. Textiles and textile goods (not dress) ..	17,176	3,990,609	232 6 9
7. Skins and leather (not clothing or footwear) ..	3,272	1,001,679	306 2 9
8. Clothing ..	31,511	5,808,532	184 6 8
9. Food, drink, and tobacco ..	20,095	8,925,587	444 3 5
10. Woodworking and basketware ..	4,288	1,136,047	264 18 9
11. Furniture, bedding, &c. ..	2,520	561,807	222 18 10
12. Paper, stationery, printing, book-binding, &c. ..	10,526	3,215,276	305 9 2
13. Rubber ..	2,340	951,708	406 14 3
14. Musical instruments ..	205	50,075	244 5 4
15. Miscellaneous products ..	1,262	393,961	312 3 5
16. Heat, light, and power ..	1,931	1,570,318	813 4 4
Total ..	128,265	37,819,628	£294 17 1

The table hereunder has been compiled in an endeavour to supply comparable figures of the value added per employee in Victorian factories for each of the past ten years.

In recent years various alterations have been made in the method of arriving at this important concept, following recommendations by Australasian statisticians in annual conferences, the objects of which are to improve the statistics and to obtain uniformity throughout the Commonwealth.

The result is that any calculations of added value based on statements appearing in *Year-Books* of earlier date than 1928-29 would not be strictly comparable.



The value added per employee has been recalculated, using the year 1928-29 as base and adjusting the previous years.

Prior to 1927-28, bakeries were not included, but the effect of their inclusion is relatively small. In 1927-28, value added per employee in bakeries was £371 12s. 11d., in 1928-29 £410 18s. 8d., in 1929-30 £415 4s. 1d., in 1930-31 £377 7s. 1d., and in 1931-32 £344 8s. 4d. To exclude these from the aggregate figures would reduce the added value per employee to £334 14s. 3d. in 1927-28, to £337 2s. 9d. in 1928-29, to £337 18s. 9d. in 1929-30, to £311 5s. 3d. in 1930-31, and to £293 14s. 8d. in 1931-32.

### VALUE ADDED IN MANUFACTURING.

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.
1922-23 ..	111,286,343	66,459,537	44,826,806	152,625	293 14 1
1923-24 ..	113,921,927	66,410,960	47,510,967	156,162	304 4 10
1924-25 ..	118,177,398	69,611,632	48,565,766	154,158	315 0 9
1925-26 ..	119,986,439	71,784,661	48,201,778	152,959	315 2 7
1926-27 ..	127,397,951	74,774,770	52,623,181	161,639	325 11 2
1927-28 ..	128,465,317	74,667,052	53,798,265	160,357	335 9 9
1928-29 ..	127,897,463	74,872,184	53,025,279	156,568	338 13 5
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

\* 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.

In 1930-31 a new classification of industries for statistical purposes, as shown in the next table, was adopted by the Statisticians of Australia. A factory is defined as an establishment employing on the average four persons or more, or an 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. The table shows for the year 1931-32 the number of factories in each industry, the horse-power used, the average number of persons employed, the wages paid, the values of materials and fuel and light used, and the value of articles produced or work done, and has been compiled from returns rendered compulsorily by all factory proprietors:—

Production of  
different  
industries,  
1931-32.

# FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1931-32.

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
<i>Class I.—Treatment of Non-metallic Mine and Quarry Products.</i>										
Lime, plaster, and asphalt ..	61	1,746	55	370	..	12	80,834	14,254	148,392	328,384
Marble, slate, &c. ..	41	929	45	253	..	8	61,942	2,933	38,765	129,976
Cement and cement goods ..	29	1,470	14	293	1	7	65,537	41,868	97,925	333,547
Other .. ..	7	19,050	2	255	..	2	60,454	48,560	110,880	357,974
Total .. ..	138	23,195	116	1,171	1	29	268,767	107,615	395,962	1,149,881
<i>Class II.—Bricks, Pottery, Glass, &amp;c.</i>										
Bricks, tiles, and firebricks ..	43	5,674	23	587	..	27	105,167	39,056	26,039	232,973
Earthenware, china, and porcelain ..	22	801	18	440	1	52	80,629	18,423	20,244	147,829
Glass, including bottles ..	20	2,585	13	556	..	23	122,217	37,371	79,734	369,675
Modelling, &c. .. ..	7	9	11	29	..	1	6,286	95	2,706	10,558
Total .. ..	92	9,069	65	1,612	1	103	314,299	94,945	128,723	761,035

Production.

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1931-32—continued.

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Victorian Year-Book, 1931-32.

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
<i>Class III.—Chemicals, Dyes, Explosives, Paint, Oils and Grease.</i>										
Chemicals, drugs, and medicines ..	61	3,664	23	603	3	586	232,531	18,892	550,245	1,134,382
Explosives .. ..	7	764	..	326	..	141	91,518	14,473	202,667	406,550
White lead, paints, and varnish ..	24	618	16	112	..	23	29,395	2,038	124,231	204,140
Oils, vegetable (including oilcake) ..	10	195	4	59	..	3	12,138	1,918	66,639	116,073
Oils, mineral .. ..	7	621	4	170	..	3	35,115	13,122	359,908	588,239
Boiling-down, tallow refining, and bone milling works .. ..	27	1,089	17	278	..	4	65,264	21,698	173,637	303,645
Soap and candles .. ..	21	618	12	510	..	161	116,462	30,541	494,331	1,038,525
Chemical fertilizers .. ..	7	1,967	1	595	..	4	118,514	24,521	666,388	1,020,437
Inks, polishes, &c. .. ..	26	554	14	186	1	125	70,177	2,861	256,880	432,586
Other .. ..	7	735	3	273	..	595	125,089	11,267	284,545	657,285
Total .. ..	197	10,825	94	3,112	4	1,645	896,203	141,331	3,179,471	5,901,862

*Class IV. — Industrial Metals,  
Machines, Implements, and Con-  
veyances.*

Smelting, refining, &c., of iron and steel	188	8,746	190	2,246	2	155	462,641	57,211	446,783	1,186,612
Engineering (not marine or electrical)	301	7,146	287	3,507	1	123	827,927	45,857	742,528	1,941,453
Electrical installations and apparatus	107	1,336	77	1,127	..	168	243,615	10,959	272,471	659,338
Tramcars and railway carriages, &c.	24	5,134	..	5,000	..	9	1,021,328	69,801	1,057,956	2,504,488
Motor vehicles and cycles—										
(i) Construction and assembly ..	21	506	6	408	..	9	80,828	4,281	20,248	155,961
(ii) Repairs .. .. .	765	2,068	534	1,969	..	84	483,493	23,056	21,266	680,365
Motor-bodies .. .. .	60	1,430	73	725	..	25	164,560	3,903	134,888	328,409
Horse-drawn vehicles .. .. .	163	509	159	389	..	9	94,061	4,846	68,455	198,446
Cycle and motor accessories ..	11	397	8	137	..	3	28,073	1,773	23,684	77,675
Ship and boat building and repairing, marine engineering .. .. .	9	1,837	8	207	..	1	40,737	2,719	11,178	67,913
Cutlery and small tools (not machine tools) .. .. .	27	252	20	103	..	6	24,979	1,511	7,833	45,626
Agricultural implements .. .. .	71	2,378	68	1,487	..	72	291,771	24,166	288,492	707,159
Brass and copper .. .. .	94	830	94	623	..	24	138,038	8,246	98,276	294,447
Galvanized-iron working and tin- smithing .. .. .	101	1,144	91	1,295	..	284	267,380	12,893	529,200	992,053
Wireworking (including nails) ..	32	1,088	30	430	..	24	87,131	4,951	261,333	410,420
Art metal works .. .. .	15	195	11	189	..	10	37,722	1,697	34,024	88,581
Stoves and ovens .. .. .	23	629	25	300	..	18	60,821	7,002	64,053	174,376
Gas fittings and meters .. .. .	7	99	2	234	..	1	57,121	2,221	38,913	129,264
Wireless apparatus .. .. .	15	128	14	580	..	92	83,542	2,793	233,783	428,108
Other metal works .. .. .	67	915	40	411	..	26	84,052	7,280	191,074	340,216
Total .. .. .	2,101	36,767	1,737	21,367	3	1,143	4,579,820	297,166	4,546,438	11,410,910

*Class V.—Precious Metals, Jewellery,  
and Plate.*

Jewellery .. .. .	68	177	60	217	1	88	61,419	1,499	88,693	183,171
Watches and clocks .. .. .	10	13	7	42	..	3	11,460	240	3,872	17,692
Gold, silver, and electroplate ..	37	725	33	442	..	43	90,885	5,824	53,287	188,465
Total .. .. .	115	915	100	701	1	134	163,764	7,563	145,852	389,328

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1931-32—*continued*.

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*Victorian Year-Book, 1931-32.*

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
							£	£	£	£
<i>Class VI.—Textiles and Textile Goods (not Dress).</i>										
Cotton .. .. .	11	457	4	127	..	369	70,419	3,590	153,421	300,954
Wool, worsted and shoddy (including wool scouring) .. .. .	34	15,530	20	3,121	1	4,002	1,025,884	145,325	2,113,304	4,134,830
Hosiery and other knitted goods .. .. .	209	3,231	154	2,059	56	5,766	944,279	51,947	2,031,836	3,837,403
Rope and cordage .. .. .	9	2,251	9	484	..	334	101,059	11,434	283,387	505,964
Canvas goods (tents, tarpaulins, and sailmaking) .. .. .	17	32	15	65	1	57	25,987	503	101,578	153,621
Bags and sacks .. .. .	19	120	17	77	..	81	23,905	409	91,871	138,529
Other .. .. .	3	577	4	122	..	231	48,667	5,376	99,771	199,127
Total .. .. .	302	22,198	223	6,055	58	10,840	2,240,200	218,584	4,875,168	9,270,428

*Class VII.—Skins and Leather (not Clothing or Footwear).*

Furs, skins, leather—										
Furriers and fur dressing ..	64	118	61	161	15	222	64,435	1,482	156,310	262,188
Fellmongery .. ..	30	1,760	16	504	..	2	110,689	23,867	773,357	1,025,875
Tanning, currying, and leather dressing .. ..	50	3,775	64	1,529	..	33	318,165	29,399	1,096,341	1,669,760
Saddlery, harness, bags, trunks, &c.—										
Saddlery, harness, and whips ..	11	48	11	63	..	10	13,411	232	17,851	42,394
Machine belting .. ..	5	60	2	39	..	2	9,220	412	34,393	55,396
Bags, trunks, other leather goods ..	47	217	45	236	3	254	71,158	2,101	138,850	258,764
Total .. ..	207	5,978	199	2,532	18	523	587,078	57,493	2,217,102	3,314,377

*Class VIII.—Clothing.*

Tailoring and slop clothing ..	387	596	341	1,184	37	4,701	768,649	17,975	1,478,379	2,555,554
Waterproof and oilskin clothing ..	9	86	5	64	1	156	31,070	1,177	56,381	112,226
Dressmaking .. ..	377	594	114	235	260	5,309	644,547	10,960	1,304,366	2,257,809
Millinery .. ..	71	148	16	113	23	1,300	145,225	3,727	264,186	493,186
Shirts, collars, and underclothing ..	136	1,605	83	435	42	4,075	493,086	14,013	1,168,525	1,986,484
Handkerchiefs, ties, and scarves ..	17	48	12	32	3	336	40,748	710	124,346	201,606
Hats and caps .. ..	45	591	38	410	11	799	178,167	8,551	231,707	542,939
Boots and shoes .. ..	176	2,835	211	4,447	9	3,989	1,315,487	31,549	1,916,736	3,773,432
Boot repairing .. ..	426	462	354	198	..	10	85,818	2,544	58,630	185,281
Boot accessories .. ..	31	710	19	353	1	140	92,071	3,779	231,182	391,409
Umbrellas and walking sticks ..	5	20	3	30	..	62	12,533	219	24,579	46,700
Dyeworks and cleaning .. ..	35	500	41	217	6	194	74,899	10,932	35,060	170,984
Other .. ..	21	232	16	133	4	939	111,703	1,932	254,739	436,329
Total .. ..	1,736	8,427	1,253	7,851	397	22,010	3,994,003	108,068	7,148,816	13,153,939

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1931-32—*continued.*

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*Victorian Year-Book, 1931-32.*

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used, including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
<i>Class IX.—Food, Drink, and Tobacco.</i>							£	£	£	£
Grain milling .. ..	39	5,760	23	907	..	27	228,720	52,271	2,873,317	3,622,593
Cereal foods and starch .. ..	27	3,452	8	541	2	323	164,507	37,519	751,360	1,304,985
Chaff-cutting and corn crushing .. ..	122	1,902	41	315	..	6	71,008	7,929	51,352	170,985
Bakeries .. ..	482	1,909	429	2,037	68	305	576,213	76,691	1,397,917	2,475,992
Biscuits .. ..	9	414	9	484	1	394	110,733	16,626	212,849	497,810
Sugar confectionery (including chocolates) .. ..	63	5,375	58	1,125	10	1,244	363,837	35,196	823,361	1,507,953
Jam, fruit, and vegetable canning .. ..	28	1,638	18	804	..	723	239,509	17,190	1,161,890	1,762,295
Pickles, sauces, and vinegar .. ..	15	459	13	114	1	78	36,122	4,541	100,433	195,829
Bacon curing .. ..	20	2,160	21	454	1	25	116,221	17,254	594,716	848,367
Butter and cheese factories, &c. .. ..	169	7,805	24	2,028	..	294	516,619	126,368	6,970,424	8,353,481
Margarine and butterine .. ..	9	183	4	77	2	9	17,769	3,460	163,436	220,783
Meat and fish preserving, meat extracts .. ..	21	4,287	3	895	..	117	182,622	36,348	1,593,982	2,073,402
Condiments, coffee, and spices, &c. .. ..	47	769	8	267	1	202	78,244	6,169	357,211	528,389
Ice and refrigerating .. ..	60	4,645	34	155	..	5	52,013	30,412	12,681	146,435
Aerated waters, cordials, &c. .. ..	101	679	64	450	..	97	106,010	5,722	206,039	416,901
Breweries .. ..	9	4,011	..	1,035	..	6	362,327	47,955	696,524	1,751,407
Distilleries .. ..	9	792	2	115	..	2	28,576	9,687	94,208	235,173

Malting .. .. .	18	583	2	202	..	5	56,853	10,742	164,696	300,111
Bottling .. .. .	8	14	2	77	..	15	22,027	957	42,759	82,697
Tobacco, cigars, cigarettes, and snuff	12	904	14	872	2	831	331,260	9,125	1,520,580	2,348,746
Dried fruits .. .. .	26	865	1	439	..	116	89,979	4,381	88,060	282,076
Ice cream .. .. .	55	825	22	85	1	27	24,820	6,709	62,713	138,367
Sausage skins .. .. .	6	28	5	205	..	1	47,275	659	55,067	124,448
Other .. .. .	12	3,075	5	607	1	53	120,866	45,851	2,927,163	3,463,713
Total .. .. .	1,367	52,534	810	14,290	90	4,905	3,953,130	609,762	22,928,738	32,852,938
<i>Class X.—Woodworking and Basket-ware.</i>										
Sawmills (forest) .. .. .	155	3,629	153	1,072	..	7	222,351	3,755	45,104	339,973
Sawmills (town) .. .. .	114	5,805	56	954	..	23	197,298	13,092	405,060	732,705
Joinery .. .. .	160	2,004	95	499	..	24	114,948	5,584	133,899	299,191
Cooperage .. .. .	11	418	7	218	..	1	64,536	1,434	43,879	139,153
Boxes and cases .. .. .	45	1,826	29	495	1	6	102,138	6,243	272,720	432,158
Woodturning, woodcarving, &c. ..	86	1,274	68	330	1	22	74,542	4,057	75,501	185,456
Basket and wickerware, seagrass and bamboo furniture .. .. .	11	115	6	83	..	2	13,864	618	16,908	41,092
Perambulators .. .. .	9	45	13	60	..	8	12,602	271	17,600	36,025
Other .. .. .	4	83	5	35	..	20	6,714	1,132	10,418	23,354
Total .. .. .	595	15,199	432	3,741	2	113	808,993	36,186	1,020,589	2,229,107
<i>Class XI.—Furniture, Bedding, &amp;c.</i>										
Billiard tables, cabinet and furniture making, and upholstery .. .. .	282	3,005	298	1,342	..	107	277,939	11,945	350,167	751,949
Bedding and mattresses .. .. .	33	1,062	19	218	1	234	65,761	5,320	168,738	288,642
Furnishing, drapery .. .. .	16	54	4	60	1	144	27,543	406	64,235	110,916
Picture frames .. .. .	11	32	8	42	..	11	10,040	169	8,588	22,381
Window blinds, verandah blinds, &c. ..	9	13	3	9	..	19	3,937	107	12,523	20,050
Total .. .. .	351	4,166	332	1,671	2	515	385,220	17,947	604,251	1,193,938



FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1931-32—continued.

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Victorian Year-Book, 1931-32.

Nature of Industry.	Number of Factories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid.	Fuel and Light used.	Materials used including Containers.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
<i>Class XII.—Paper, Stationery, Printing, Bookbinding, &amp;c.</i>							£	£	£	£
Envelopes, stationery, paper, paper boxes, bags, &c. ..	74	7,390	45	1,441	1	1,335	430,938	69,750	878,542	1,926,825
Newspapers, periodicals, &c. ..	121	3,084	113	1,832	1	79	531,943	21,716	713,253	1,561,408
General printing and bookbinding, &c.—										
(a) Government .. ..	3	862	..	776	..	286	185,805	4,985	103,992	348,055
(b) Other .. ..	356	3,279	408	2,585	8	1,081	742,186	20,598	714,388	1,864,345
Die sinking and engraving ..	25	86	27	113	..	8	26,656	757	10,292	48,361
Electrotyping and stereotyping ..	6	24	9	21	..	4	6,166	361	2,267	11,670
Photo engraving, lithography, photo lithography .. ..	34	70	36	199	5	87	62,254	1,956	28,043	113,627
Other .. ..	6	10	4	17	..	5	4,773	50	2,761	9,299
Total ..	625	14,805	642	6,984	15	2,885	1,990,721	120,173	2,453,538	5,883,590
<i>Class XIII.—Rubber Goods</i> ..	115	12,825	94	1,384	..	862	386,960	92,863	1,044,770	2,161,171

*Class XIV.—Musical Instruments.*

Pianos, piano-players, organs ..	15	109	6	178	..	6	30,491	667	47,833	96,281
Other .. .. .	1	263	..	12	..	3	2,788	455	892	4,702
Total .. ..	16	372	6	190	..	9	33,279	1,122	48,725	100,983

*Class XV.—Miscellaneous Products.*

Brooms and Brushes .. ..	16	182	15	206	..	58	45,092	1,176	89,032	164,283
Surgical, optical, and other scientific instruments .. ..	53	96	32	189	1	14	49,894	1,526	44,893	118,300
Toys, games, and sports requisites ..	39	379	30	283	1	123	69,758	3,517	130,621	291,299
Other .. .. .	17	391	10	166	3	131	41,049	4,396	95,163	197,441
Total .. ..	125	1,048	87	844	5	326	205,793	10,615	359,709	771,323

*Class XVI.—Heat, Light, and Power.*

Electric light and power—										
(a) Government .. ..	11	158,657	..	774	..	1	169,364	328,573	847	1,039,460
(b) Local authority .. ..	44	27,193	..	252	..	..	63,756	36,255	140	199,374
(c) Companies .. .. .	29	8,734	4	135	..	2	33,537	47,286	3	137,052
Gas works—										
(a) Local authority .. ..	9	94	..	70	..	4	16,483	3,347	26,563	63,727
(b) Companies .. .. .	28	2,953	..	686	..	1	166,795	103,499	600,372	1,395,167
Other .. .. .	1	830	..	2	..	..	434	3,146	1,908	9,027
Total .. ..	122	198,461	4	1,919	..	8	450,369	522,106	629,833	2,843,807
Total all Classes ..	8,204	416,784	6,194	75,424	597	46,050	21,258,599	2,443,539	51,727,685	93,388,617

## 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 1922-23, and the past four years are given in the following table:—

Item.	1922-23.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	49	42	44	53	50
Number of persons engaged ..	2,443	1,879	1,838	1,406	1,626
Horsepower of engines used ..	3,858	4,005	3,840	3,676	3,775
Value of plant and machinery £	338,160	366,680	336,835	309,960	282,716
Value of land and buildings £	381,000	472,830	454,589	455,415	421,535
Salaries and wages paid .. £	*520,487	466,000	449,027	322,373	318,165
Fuel, light, and power .. £	41,380	33,824	33,288	28,641	29,399
Value of materials used .. £	1,825,999	1,897,630	1,417,919	988,916	1,096,341
Value of output .. £	2,775,224	2,722,296	2,197,709	1,517,087	1,669,760
Value added to materials .. £	907,845	764,892	720,999	482,447	518,056
Materials treated—					
Cow and ox hides ..	780,221	624,681	638,915	504,528	654,584
Calf hides ..	663,813	455,902	429,373	276,672	375,424
Sheep and other skins ..	2,403,940	1,130,352	1,048,002	1,024,903	1,143,959
Bark used .. tons	13,683	10,931	11,709	8,725	10,178
Sole leather produced .. lbs.	†	11,916,309	12,624,029	10,334,659	11,465,898

\* Exclusive of drawings of working proprietors.

† Not available.

The value of leather imported into Victoria from overseas countries during the year ended 30th June, 1932, was £19,901, and the value of leather exported in the same period was £131,331.

The manufacture of soap was also one of the earliest of 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.

Item.	1922-23.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	19	17	17	18	21
Number of persons engaged ..	769	671	653	625	683
Horsepower of engines used ..	662	851	823	569	618
Value of plant and machinery £	196,355	240,640	246,020	225,097	227,535
Value of land and buildings £	172,790	188,840	204,895	193,885	197,185
Salaries and wages paid .. £	*142,685	141,107	138,450	122,380	116,462
Fuel, light and power .. £	28,686	36,628	31,282	26,947	30,541
Value of materials used .. £	661,836	703,126	636,235	499,679	494,331
Value of output .. £	1,152,270	1,230,451	1,138,963	1,030,955	1,028,525
Value added to materials .. £	461,748	461,697	455,107	481,430	499,004
Materials treated—					
Tallow .. cwt.	193,190	215,519	197,953	186,843	211,444
Alkali .. lbs.	6,174,060	9,029,663	8,738,472	8,437,976	11,668,981
Copro. oil .. cwt.	22,205	27,182	26,112	25,421	24,226
Output—					
Soap household .. cwt.	298,234	298,343	285,324	281,194	283,190
" Sand .. "		48,656	28,346	29,450	24,803
" Toilet .. "		14,057	14,464	14,887	15,845
Soda crystals .. lbs.	1,774,752	3,709,104	3,488,576	3,466,400	3,965,552

\* Exclusive of drawings of working proprietors.

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

The imports from oversea countries in 1931-32 included 166,178 lbs. of soap valued at £5,578, and 20,065 lbs. of candles, &c., valued at £1,311.

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 cement and cement products.

Item.	1922-23.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	92	76	77	65	65
Number of persons engaged ..	3,201	2,321	2,165	1,167	1,148
Horse-power of engines used ..	6,903	8,459	8,838	8,200	6,475
Value of plant and machinery £	408,220	503,770	499,205	468,456	425,585
Value of land and buildings £	417,825	564,270	581,765	534,554	493,751
Salaries and wages paid £	*631,454	538,952	483,873	221,333	185,796
Fuel, light, and power £	246,357	223,231	214,917	73,296	57,479
Value of materials used £	91,683	142,869	125,978	49,288	46,283
Value of output ..	1,359,547	1,171,830	1,084,452	470,843	380,802
Value added to materials £	1,021,507	761,318	703,619	331,749	261,157
Production—					
Bricks, common .. No.	227,183,000	179,528,000	162,676,000	45,700,000	45,682,000
Firebricks .. No.	†	3,453,000	3,595,000	3,064,000	4,098,000
Roofing tiles .. No.	†	9,254,320	8,939,839	1,504,000	1,439,000
Pipes ..	£ 146,671	161,771	145,430	80,045	45,579
Pottery ..	£ 203,828	124,839	126,708	75,022	46,662

\* Exclusive of drawings of working proprietors. † Not available.

**Forest Saw-mills.**

Detailed information in regard to the forest saw-mills of the State for the five years 1927-28 to 1931-32 is given in the table which follows:—

**FOREST SAW-MILLS, 1927-28 to 1931-32.**

Year.	Number of Mills.	Value of Machinery and Plant in Use.	Persons Employed.	Salaries and Wages Paid.	Victorian Timber Sawn.	
					Quantity.	Value.
		£		£	'super ft.	£
1927-28 ..	185	516,800	2,528	536,708	100,567,000	782,700
1928-29 ..	171	443,640	1,758	406,582	79,018,000	676,200
1929-30 ..	169	447,080	1,882	430,639	86,145,000	681,625
1930-31 ..	149	350,435	1,072	214,312	42,274,000	310,430
1931-32 ..	155	344,488	1,232	222,351	49,412,410	326,587

In addition to the forest saw-mills there were 440 other factories working in wood. Particulars relating to these for the year 1931-32 are given on page 389.

**Firewood.**

The quantity of timber sawn for firewood consumption in the year 1931-32 was 219,039 tons valued at the sawmills at £174,704. 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. The increased use of brown coal briquettes and the extension of the use of gas and electricity for cooking and heating has caused a reduction in the demand for firewood in recent years.

**Agricultural and Dairy Machinery Works.**

Agricultural and Dairy Machinery Works have been tabulated jointly since 1925-26, owing to a revision of the classification of Victorian statistics. Comparable figures are therefore available for the past six years only.

### AGRICULTURAL AND DAIRY MACHINERY WORKS, 1926-27 TO 1931-32.

Year.	No. of Factories.	Persons Employed.	Salaries and Wages Paid.	Value of—		
				Fuel and Light Used.	Materials Used.	Output.
			£	£	£	£
1926-27 ..	73	3,820	931,404	51,620	891,930	2,228,570
1927-28 ..	77	3,353	806,978	57,011	801,008	2,003,855
1928-29 ..	71	3,239	762,977	49,243	738,414	1,885,154
1929-30 ..	72	2,639	603,817	41,540	537,545	1,378,237
1930-31 ..	73	2,034	418,845	28,974	357,492	938,990
1931-32 ..	71	1,627	291,771	24,166	288,492	707,159

In the following table particulars of bacon and ham curing establishments are given for the year 1922-23 and the past four years.

### BACON CURING.

Item.	1922-23.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	24	19	19	19	20
Number of persons employed ..	494	556	544	498	501
Horse-power of engines used ..	1,262	1,838	1,798	1,974	2,160
Value of land, buildings, plant, &c. ..	£ 272,425	352,260	348,270	349,195	354,240
Salaries and wages paid ..	£ 104,841	147,369	144,120	130,692	116,221
Value of materials used ..	£ 1,030,686	1,109,616	1,043,360	650,101	594,716
Value of fuel and light ..	£ 16,905	21,737	23,075	20,190	17,254
Value of output ..	£ 1,289,267	1,409,897	1,367,179	954,873	848,367
Pigs slaughtered for curing No.	186,640	198,131	218,799	208,593	198,212
Bacon and ham cured—					
In factories .. lbs.	17,302,995	18,611,728	18,222,220	17,340,287	16,833,907
On farms .. lbs.	1,975,729	789,719	666,317	891,932	1,453,497

\* Excluding drawings of working proprietors.

The number of butter, cheese, and kindred factories in 1931-32 was 169. Of these 137 were making butter, 18 cheese, 4 concentrated milk, 3 condensed milk, 10 powdered milk, 5 casein, and 1 milk sugar. There were also 16 creameries attached to the factories. The following table gives some indication of the value of this industry to the State :—

### BUTTER AND CHEESE FACTORIES, 1922-23 to 1931-32.

Year.	Number of Factories.	Value of Machinery, Plant, Land, and Buildings.	Persons Employed.	Salaries and Wages Paid.	Value of Output.
		£		£	£
1922-23 .. ..	182	1,509,545	2,278	497,816	7,899,377
1923-24 .. ..	184	1,685,530	2,280	511,001	7,974,676
1924-25 .. ..	186	1,812,525	2,427	565,422*	8,212,788
1925-26 .. ..	183	1,889,475	2,213	528,310*	7,631,400
1926-27 .. ..	182	1,969,280	2,320	552,659*	7,813,409
1927-28 .. ..	179	2,021,330	2,426	572,907*	8,681,454
1928-29 .. ..	169	1,931,360	2,449	582,411*	9,614,084
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

\* Including amounts drawn by working proprietors.

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on page 362.

### BAKERIES (INCLUDING BREAD, PASTRY, AND CAKES, ETC.), 1927-28 to 1931-32.

Statistics relating to the manufacture of bread, pastry, and cakes were first compiled in the year 1928.

Figures for the past five years only are therefore available and cover about 44 per cent. of the establishments, the remaining 56 per cent. being too small to be classified as factories according to the

statistical definition. In 1927-28, 669 small factories, representing the 56 per cent. excluded from the statistics, used 32,889 tons of flour and produced, among other items, 20,851,188 4-lb. loaves of bread.

The total value of output of the industry as stated hereunder includes the value of all articles produced, but details relating to the output of pastry, cakes, pies, scones, &c., have not been tabulated. It must be explained that the value quoted is the wholesale selling value of the goods produced at the factory exclusive of all selling and delivery costs.

### BAKERIES, 1927-28 to 1931-32.

Item.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
Number of factories ..	519	487	464	468	482
Number of persons employed ..	3,367	3,248	2,951	2,871	2,839
Horse-power of engines used ..	1,774	1,822	1,944	1,980	1,909
Value of land and buildings £	1,025,220	1,087,550	1,019,260	1,036,675	1,030,860
Value of plant and machinery £	344,970	368,050	366,290	366,796	377,371
Salaries and wages paid £	772,704	767,117	719,055	652,387	576,213
Value of materials used £	2,218,452	2,045,012	1,987,669	1,566,851	1,397,017
Fuel, light, and power £	86,592	84,436	82,347	75,878	76,691
Repairs, oil and water used £	19,077	16,828	18,529	19,205	23,583
Total output ..	£ 3,575,645	£ 3,480,992	£ 3,313,820	£ 2,745,322	£ 2,475,992
Value added in process of manufacture ..	£ 1,251,524	£ 1,334,716	£ 1,225,275	£ 1,083,388	£ 977,801
Value added per employee ..	£ 371	£ 411	£ 415	£ 377	£ 344
Flour used—short tons ..	89,135	90,943	104,069	93,116	88,987
Bread made—4-lb. loaves ..	52,812,500	54,656,000	53,852,013	54,343,878	54,728,450

Meat freezing, preserving, and meat extract works numbered 21 in 1931-32, and gave employment to 1,015 hands, the wages paid amounting to £182,622. The

approximate value of machinery, plant, land and buildings in that year was £986,740. Further details regarding this industry appear on page 388, and particulars of the output for the past five years are given in the following table:—

Item.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
Frozen meat—					
Cattle .. .. . qrs.	19,500	6,297	7,784	10,798	21,289
Sheep .. .. . No.	915,545	1,590,573	1,825,019	1,697,947	1,863,375
Rabbits and hares ..	1,055,976	3,248,558	2,949,796	4,617,406	5,098,326
Poultry .. .. . "	6,234	8,732	4,872	18,462	17,522
Preserved meat—					
Beef and mutton .. . cwt.	12,890	9,544	4,628	3,152	382
Rabbits and hares ..	4	8	2	..	14
Other meats, &c. ..	3,335	4,459	2,726	2,631	2,965

The following statement shows the imports from and exports to overseas countries of frozen and preserved meats, other than bacon and ham, during the year ended 30th June, 1932:—

Imports and  
exports of  
meats.

## MEATS IMPORTED AND EXPORTED OVERSEA, 1931-32.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Frozen—				
Beef .. ..	110 lbs.	2	2,345,825 lbs.	30,028
Game .. ..	290 „	36	13,075 „	104
Lamb .. ..	..	..	53,730,762 „	1,186,155
Mutton .. ..	..	..	11,816,831 „	190,621
Pork .. ..	..	..	1,565,668 „	38,993
Poultry .. ..	..	..	8,761 prs.	7,246
Rabbits and Hares .. ..	..	..	2,549,163 „	148,058
Other .. ..	..	..	632,901 lbs.	14,719
Potted and Concentrated	19,832 lbs.	4,999	..	862
Preserved in tins .. ..	9,811 „	492	247,639 lbs.	10,402
Sausage Casings .. ..	2,897 cwt.	27,029	7,118 cwt.	75,567
Other .. ..	..	14	..	4,970
Total value .. ..	..	32,572	..	1,707,725

Victorian flour mills produce ample flour, etc., to supply all local requirements and a considerable surplus for export. During the year 1931-32, 217,872 tons of flour, valued at £1,347,302, were exported from Victoria to countries beyond Australia. The following table gives particulars of the industry for the year 1922-23 and the past four years:—

Item.	1922-23.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	47	41	38	35	39
Number of persons engaged ..	1,089	985	898	888	957
Horse-power of engines used ..	5,593	5,982	5,591	5,422	5,766
Value of plant and machinery £	418,985	634,510	580,835	527,055	508,905
Value of land and buildings £	287,750	468,600	431,710	421,723	476,250
Salaries and wages paid £	*244,436	269,913	247,692	229,601	228,720
Fuel, light, and power £	53,518	53,677	52,163	52,165	52,271
Value of materials used £	4,476,424	4,593,331	4,355,538	2,802,160	2,873,317
Value of output .. £	5,415,067	5,378,763	5,106,194	3,461,548	3,622,593
Value added to materials £	885,125	708,551	677,443	585,662	667,865
Wheat ground into flour bushels	16,601,527	18,545,041	17,227,886	17,578,614	19,065,977
Flour produced .. tons	352,002	390,286	364,682	369,966	396,257
(2,000 lbs.)					
Brass produced .. bushels	7,643,408	8,228,720	7,238,198	7,868,544	8,938,541
Polhard produced ..	6,372,741	7,762,370	7,667,061	7,602,848	8,131,560
Wheatmeal produced cwt.	†	43,010	57,276	63,609	60,862

\* Exclusive of drawings of working proprietors. † Not available.



**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 past five years.

Item.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	35	38	39	40	43
Number of persons engaged ..	2,861	2,126	2,261	1,647	1,751
Horse-power of engines used ..	1,663	2,148	2,085	2,034	2,097
Value of plant and machinery £	304,130	307,560	286,240	288,697	280,660
Value of land and buildings £	435,060	453,390	460,635	455,929	465,558
Salaries and wages paid £	466,016	393,685	418,024	276,754	275,631
Fuel, light, and power used £	37,106	32,815	35,496	22,306	21,731
Value of materials used £	1,618,263	1,347,853	1,607,306	1,022,234	1,262,323
Value of output ..	£ 2,660,244	2,202,502	2,592,061	1,617,563	1,958,124
Fruit used .. cwt.	960,004	601,722	1,052,534	574,931	697,968
Sugar used ..	295,331	253,735	308,012	199,576	246,400
Output of—					
Jams and jellies .. cwt.	340,847	285,636	335,530	246,265	298,898
Fruit preserved ..	479,928	351,048	510,298	245,690	355,088
Fruit pulped ..	121,060	57,648	150,647	52,175	75,906
Sauce .. pints	7,312,500	7,905,541	8,806,347	6,736,916	5,528,979
Pickles ..	1,487,990	1,803,764	1,451,693	1,058,754	725,410

**Beet Sugar Industry.** The following table contains particulars relating to the production, etc., of sugar in the beet sugar factory in which work is carried on under the control of the Victorian Government at Maffra, Gippsland.

A brief survey of the progress of this industry since its establishment was given in the *Victorian Year-Book* for 1928-29.

Season.	Area Harvested.	Sugar Beet Harvested.	Sugar Produced.
	acres.	tons.	tons.
1925-26 .. ..	1,880	21,194	2,315
1926-27 .. ..	2,024	9,851	1,177
1927-28 .. ..	2,353	25,439	2,349
1928-29 .. ..	2,130	15,236	2,108
1929-30 .. ..	2,500	26,525	3,472
1930-31 .. ..	3,045	38,291	5,095
1931-32 .. ..	3,173	43,209	5,428

**Breweries.** Particulars regarding breweries for the ten years 1922-23 to 1931-32 are set forth in the next table. Machinery and plant were valued at £630,425 in 1922-23 and at £952,830 in 1931-32, whilst land and buildings were valued at £435,135 and £716,186 respectively in those years. The wages paid in 1931-32 amounted to £362,327.

## BREWERIES, 1922-23 to 1931-32.

Year.	Number of Breweries.	Persons Employed.	Materials Used—			Beer and Stout Made.	Value of Output.
			Sugar.	Malt.	Hops.		
			cwt.	bushels.	lbs.	gallons.	£
1922-23	14	1,091	110,051	723,511	768,870	23,212,000	2,322,814
1923-24	14	1,186	112,840	743,131	796,769	23,907,000	2,412,387
1924-25	14	1,263	113,729	744,048	784,080	23,286,000	2,479,619
1925-26	11	1,113	118,310	777,041	811,063	24,347,000	2,594,835
1926-27	10	1,156	121,666	814,298	831,317	26,484,000	2,605,704
1927-28	9	1,169	116,890	815,882	814,812	25,870,000	2,534,815
1928-29	9	1,194	110,968	806,252	777,849	24,999,000	2,522,933
1929-30	9	1,153	103,323	754,238	619,218	21,952,775	2,334,233
1930-31	9	1,083	83,153	648,248	602,277	20,545,800	1,935,542
1931-32	9	1,041	69,868	619,055	545,609	18,705,325	1,751,407

**Distilleries.** The number of distilleries working in 1931-32 was 9, and the persons employed numbered 119, of whom two were working proprietors. The estimated value of the machinery, plant, land and buildings was £414,355. The quantities of materials used in manufacture and of spirits distilled in each of the last ten years were as follows :—

## DISTILLERIES, 1922-23 to 1931-32.

Year.	Materials Used.				Spirits Distilled.
	Wine.	Malt.	Other Grain.	Molasses.	
	gallons.	bushels.	bushels.	lbs.	proof gals.
1922-23	..	..	..	85,120	473,152
1923-24	..	..	..	2,350,880	730,158
1924-25	..	..	..	2,727,650	561,153
1925-26	..	..	..	2,994,880	785,595
1926-27	..	..	..	2,437,920	995,708
1927-28	..	..	..	1,513,792	709,031
1928-29	..	..	11,192	2,278,080	813,562
1929-30	..	..	93,781	1,234,528	1,142,762
1930-31	..	..	173,311	909,888	1,010,727
1931-32	..	..	129,421	549,584	1,053,698

Spirits made by vine-growers for fortifying wine are not included in the foregoing table. The following quantities were distilled in vineyards for that purpose during the last ten years :—14,930 gallons in 1922-23, 13,792 gallons in 1923-24, 19,245 gallons in 1924-25, 14,850 gallons in 1925-26, 11,259 gallons in 1926-27, 10,110 gallons in 1927-28, 17,529 gallons in 1928-29, 18,299 gallons in 1929-30, 21,295 gallons in 1930-31, and 18,664 gallons in 1931-32.

**Tobacco  
factories.**

The number of tobacco, cigar, and cigarette factories licensed in 1931-32 was twenty-five, of which thirteen were too small to be classified as ordinary factories and were consequently not included in the statistical tabulation on page 389. In the year mentioned the remaining twelve gave employment to 1,719 persons who were paid £331,260 in wages, and used machinery, plant, land and buildings valued at £545,270. The subjoined table shows the quantity of tobacco leaf used by and the output of the full number of licensed establishments for the last ten years:—

**TOBACCO FACTORIES, 1922-23 to 1931-32.**

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured.			
	Australian.	Imported.	Tobacco.	Snuff.	Cigars.	Cigarettes.
	lbs.	lbs.	lbs.	lbs.	number.	number.
1922-23 ..	540,322	5,628,555	6,709,060	231	32,699,019	99,771,650
1923-24 ..	471,862	4,998,680	5,833,903	99	29,244,981	87,896,350
1924-25 ..	427,152	5,222,496	5,998,437	50	30,794,864	77,840,200
1925-26 ..	449,575	5,055,260	5,879,683	100	29,595,805	70,135,500
1926-27 ..	527,807	4,662,288	5,520,998	—	27,657,963	70,314,868
1927-28 ..	462,279	4,579,586	5,511,072	—	26,688,939	68,537,354
1928-29 ..	450,083	4,585,040	5,351,643	4,527	24,094,483	96,032,175
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

**Woollen  
mills.**

There were thirty-four woollen mills working in 1931-32, and the number of persons employed therein was 7,144, of whom twenty-one were working proprietors. Salaries and wages paid amounted to £1,025,884, and the approximate value of the machinery, plant, land and buildings was £2,794,425. The value of the raw materials used during the year was £2,113,304, and that of the goods manufactured in the same period, £4,134,830. The quantities of wool and cotton used and of goods manufactured in each of the last ten years were as follows:—

## WOOLLEN MILLS, 1922-23 to 1931-32.

Year.	Quantity of Scoured Wool Used.	Quantity of Cotton Used.	Goods Manufactured—				Value of Output.
			Tweed and Cloth.	Flannel.	Blankets.	Shawls and Rugs.	
	lbs.	lbs.	yards.	yards.	pairs.	number	£
1922-23	9,640,760	621,490	1,714,460	6,622,350	314,803	71,073	3,264,025
1923-24	7,936,456	848,812	1,927,298	6,095,442	377,354	115,443	3,561,480
1924-25	8,782,203	544,364	1,898,647	3,594,427	319,026	130,094	3,433,231
1925-26	10,679,901	285,482	3,438,142	3,618,260	250,943	93,766	3,976,224
1926-27	14,510,421	1,013,077	4,854,389	6,213,860	327,113	116,855	4,581,445
1927-28	11,960,882	972,455	6,236,623*	6,879,796*	375,125	126,603	4,680,740
1928-29	11,582,312	832,851	5,979,625*	4,603,874*	235,830	115,533	4,308,677
1929-30	11,708,536	547,307	6,077,129*	3,546,961*	190,869	123,861	3,903,164
1930-31	9,569,421	464,277	5,431,704*	4,065,138*	107,962	71,951	3,289,288
1931-32	13,018,635	788,472	10,111,143*	5,063,865*	125,858	69,573	4,134,880

\* Square yards.

**Boots and shoes.**

Particulars relating to factories manufacturing boots and shoes are shown in the following table. Figures for the year 1922-23 include boot repairing establishments which were tabulated separately from boot factories in the year 1926-27 and succeeding years.

Item.	1922-23.	1928-29.	1929-30.	1930-31.	1931-32.
Number of establishments ..	371	175	175	175	176
Number of persons employed ..	12,333	11,041	10,321	8,622	8,656
Horse-power of engines used ..	2,994	3,176	3,077	2,812	2,835
Value of plant, machinery, land, and buildings ..	£ 1,338,555	£ 1,403,330	£ 1,369,000	£ 1,218,654	£ 1,229,492
Salaries and wages paid ..	* 1,922,345	1,939,069	1,834,816	1,400,624	1,315,487
Fuel, light, and power ..	£ 34,151	£ 84,654	£ 34,284	£ 29,857	£ 31,549
Value of materials used ..	£ 3,059,769	£ 3,031,173	£ 2,726,740	£ 1,917,444	£ 1,916,736
Value of output ..	£ 6,157,132	£ 5,810,519	£ 5,375,438	£ 3,974,195	£ 3,773,432
Boots and shoes made .. pairs	7,691,946	7,856,996	7,891,138	7,238,276	7,570,209
Slippers (including canvas) made .. pairs	851,289	2,492,609	2,567,407	2,548,326	3,056,638
<i>Boot Repairing Factories.</i>					
Number of factories ..	†	340	372	415	426
Persons employed ..	†	567	594	664	562
Value of plant, machinery, land, and buildings ..	†	£ 491,110	£ 495,270	£ 494,426	£ 400,180
Value of materials used ..	†	£ 83,955	£ 81,389	£ 75,749	£ 58,630
Salaries and wages paid ..	†	£ 116,849	£ 121,037	£ 111,696	£ 85,818
Value of output ..	†	£ 253,913	£ 255,528	£ 233,171	£ 185,281

\* Excluding amounts drawn by working proprietors. † Not available.

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 £12,856,708 in 1931-32, as compared with £13,354,238 in 1922-23. During the period 1922-23 to 1931-32 the persons employed decreased by 10 per cent., the wages paid (excluding amounts drawn by working proprietors) by 11 per cent., the

**Dress (exclusive of boots) factories.**

value of materials used by 5 per cent., and the value of the output by 4 per cent. Particulars of the industry for each of the last ten years are as follows:—

**DRESS (EXCLUSIVE OF BOOT) FACTORIES, 1922-23 to 1931-32.**

Year.	Number of Factories.	Number of Persons Employed.			Salaries and Wages Paid.	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
					£	£	£
1922-23	1,526	4,951	23,595	33,546	3,554,303	7,456,539	13,354,238
1923-24	1,501	4,751	26,772	31,523	3,574,059	7,181,020	13,118,477
1924-25	1,500	4,823	26,295	31,118	3,837,919*	7,388,950	13,584,190
1925-26	1,491	4,862	26,458	31,320	4,022,168*	7,833,863	14,199,570
1926-27	1,535	5,348	28,941	34,289	4,492,778*	8,530,529	15,517,404
1927-28	1,517	5,241	28,212	33,453	4,493,366*	7,975,259	14,707,061
1928-29	1,522	5,433	28,272	33,705	4,541,295*	8,426,982	15,505,660
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

\* Including amounts drawn by working proprietors.

Electric light and power works.

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

**ELECTRIC LIGHT AND POWER WORKS, 1922-23 to 1931-32.**

Year.	Number of Stations.	Horse-power of Machinery.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Supplied.	Value of Output.
			£		£	Kilowatt hours.	£
1922-23	88	72,106	4,042,910	1,451	377,048	157,728,000	1,614,139
1923-24	90	154,622	5,864,065	1,752	462,172	405,108,000	2,176,551
1924-25	84	185,633	7,900,455	2,011	549,849	413,556,000	2,382,582
1925-26	83	188,342	5,035,460	1,149	338,807	460,710,000	1,648,113
1926-27	86	219,626	5,144,035	1,120	323,286	580,221,000	1,768,514
1927-28	86	198,914	5,513,630	1,069	307,490	630,880,000	1,566,113
1928-29	87	235,589	6,079,300	1,153	322,295	673,492,000	1,616,076
1929-30	91	248,193	6,559,245	1,230	354,823	724,525,000	1,873,361
1930-31	91	221,767	6,411,935	1,162	306,785	681,230,000	1,605,138
1931-32	84	194,584	6,152,620	1,168	266,657	704,639,000	1,375,886

The decrease in the number of persons and the value of machinery and plant and output in electric supply undertakings for the last seven years is due to a change in the method of compilation. In previous years, the figures related to both generation and distribution, but since 1924-25 only those relating to the former are given.

Prior to 1923-24 particulars relating to the Newport power houses controlled by the Victorian Railways Commissioners and the State Electricity Commission had not been included in the statistics, and this accounts for the large increase in the figures for that year.

The principal generating station is now located at the Electricity Commission's works at Yallourn, where 317,676,000 units were generated in the year 1931-32.

### 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 electric undertakings and 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 and to issue licences for wiremen. 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 the 75,000-kw. station is being duplicated by the installation of three 25,000-kw. turbo-alternators, together with the necessary boiler and auxiliary plant. One 25,000-kw. turbo-alternator is already in operation, making the present installed capacity of the Yallourn Power Station 100,000 kw. Two 132,000-volt lines transmit energy to receiving stations at Richmond and Yarraville. A third station (Thomastown) receives the surplus energy from the Sugarloaf-Rubicon group of hydro stations (37,000 h.p.) in the north-eastern district. There are two peak load stations in the metropolitan area, viz., Newport "B" and Richmond.

The total kva. of the three main receiving stations is 186,900, in addition to which there are 1,078 sub-stations, metropolitan and rural, aggregating 352,868 kva. High tension lines aggregate 2,391 miles, including 503 miles of underground cables. The Commission supplies practically the whole of the energy requirements of the metropolitan area of Melbourne, excluding the railways. It retails direct in nineteen suburbs, in addition to all the outer metropolitan centres. The very comprehensive metropolitan distribution network includes nine main sub-stations, 480 minor sub-stations, 8,000 miles of copper mains, and the reticulation of 1,400 miles of streets.

The rural centres supplied by the Commission number 162, of which 108 had no supply previously. As from 1st July, 1931, it has supervised the operation of the Bendigo and Ballarat undertakings (including tramways), and will continue to do so until 1st July, 1934, when it will assume full control.

**Gasworks.** Particulars in regard to gasworks are given below for each of the last five years.

## GASWORKS, 1927-28 to 1931-32.

Year.	Number of Works.	Persons Employed.	Wages Paid.	Coal Used.	Gas Made.	Coke Produced.	Value of Output.
			£	tons.	cubic feet.	tons.	£
1927-28 ..	34	1,013	290,190	437,947	6,326,887,000	291,077	2,077,058
1928-29 ..	35	936	265,536	437,651	6,424,614,000	279,887	2,042,806
1929-30 ..	36	905	261,547	399,182	6,409,110,000	260,437	2,073,435
1930-31 ..	37	822	202,627	334,874	5,869,257,000	211,226	1,633,880
1931-32 ..	37	761	183,278	306,287	5,458,609,000	181,746	1,458,894

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 68,567 in 1927-28, 239,928 in 1928-29, 2,516,029 in 1929-30, 1,489,397 in 1930-31, and 948,063 in 1931-32.

**Factory output by classes.**

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

A revised classification of industries was adopted in 1930-31 in accordance with a resolution passed at a conference of Commonwealth and State statisticians.

## VALUE OF ARTICLES PRODUCED IN FACTORIES.

Class of Industry.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
	£	£	£	£	£
1. Treatment of non-metalliferous mine and quarry products ..	2,182,682	2,116,449	2,219,308	1,308,408	1,149,881
2. Bricks, pottery, glass, &c. ..	2,044,206	1,911,641	1,714,886	921,949	761,035
3. Chemicals, dyes, explosives, paint, oils, and grease ..	6,769,375	7,244,216	7,203,210	6,158,919	5,901,862
4. Industrial metals, machines, implements, and conveyances ..	20,442,389	20,137,270	18,787,020	12,910,719	11,410,910
5. Precious metals, jewellery, and plate ..	552,309	580,257	552,078	400,555	389,328
6. Textiles and textile goods (not dress) ..	8,945,062	9,228,699	9,186,336	7,707,688	9,270,428
7. Skins and leather (not clothing or footwear) ..	6,218,667	5,781,861	4,759,255	2,658,212	3,314,377
8. Clothing ..	17,472,270	17,925,129	17,390,421	12,833,584	12,153,939
9. Food, drink, and tobacco ..	40,416,917	40,739,745	39,724,515	33,579,814	32,862,988
10. Woodworking and basketware ..	4,990,458	4,230,329	4,179,177	2,448,485	2,229,107
11. Furniture, bedding, &c. ..	2,751,798	2,525,472	2,250,585	1,315,774	1,193,938
12. Paper, stationery, printing, bookbinding, &c. ..	7,084,595	7,153,207	6,975,549	5,779,796	5,883,590
13. Rubber ..	4,251,598	3,911,849	3,209,032	1,412,297	2,161,171
14. Musical instruments ..	279,566	335,387	310,518	156,315	100,983
15. Miscellaneous products ..	387,734	421,890	452,423	585,712	771,323
16. Heat, light, and power ..	3,666,691	3,674,122	3,956,786	3,247,668	2,843,807
Total ..	128,465,317	127,897,463	122,811,099	93,425,795	93,388,617

**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, 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 422) is designed to show seasonal employment.

**AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.**

Class of Industry.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
1. Treatment of non-metallic ferous mine and quarry products .. ..	2,518	2,382	2,297	1,505	1,317
2. Bricks, pottery, glass, &c. ..	3,458	3,336	2,997	1,831	1,781
3. Chemicals, dyes, explosives, paint, oils, and grease ..	5,317	5,272	5,074	4,723	4,855
4. Industrial metals, machines, implements, and convey- ances .. ..	35,725	35,590	33,188	26,193	24,250
5. Precious metals, jewellery, and plate .. ..	1,100	1,065	1,077	941	936
6. Textiles and textile goods (not dress) .. ..	14,248	14,903	16,221	14,719	17,176
7. Skins and leather (not cloth- ing or footwear) .. ..	4,153	3,799	3,824	2,738	3,272
8. Clothing .. ..	39,131	38,701	36,489	30,157	31,511
9. Food, drink, and tobacco ..	22,293	21,517	21,285	20,024	20,095
10. Woodworking and basket- ware .. ..	8,670	6,992	6,841	4,483	4,288
11. Furniture, bedding, &c. ..	4,688	4,286	3,660	2,674	2,520
12. Paper, stationery, printing, bookbinding, &c. ..	11,618	11,470	11,451	10,641	10,526
13. Rubber .. ..	4,205	3,868	3,261	2,051	2,340
14. Musical instruments .. ..	471	537	466	298	205
15. Miscellaneous products ..	653	733	741	1,052	1,262
16. Heat, light, and power ..	2,109	2,095	2,137	1,986	1,931
Total .. ..	160,357	156,568	151,009	126,016	128,265

This table shows that there has been a slight recovery in factory employment since the year 1930-31, and indicates greater activity in Victorian secondary industries.



An examination of the five-year table hereunder reveals the fact that the greatest and most consistent increase in the number of factories has taken place in the factories employing under four hands.

### FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

	Showing Annual Percentage Increase or Decrease.									
	1927-28.	Increase.	1928-29.	Increase.	1929-30.	Increase.	1930-31.	Increase.	1931-32.	Increase.
		%		%		%		%		%
Under 4 hands—										
Number of Factories	2,397	16·87	2,585	7·84	2,770	7·2	3,182	14·9	3,370	5·9
Employees	5,056	17·17	4,907	2·95	4,940	0·7	5,933	20·1	5,862	-1·2
4 hands—										
Number of Factories	955	17·75	823	-13·82	919	-11·7	814	-11·4	717	-11·9
Employees	3,820	17·75	3,292	-13·82	3,676	-11·7	3,256	-11·4	2,868	-11·9
5 to 10 hands—										
Number of Factories	2,301	3·88	2,241	-2·61	2,049	-8·6	2,015	-1·7	1,968	-2·3
Employees	15,861	2·56	15,391	-2·96	14,124	-8·2	13,736	-2·7	13,368	-2·7
11 to 20 hands—										
Number of Factories	1,101	-2·13	1,035	-1·45	1,013	-6·6	1,000	-1·3	927	-7·3
Employees	16,160	-1·93	15,540	-1·93	14,755	-6·8	14,606	-1·0	13,664	-6·4
21 to 50 hands—										
Number of Factories	922	2·44	903	-2·03	880	-2·5	763	-13·3	768	·7
Employees	28,960	0·64	23,472	-1·68	27,232	-4·4	24,286	-10·8	23,807	-2·0
51 to 100 hands—										
Number of Factories	320	-5·88	300	-6·25	309	3·0	205	-33·7	239	16·6
Employees	22,433	-7·21	20,933	-6·55	21,310	1·7	14,092	-33·9	16,637	18·1
Over 100 hands—										
Number of Factories	249	0·40	260	4·42	255	-1·9	220	-13·7	215	-2·3
Employees	68,067	-1·61	67,703	-0·53	64,972	-4·0	53,258	-18·0	54,338	2·0

### PROPORTION OF FACTORIES OF DIFFERENT SIZES.

[illegible]

Occupations  
in factories.

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

### OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

Occupations.	1926-27.	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
Working proprietors ..	7,334	7,755	7,302	6,963	6,882	6,791
Managers, overseers ..	5,580	5,891	5,826	5,797	5,376	5,118
Accountants, clerks ..	6,519	6,677	6,847	6,500	6,064	5,976
Engine-drivers, firemen	2,036	1,945	1,850	1,850	1,601	1,555
Workers in factory or works .. ..	137,025	135,425	132,304	127,738	104,475	107,325
Outworkers .. ..	592	380	240	182	136	140
Carters, messengers ..	2,065	1,703	1,660	1,494	1,269	1,107
Others .. ..	488	581	539	485	213	253
Total ..	161,639	160,357	156,568	151,009	126,016	128,265

**Outworkers.** The term “outworker” 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 1922-23 to 1931-32, were as follows :—

### 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.
1922-23 ..	103,092	1,307	49,533	618	152,625	960
1923-24 ..	107,578	1,334	48,584	593	156,162	961
1924-25 ..	105,984	1,286	48,174	578	154,158	930
1925-26 ..	104,512	1,246	48,447	573	152,959	908
1926-27 ..	108,969	1,278	52,670	613	161,639	944
1927-28 ..	108,068	1,246	52,289	598	160,357	921
1928-29 ..	104,648	1,195	51,920	586	156,568	889
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

Males formed 67·5 per cent. in 1922-23 and 63·6 per cent. in 1931-32 of the total persons employed. The decrease during the period 1922-23 to 1931-32 in the number of males employed was 21,474, or 20·8 per cent., and in the number of females employed, 2,886, or 5·8 per cent.

Of the total females in factories 71·4 per cent. are engaged in the textile and clothing industries, and 10·7 per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next table :—

### FEMALE EMPLOYMENT IN FACTORIES, 1931-32.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Chemicals, drugs, &c. .. ..	626	589	94
Explosives .. ..	326	141	43
Matches .. ..	218	591	271
Galvanised iron working and tin-smithing .. ..	1,386	284	20
Cotton .. ..	131	369	282
Woollen mills .. ..	3,141	4,003	127
Hosiery and knitting .. ..	2,213	5,822	263
Silk natural and artificial .. ..	126	231	183
Rope cordage .. ..	493	334	68
Furriers and fur dressing .. ..	222	237	107
Bags, trunks, &c. .. ..	276	257	93
Tailoring and slop clothing .. ..	1,525	4,738	311
Dressmaking .. ..	349	5,569	1,596
Millinery .. ..	129	1,323	1,026
Shirts, underclothing, corsets .. ..	594	4,665	785
Hats and caps .. ..	448	810	181
Boots and shoes .. ..	4,658	3,998	86
Biscuits .. ..	493	395	80
Confectionery .. ..	1,183	1,254	106
Jams, pickles, &c. .. ..	949	802	85
Tobacco, cigarettes, &c. .. ..	886	833	94
Envelopes, stationery, &c. .. ..	959	1,302	136
General printing and bookbinding .. ..	3,769	1,375	36
Rubber goods .. ..	1,478	862	58
All other factories .. ..	55,040	5,863	11
Total .. ..	81,618	46,647	657

A favorable feature of factory statistics has been the small proportion of children engaged in factories. Of the male and female employees, boys and girls under 16 constituted 3·20 and 8·77 per cent. respectively in 1931-32, as

Child labour  
in factories.

against 4.18 and 6.48 per cent. in 1922-23. The number of children employed in factories and their proportions to the total employees are given in the subjoined table for the years 1922-23 to 1931-32:—

## CHILDREN EMPLOYED IN FACTORIES.

Year.	Boys under 16.	Girls under 16.	Total Children.	Proportion per cent. of—		
				Boys to Male Employees.	Girls to Female Employees.	Children to Total Employees.
1922-23 ..	4,031	3,163	7,194	4.18	6.48	4.95
1923-24 ..	4,057	3,422	7,479	4.03	7.15	5.03
1924-25 ..	4,027	3,223	7,250	4.05	6.78	4.94
1925-26 ..	3,980	3,489	7,469	4.06	7.30	5.13
1926-27 ..	4,567	4,041	8,608	4.46	7.77	5.58
1927-28 ..	4,231	3,992	8,223	3.91	7.63	5.13
1928-29 ..	4,209	4,298	8,507	4.29	8.39	5.70
1929-30 ..	3,748	4,019	7,767	3.74	7.90	5.14
1930-31 ..	2,543	3,361	5,904	3.07	7.80	4.69
1931-32 ..	2,615	4,089	6,704	3.20	8.77	5.23

**Machinery in factories.** In the following table are shown the number of factories using mechanical power, the total horse-power of the engines used, and the value of the machinery and plant for the ten years 1922-23 to 1931-32:—

## MACHINERY IN FACTORIES.

Year.	Number of Factories equipped with Machinery.	Value of Machinery and Plant.	Average Horse-power used.
		£	
1922-23 ..	5,762	23,994,715	216,427
1923-24 ..	6,030	28,223,915	314,561
1924-25 ..	6,168	32,563,815	374,064
1925-26 ..	6,321	30,549,130	367,318
1926-27 ..	6,637	31,580,350	414,992
1927-28 ..	7,209	32,745,680	403,770
1928-29 ..	7,305	33,724,910	446,382
1929-30 ..	7,419	35,022,535	465,739
1930-31 ..	7,519	34,771,687	433,509
1931-32 ..	7,617	33,481,615	416,784

The nature of the power used and the capacity of the machinery in the factories of the State are set out in the next table. Establishments using more than one kind of mechanical power are included once only in the upper half of the table, usually under the power which is principally used. The lower half of the table shows the total horse-power of engines used.

### POWER USED IN FACTORIES, 1922-23 TO 1931-32.

Year.	Number of Factories using—					
	Steam.	Gas.	Electricity.	Oil.	Water, Wind, or Horses.	Manual Labour.
1922-23 ..	910	655	3,795	372	30	1,334
1923-24 ..	885	540	4,174	402	29	1,259
1924-25 ..	812	476	4,448	403	29	1,257
1925-26 ..	736	413	4,709	432	31	1,140
1926-27 ..	678	334	5,141	467	17	1,053
1927-28 ..	618	334	5,701	509	12	1,036
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

Year.	Average Horse-power used.				
	Steam.	Gas.	Electricity.	Oil.	Total.
1922-23 .. ..	112,547	18,968	81,679	3,233	216,427
1923-24 .. ..	195,744	18,394	95,340	5,033	314,561
1924-25 .. ..	233,290	17,869	97,381	5,380	353,920
1925-26 .. ..	235,872	15,422	107,812	8,212	367,318
1926-27 .. ..	268,061	13,548	123,359	10,024	414,992
1927-28 .. ..	241,956	12,326	137,692	11,796	403,770
1928-29 .. ..	(a) 274,331	10,886	147,835	13,330	446,382
1929-30 .. ..	(b) 286,164	9,671	155,911	13,993	465,739
1930-31 .. ..	(c) 258,253	9,081	151,997	14,268	433,599
1931-32 .. ..	(d) 235,334	8,937	158,279	14,234	416,784

(a) Includes 26,265 horse-power generated by water.

(b) Includes 26,546 horse-power generated by water.

(c) Includes 26,581 horse-power generated by water.

(d) Includes 31,433 horse-power generated by water.

The predominance of steam is due to its extensive use for the generation of electricity. A consistent increase is shown in the use of electricity which, as a secondary power, should be deducted from the total if the net horse-power used in factory production is required.

Wages in  
Factories.

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 last ten years:—

## 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.	
Aggregate Amounts.							
1922-23	£	£	£	£	£	£	£
1923-24	..	..	2,761,045	394,366	18,038,101	4,353,680	25,547,192
1924-25	1,538,868	74,043	3,003,856	436,425	19,577,822	4,453,982	27,472,084
1925-26	1,590,771	80,876	3,055,257	443,676	19,460,304	4,484,904	29,057,052
1926-27	1,837,094	95,938	2,996,929	448,337	19,547,974	4,664,463	29,329,400
1927-28	1,954,036	102,663	3,268,208	495,735	20,931,037	5,194,577	31,822,589
1928-29	1,965,990	100,829	3,353,582	532,265	20,915,338	5,229,167	32,087,051
1929-30	2,032,445	97,250	3,416,012	552,056	20,268,582	5,230,117	31,533,586
1930-31	2,032,445	97,250	3,395,311	554,149	19,293,295	5,145,085	30,517,535
1931-32	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

*Average Amounts.*

	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.	£	s.	d.
1922-23	..	..	..	331	10	9	134	14	8	204	12	2	94	16	5	175	15	9
1923-24	..	..	..	339	19	1	142	13	5	212	19	0	99	7	1	184	15	11
1924-25	233	8	11	111	13	7	347	18	0	143	13	7	214	15	5	100	19	4
1925-26	240	18	4	124	4	8	363	7	11	149	9	3	218	0	4	104	2	6
1926-27	275	18	6	141	18	5	369	19	2	151	16	8	223	18	1	106	12	0
1927-28	278	14	11	137	16	0	367	14	4	154	7	7	227	11	3	108	14	5
1928-29	298	15	8	139	13	0	374	11	3	155	7	7	227	17	5	109	15	5
1929-30	321	1	8	153	12	8	386	10	8	157	14	10	226	18	6	110	2	2
1930-31	290	6	1	163	12	3	334	9	2	145	13	9	204	15	9	99	1	6
1931-32	275	7	11	165	8	6	345	7	11	136	11	4	183	12	7	91	2	11

\* These figures are based on the number of employees and the wages, etc., paid to them, working proprietors being excluded.

The above table shows a general decrease in the wages paid in all groups except female working proprietors for the year 1931-32. The average wage paid to all employees decreased by £19 2s. 10d., or 11 per cent.

The method of arriving at the average number of employees since the year 1928-29 (see page 405) would tend to increase the average wage paid to an amount slightly greater than that in previous years.

The average wage for 1931-32 (£160 3s. 0d.) was probably below the average according to the determinations of Wages Boards, and would be mainly accounted for by the fact that the former sum is based on the actual payments to workers, while the latter represents the

average of the sums to which they would have been entitled if they had worked throughout the whole year. There is, of necessity, a difference between the two averages, as all hands are not continuously employed, nor are all factories working throughout the whole year.

The cost of production and the value of the output in each class of manufacturing industry during the year 1931-32 are given in the subjoined statement :—

### FACTORY COSTS AND OUTPUT, 1931-32.

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.	5.
	£	£	£	£	£
1. Treatment of non-metallic mine and quarry products ..	395,962	107,615	268,767	41,550	1,149,881
2. Bricks, pottery, glass, &c. ..	128,723	94,945	314,299	32,190	761,035
3. Chemicals, dyes, explosives, paint, oils and grease ..	3,179,471	141,331	896,203	79,736	5,901,862
4. Industrial metals, machines, implements and conveyances ..	4,546,438	297,166	4,579,820	196,651	11,410,910
5. Precious metals, jewellery, and plate ..	145,852	7,563	163,764	3,794	389,328
6. Textiles and textile goods (not dress) ..	4,875,168	218,584	2,240,200	186,067	9,270,428
7. Skins and leather (not clothing or footwear) ..	2,217,102	57,493	587,078	38,103	3,314,377
8. Clothing ..	7,148,816	108,068	3,994,003	88,523	13,153,939
9. Food, drink, and tobacco ..	22,928,738	609,762	3,953,130	388,851	32,852,938
10. Woodworking and basketware ..	1,020,589	36,186	808,993	36,285	2,229,107
11. Furniture, bedding, &c. ..	604,251	17,947	385,220	9,933	1,193,938
12. Paper, stationery, printing, bookbinding, &c. ..	2,453,538	120,173	1,990,721	94,603	5,883,590
13. Rubber ..	1,044,770	92,863	386,960	71,830	2,161,171
14. Musical instruments ..	48,725	1,122	33,279	1,061	100,983
15. Miscellaneous products ..	359,709	10,615	205,793	7,038	771,323
16. Heat, light and power ..	629,833	522,106	450,369	121,550	2,843,807
Total ..	51,727,685	2,443,539	21,258,599	1,397,765	93,388,617

The difference between the sum of the first four columns and the last column 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 :—

PROPORTIONATE VALUE OF COSTS, ETC., TO PRODUCTION  
IN FACTORIES, 1931-32.

Class of Industry.	Percentage of Costs, &c., to Total Value of Production.				
	Materials Used, including Containers.	Fuel, Light, &c.	Wages.	Tools Replaced, Repairs to Plant, Oil and Water Used.	All other Expendi- ture, Interest and Profit.
	%	%	%	%	%
1. Treatment of non-metalliferous mine and quarry products .. ..	34·4	9·4	23·4	3·6	29·2
2. Bricks, pottery, glass, &c.	16·9	12·5	41·3	4·2	25·1
3. Chemicals, dyes, explosives, paint, oils, and grease .. ..	53·9	2·4	15·2	1·3	27·2
4. Industrial metals, machines, implements, and conveyances .. ..	39·9	2·6	40·1	1·7	15·7
5. Precious metals, jewellery, and plate .. ..	37·4	2·0	42·1	1·0	17·5
6. Textiles and textile goods (not dress) .. ..	52·6	2·3	24·2	2·0	18·9
7. Skins and leather (not clothing or footwear) .. ..	66·9	1·7	17·7	1·2	12·5
8. Clothing .. ..	54·3	·8	30·4	·7	13·8
9. Food, drink, and tobacco	69·8	1·9	12·0	1·2	15·1
10. Woodworking and basketware .. ..	45·8	1·6	36·3	1·6	14·7
11. Furniture, bedding, &c. ..	50·6	1·5	32·3	·8	14·8
12. Paper, stationery, printing, bookbinding, &c. ..	41·7	2·1	33·8	1·6	20·8
13. Rubber .. ..	48·4	4·3	17·9	3·3	26·1
14. Musical instruments ..	48·3	1·1	33·0	1·0	16·6
15. Miscellaneous products ..	46·6	1·4	26·7	·9	24·4
16. Heat, light, and power ..	22·1	18·4	15·8	4·3	39·4
Total .. ..	55·4	2·6	22·8	1·5	17·7



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 present the raw material in its manufactured form. Thus in class two the sum paid in wages represents 41 per cent. and the cost of raw materials 17 per cent. of the value of the finished article, whilst in class nine the expenditure on wages amounts to 12 per cent. and that on raw materials to 70 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 1922-23 to 1931-32 :—

**COST OF PRODUCTION AND VALUE OF OUTPUT OF  
FACTORIES, 1922-23 to 1931-32.**

Year.	Cost of Production.				Total Value of Output.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	All other Expenditure, Interest, and Profit.	
	£	£	£	£	£
1922-23 ..	62,658,163	2,443,681	25,547,192	20,637,307	111,286,343
1923-24 ..	62,217,874	2,803,239	27,472,084	21,428,730	113,921,927
1924-25 ..	65,205,233	2,964,635	29,057,052	20,950,478	118,177,398
1925-26 ..	67,164,445	3,156,382	29,329,400	20,336,212	119,986,439
1926-27 ..	69,816,935	3,392,448	31,822,589	22,365,979	127,397,951
1927-28 ..	69,637,778	3,433,923	32,087,051	23,306,565	128,465,317
1928-29 ..	70,100,456	3,361,298	31,533,586	22,902,123	127,897,463
1929-30 ..	66,770,302	3,435,727	30,517,535	22,087,535	122,811,099
1930-31 ..	50,380,110	2,589,475	23,279,689	17,176,521	93,425,795
1931-32 ..	51,727,685	2,443,539	21,258,599	17,958,794	93,388,617

These figures are reduced in the succeeding statement to their proportionate value of the total output.

**PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES,  
1922-23 TO 1931-32.**

Year.	Proportion of Outlay to Output.				Total.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Other Expenditure, Interest, and Profit.	
	%	%	%	%	%
1922-23 .. ..	56·3	2·2	23·0	18·5	100·0
1923-24 .. ..	54·6	2·5	24·1	18·8	100·0
1924-25 .. ..	55·2	2·5	24·6	17·7	100·0
1925-26 .. ..	56·0	2·6	24·4	17·0	100·0
1926-27 .. ..	54·8	2·7	25·0	17·5	100·0
1927-28 .. ..	54·2	2·7	25·0	18·1	100·0
1928-29 .. ..	54·8	2·6	24·7	17·9	100·0
1929-30 .. ..	54·4	2·8	24·8	18·0	100·0
1930-31 .. ..	53·9	2·8	24·9	18·4	100·0
1931-32 .. ..	55·4	2·6	22·8	19·2	100·0

The ratio of salaries and wages to the value of the output of factories was 24·4 per cent. on the average of the last five years, as against 24·2 per cent. in the period 1922-23 to 1926-27. The cost of materials was 54·5 per cent. of the value of output in the period 1927-28 to 1931-32, as compared with 55·4 per cent. in the years 1922-23 to 1926-27. The proportionate outlay on fuel, light, and power was 2·5 per cent. in the earlier and 2·7 per cent. in the later period. The balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £18 6s. 5d. in every £100 of the total output value in the period 1927-28 to 1931-32, as compared with £17 17s. 11d. in the preceding five-year period.

In the following statement the amount of capital invested in machinery and plant and land and buildings used in connexion with the various classes of manufacturing industries is shown for the year 1931-32 :—

**Capital  
invested in  
manufacturing  
plant and  
premises.**

# **MACHINERY, PLANT, LAND AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1931-32.**

Class of Industry.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
1. Treatment of non-metalliferous mine and quarry products .. .. .	1,526,487	766,277
2. Bricks, pottery, glass, &c. .. .	585,441	630,811
3. Chemicals, dyes, explosives, paint, oils, and grease .. .. .	2,385,089	2,273,398
4. Industrial metals, machines, implements, and conveyances .. .. .	4,832,200	7,171,494
5. Precious metals, jewellery, and plate .. .	71,669	239,385
6. Textiles and textile goods (not dress) .. .	3,059,520	2,582,965
7. Skins and leather (not clothing or footwear) ..	447,713	862,600
8. Clothing .. .. .	1,221,113	4,216,439
9. Food, drink, and tobacco .. .. .	6,481,984	7,837,884
10. Woodworking and basketware .. .. .	857,313	949,862
11. Furniture, bedding, &c. .. .. .	210,326	742,331
12. Paper, stationery, printing, bookbinding, &c.	2,522,244	2,977,402
13. Rubber .. .. .	1,000,460	804,442
14. Musical instruments .. .. .	34,587	99,849
15. Miscellaneous products .. .. .	237,099	323,843
16. Heat, light, and power .. .. .	8,008,370	2,389,978
<b>Total .. .. .</b>	<b>33,481,615</b>	<b>34,868,960</b>

The capital invested in plant, buildings, &c., used in connexion with four classes of industry—food and drink; clothing; textile fabrics; and heat, light and power—amounted, in the year under review, to £35,798,253, 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 1922-23 to 1931-32 :—

**MACHINERY, PLANT, LAND AND BUILDINGS USED IN  
MANUFACTURING INDUSTRIES, 1922-23 to 1931-32.**

Year.						Value of Machinery and Plant.	Value of Land and Buildings.
						£	£
1922-23	..	..	..	..	..	23,994,715	22,428,525
1923-24	..	..	..	..	..	28,223,915	24,972,560
1924-25	..	..	..	..	..	32,563,815	28,468,160
1925-26	..	..	..	..	..	30,549,130	29,847,370
1926-27	..	..	..	..	..	31,530,350	32,269,655
1927-28	..	..	..	..	..	32,745,680	34,761,340
1928-29	..	..	..	..	..	33,724,910	36,184,460
1929-30	..	..	..	..	..	35,022,535	36,988,485
1930-31	..	..	..	..	..	34,771,687	36,218,384
1931-32	..	..	..	..	..	33,481,615	34,868,960

It will be seen from these figures that the values of machinery and plant and land and buildings increased by 47 per cent. between 1922-23 and 1931-32.

In the appended table the number of accidents in factories is given for the last 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.

**ACCIDENTS IN FACTORIES, 1922 to 1931.**

Year.			Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1922	..	..	126,630	787	·621
1923	..	..	128,915	1,034	·802
1924	..	..	129,147	1,052	·814
1925	..	..	128,013	996	·778
1926	..	..	135,510	1,252	·924
1927	..	..	136,022	1,348	·991
1928	..	..	137,244	1,224	·891
1929	..	..	136,025	1,129	·829
1930	..	..	104,926	890	·848
1931	..	..	110,692	677	·611

**Manufactures—  
Penal  
Department  
and Blind  
Institute.**

The foregoing tables do not include particulars relating to work of various kinds done by the Penal Department at Pentridge 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 1931-32 was £44,357, and of the materials used, £33,267. The articles produced are used principally by Government Departments. The work carried on by the latter is the manufacture of brushware, basketware, mats and matting, and gives employment to 163 persons (140 males and 23 females). The value of the work turned out for the period under review was £33,901.

**Value of  
Victorian  
production.**

The value of all articles produced or manufactured in Victoria has been compiled from actual returns or estimates in the office of the Government Statist, and the results are set forth in the following table:—

**VALUE OF VICTORIAN PRODUCTION, 1927-28 to 1931-32.**

Produce.	Value in—				
	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
<i>Cultivation.</i>	£	£	£	£	£
Wheat .. ..	4,724,369	8,364,675	3,559,063	3,600,190	5,386,602
Oats .. ..	688,804	627,521	554,547	340,673	416,981
Barley, malting ..	184,824	151,726	203,999	122,836	110,985
" other .. ..	112,503	70,778	96,203	32,017	27,301
Maize .. ..	121,368	136,067	112,686	90,005	99,930
Other Cereals ..	48,995	36,000	45,111	24,776	34,925
Grass and Clover					
Seed .. ..	2,076	9,380	9,636	7,905	10,219
Potatoes .. ..	388,537	1,189,349	691,273	328,305	583,154
Onions .. ..	188,186	187,233	74,704	52,018	179,425
Other Root Crops ..	14,759	13,163	10,933	11,173	9,425
Hay .. ..	3,683,272	3,502,862	2,998,282	2,369,865	2,128,125
Straw .. ..	66,904	49,427	53,710	28,311	19,663
Green Forage* ..	474,475	535,755	846,265	631,735	595,030
Tobacco .. ..	35,200	39,510	54,660	145,750	579,150
Grapes, not made into wine, raisins, &c. .. ..	81,421	50,813	31,038	32,481	32,869
Raisins, ordinary ..	76,100	82,873	96,451	83,908	80,413
" sultanas ..	623,241	857,975	797,736	692,750	1,177,698
Currants .. ..	162,171	273,186	186,406	194,039	282,620
Wine .. ..	152,212	84,239	82,132	61,817	67,927
Hops .. ..	50,262	36,800	38,120	26,068	20,307
Other Crops .. ..	168,618	119,397	144,663	157,387	250,925
Fruit grown for sale in orchards and gardens .. ..	1,189,356	1,093,434	927,723	751,716	790,018
Fruit in private orchards and gar- dens .. ..	10,520	8,509	9,100	8,250	7,770
Market Gardens ..	949,200	931,500	1,060,500	1,009,850	989,300
Less Deductions ..	-5,616,588	-4,087,508	-3,699,467	-4,205,669	-2,447,625
Total .. ..	8,570,865	14,364,655	8,985,524	6,598,156	11,433,117

\* Exclusive of area under sown grasses.

## VALUE OF VICTORIAN PRODUCTION, 1927-28 TO 1931-32—continued.

Produce.	Value in—				
	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
<i>Dairying and Pastoral.</i>	£	£	£	£	£
Milk consumed in natural state ..	2,184,900	2,025,300	1,858,000	1,685,200	1,538,000
Butter made ..	6,675,700	7,682,200	6,901,330	6,570,817	7,138,104
Cheese made ..	244,140	325,600	378,500	326,774	319,570
Cream made (not for butter) ..	174,610	212,800	227,470	152,509	138,426
Condensed, Concentrated, and Powdered Milk ..	1,906,720	1,713,600	1,557,880	1,277,866	1,002,250
† Cattle and Horses ..	4,558,700	4,008,300	3,783,700	2,251,400	1,890,275
† Pigs ..	1,486,000	1,580,600	1,420,500	1,112,700	870,580
† Sheep (without wool) ..	3,238,300	2,788,000	2,711,000	2,347,000	1,301,774
Wool ..	9,701,660	10,252,002	5,694,019	4,374,932	4,813,663
Less Deductions ..	-2,701,730	-2,368,289	-2,555,965	-2,466,918	-1,817,347
Total ..	27,469,000	28,220,113	21,976,434	17,642,280	17,195,295
<i>Mining.</i>					
Gold ..	163,699	144,068	111,609	102,456	262,488
Coal ..	982,533	933,408	991,422	981,412	613,795
Stone from Quarries (including limestone) ..	652,800	602,900	624,613	324,811	213,422
Other Metals and Minerals ..	156,246	113,765	105,602	108,388	106,867
Total ..	1,955,278	1,794,141	1,833,246	1,517,067	1,196,572
<i>Forest Produce.</i>					
Timber (Forest Saw-mills only) ..	782,700	676,200	681,625	310,432	326,587
Firewood (estimated) ..	910,000	939,000	936,400	732,141	693,336
Bark for Tanning ..	107,700	98,380	86,589	44,349	52,377
Total ..	1,800,400	1,713,580	1,704,614	1,086,922	1,072,300
<i>Miscellaneous.</i>					
Honey and Beeswax ..	60,140	82,854	60,125	45,498	37,308
Poultry production (estimated) ..	4,760,000	4,295,000	4,638,000	3,926,000	3,653,000
Rabbits and Hares ..	679,230	820,820	609,470	352,280	296,769
Fish ..	185,840	173,870	223,587	166,450	153,099
Total ..	5,685,210	5,372,544	5,531,182	4,490,228	4,140,176
Total Value of Primary Products ..	45,480,753	51,465,033	40,031,000	31,334,653	35,037,460
Manufacturing—Added Value* ..	51,565,291	51,062,027	49,403,185	37,877,866	36,378,826
Grand Total ..	97,046,044	102,527,060	89,434,185	69,212,519	71,416,286

\* Exclusive of value of output of butter and cheese factories, and forest saw-mills (as regards Victorian timber), which is included above under the headings "Dairying and Pastoral" and "Forest Produce," respectively.

† Livestock values for the past five years have been revised. In these years and in the future increases or decreases in numbers of livestock have not been taken and are not to be taken into account.

Deductions made from the total value of "Cultivation" include cost of freight and handling charges, together with cost of bags, seed, manure, spraying material, and fodder used in the production of crops.

In the case of "Dairying and Pastoral" production the deductions consist of cost of freight, handling charges, and wool packs, and the value of hay, bran and pollard, green fodder, and root crops used as fodder.

The values of different kinds of production per head of the total population in each of the last five years were as follows:—

VALUE OF PRODUCTION PER HEAD OF POPULATION,  
1927-28 to 1931-32.

Produce.	Value of Produce per head in—				
	1927-28.	1928-29.	1929-30.	1930-31.	1931-32.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cultivation ..	4 18 5	8 3 2	5 1 1	3 13 8	6 6 11
Dairying and Pastoral	15 15 6	16 0 6	12 7 4	9 17 0	9 10 11
Mining .. ..	1 2 5	1 0 4	1 0 8	0 16 11	0 13 4
Forest .. ..	1 0 8	0 19 6	0 19 2	0 12 2	0 11 11
Miscellaneous ..	3 5 4	3 1 0	3 2 3	2 10 2	2 5 11
<b>Total Primary Production</b>	<b>26 2 4</b>	<b>29 4 6</b>	<b>22 10 6</b>	<b>17 9 11</b>	<b>19 9 0</b>
<b>Manufactures ..</b>	<b>29 12 3</b>	<b>28 19 11</b>	<b>27 16 0</b>	<b>21 3 0</b>	<b>20 3 11</b>
<b>Grand Total</b>	<b>55 14 7</b>	<b>58 4 5</b>	<b>50 6 6</b>	<b>38 12 11</b>	<b>39 12 11</b>

Monthly  
employment  
in factories.

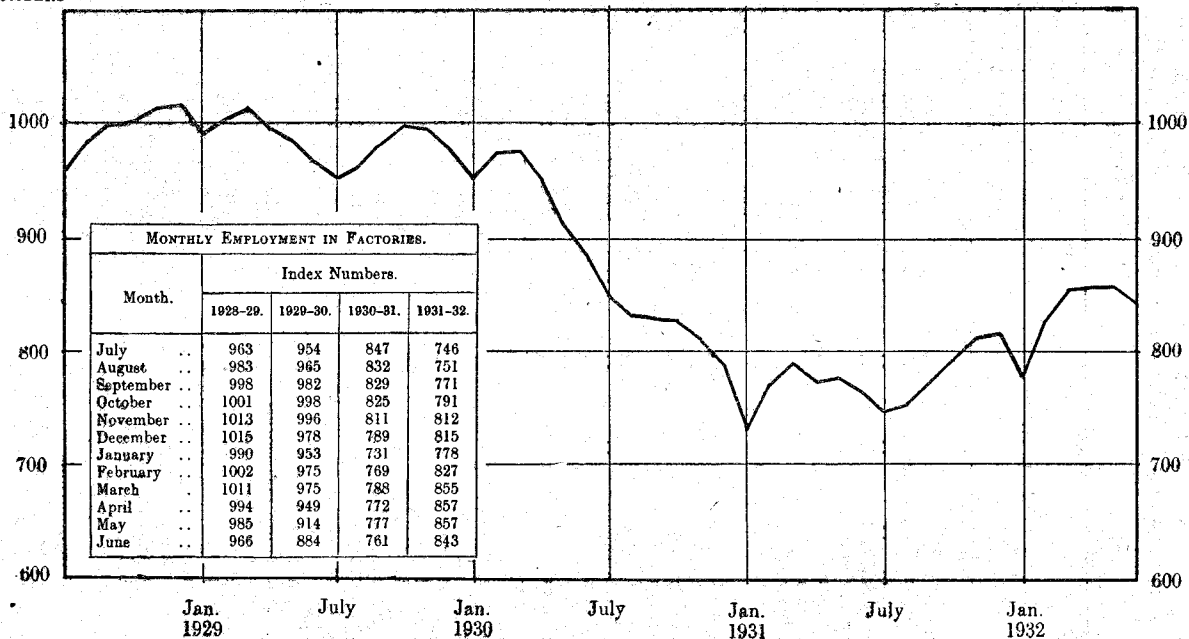
An analysis has been made of the number of employees in factories in Victoria on the pay day nearest the 15th day of each month for the past four years.

The figures have been converted into index numbers which are given hereunder with an accompanying graph. The latter indicates

# MONTHLY INDEX OF EMPLOYMENT IN VICTORIAN FACTORIES FROM 1ST JULY, 1928, TO 30TH JUNE, 1932.

Average for 1927-28 = 1000.

INDEX  
NUMBERS



clearly the course of the trade depression as affecting factory employees.

*Production.*



Monthly  
employment  
in factories.

Statistics furnished by manufacturers include informa-  
pay days nearest the 15th day of each month, including  
and all others engaged in work connected with manu-  
This information has been tabulated and the monthly totals for

## MONTHLY EMPLOYMENT

Industry.	Average Number			
	July.	August.	Septem- ber.	October.
Aerated waters .. ..	437	455	512	540
Agricultural implements .. ..	1,302	1,315	1,435	1,508
Art metal .. ..	186	193	189	184
Bacon curing .. ..	471	457	455	469
Bags and sacks .. ..	107	113	123	139
Bags, trunks, &c. .. ..	355	378	395	414
Bakeries .. ..	2,363	2,363	2,358	2,349
Basketware .. ..	97	61	97	99
Bedding and mattress .. ..	425	410	412	420
Biscuits .. ..	930	905	930	914
Boiling down, tallow, &c. .. ..	279	279	282	289
Boot accessories .. ..	460	451	463	471
Boot repairing .. ..	215	212	212	213
Boots and shoes .. ..	8,056	7,790	7,902	8,403
Boxes and cases .. ..	433	433	453	480
Brass and copper .. ..	620	628	628	609
Breweries .. ..	1,032	1,033	1,032	1,039
Bricks, tiles, firebricks .. ..	601	602	613	523
Brooms and brushware .. ..	244	257	258	254
Butter and cheese .. ..	2,115	2,135	2,283	2,457
Cabinet, furniture .. ..	1,350	1,352	1,297	1,321
Cement and cement goods .. ..	324	351	256	281
Cereal foods .. ..	885	858	865	723
Chaffcutting .. ..	333	346	353	347
Chemical fertilizers .. ..	516	568	576	575
Chemicals, drugs .. ..	1,133	1,147	1,209	1,221
Condiments, coffee .. ..	455	428	457	456
Confectionery .. ..	2,404	2,298	2,289	2,279
Cooperage .. ..	227	205	217	211
Cotton .. ..	465	472	471	463
Cutlery and small tools .. ..	102	103	105	103
Cycle and motor accessories .. ..	115	123	123	116
Die sinking and engraving .. ..	114	110	106	114
Distilleries .. ..	147	146	127	130
Dressmaking .. ..	4,398	4,843	5,400	5,608
Dried fruit .. ..	390	384	366	376
Dyeworks and cleaning .. ..	364	375	390	412
Earthenware, china, &c. .. ..	524	524	491	476
Electric light—Government .. ..	855	845	843	795
"    Local authority .. ..	258	258	258	258
"    Companies .. ..	143	143	136	140
Electrical installations .. ..	1,144	1,108	1,136	1,095
Electrotyping and stereotyping .. ..	24	24	24	25
Engineering (not marine or electrical) .. ..	3,463	3,421	3,454	3,472
Explosives .. ..	415	417	410	408

tion relating to the number of employees on factory pay-rolls on the managers, clerks, engine-drivers, operatives, carters and messengers facturing.

each industry are set out in the following table :—

### IN FACTORIES, 1931-32.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
666	693	622	611	545	481	457	461
1,548	1,603	1,556	1,574	1,593	1,663	1,701	1,782
177	189	170	201	192	222	228	245
485	488	476	484	474	493	494	486
190	204	169	163	169	173	174	163
433	464	421	452	459	453	461	451
2,356	2,369	2,374	2,374	2,382	2,393	2,384	2,389
100	108	68	107	108	52	54	101
428	434	452	479	490	504	509	487
994	960	839	884	864	765	743	791
291	295	283	283	282	282	279	267
472	438	434	494	546	553	544	524
214	212	209	212	211	211	207	202
9,000	8,408	6,722	8,624	8,995	9,059	9,157	8,726
520	560	527	525	524	512	508	472
646	664	665	661	661	658	678	666
1,048	1,075	1,054	1,051	1,045	1,041	1,041	1,034
481	445	410	612	653	734	857	878
262	258	254	268	285	275	278	275
2,584	2,544	2,441	2,323	2,282	2,291	2,318	2,335
1,350	1,423	1,333	1,423	1,524	1,608	1,665	1,612
264	287	321	342	321	227	302	322
860	866	770	886	886	906	906	887
342	338	340	314	303	322	354	297
580	542	544	591	777	764	705	597
1,244	1,223	1,173	1,194	1,166	1,139	1,149	1,169
485	507	486	489	466	493	472	440
2,290	2,441	2,273	2,371	2,413	2,383	2,488	2,506
226	218	197	220	214	213	213	219
458	474	483	507	520	524	532	507
107	103	107	110	110	109	109	109
128	131	135	144	150	161	169	174
114	118	106	122	112	116	122	128
108	115	74	74	97	135	128	125
5,610	5,412	4,982	5,731	6,251	6,422	6,143	5,617
431	372	400	497	1,054	941	855	661
417	425	415	428	438	429	431	425
511	507	423	484	465	525	542	561
786	778	764	754	729	713	715	700
258	259	258	258	256	257	259	262
141	141	138	141	138	124	125	137
1,143	1,205	1,281	1,333	1,351	1,392	1,431	1,473
25	25	24	26	25	26	26	26
3,508	3,660	3,556	3,637	3,612	3,659	3,703	3,818
399	407	413	421	411	463	452	441

## MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	September.	October.
Extracting and refining—other metals ..	29	28	28	28
Fellmongery .. ..	453	438	490	550
Furnishing, drapery .. ..	169	175	194	191
Furriers .. ..	295	279	253	244
Galvanized iron working .. ..	1,418	1,450	1,511	1,536
Gas fittings and meters .. ..	229	248	240	235
Gasworks—Local authority .. ..	77	76	75	75
„ Companies .. ..	743	745	751	746
Glass (including bottles) .. ..	405	571	585	583
Gold, silver, and electroplating ..	447	441	463	465
Grain milling .. ..	850	803	806	870
Handkerchiefs, ties, &c. .. ..	319	345	374	392
Hats and caps .. ..	1,109	1,159	1,210	1,239
Horse-drawn vehicles .. ..	384	379	383	407
Hosiery and knitting .. ..	7,144	6,937	7,036	7,204
Ice refrigerating .. ..	128	125	134	158
Ice cream .. ..	51	66	98	120
Inks, polishes, &c. .. ..	290	297	303	298
Jams and fruit preserving .. ..	746	863	1,014	1,273
Jewellery .. ..	277	277	291	305
Joinery .. ..	517	520	536	527
Lime, plaster, and asphalt .. ..	369	342	361	376
Machine belting .. ..	25	27	29	29
Malting .. ..	248	253	268	256
Margarine .. ..	97	94	99	95
Marble, slate, &c. .. ..	280	275	262	260
Meat and fish preserving .. ..	667	899	1,340	1,810
Millinery .. ..	1,217	1,323	1,289	1,398
Modelling .. ..	36	30	24	26
Motor body building .. ..	619	614	654	687
Motor construction and assembly ..	397	369	367	376
Motor repairs .. ..	1,987	1,983	1,987	1,997
Musical instruments .. ..	145	141	147	152
Newspapers .. ..	1,892	1,881	1,903	1,917
Oils, mineral .. ..	185	176	178	179
Oils, vegetable .. ..	72	83	78	54
Papermaking, stationery .. ..	2,623	2,589	2,698	2,739
Perambulators .. ..	72	69	69	74
Photo engraving .. ..	278	274	272	267
Pickles and sauces .. ..	162	158	153	188
Picture frames .. ..	48	52	53	50
Printing and bookbinding .. ..	4,607	4,623	4,638	4,706
Rope and cordage .. ..	796	752	838	914
Rubber tyres, &c. .. ..	926	963	983	1,173
Rubber goods (other) .. ..	941	952	991	1,036
Saddlery, harness .. ..	67	71	68	72
Sausage skins .. ..	201	179	245	261
Sawmills—Forest .. ..	977	903	912	956
„ Town .. ..	794	868	901	986
Ship and boat building .. ..	203	261	193	237

FACTORIES, 1931-32—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
29	34	31	33	35	32	37	38
617	505	470	497	540	564	530	512
202	197	186	227	227	223	220	214
283	303	348	441	530	551	554	467
1,670	1,703	1,649	1,618	1,632	1,564	1,551	1,570
239	238	231	232	228	231	234	233
78	78	79	76	76	77	74	75
696	697	655	653	659	657	655	650
601	617	587	549	551	578	634	638
479	526	461	485	497	488	510	503
908	986	1,108	993	993	988	990	905
396	418	311	365	361	396	390	382
1,268	1,210	1,139	1,183	1,269	1,276	1,278	1,263
397	414	426	432	405	391	378	386
7,381	7,533	7,571	8,192	8,565	8,737	8,873	8,576
185	199	202	201	183	148	134	126
145	161	174	164	133	81	67	69
309	316	304	300	301	302	302	298
1,388	1,396	1,892	2,518	3,069	2,211	1,084	850
318	330	267	306	311	320	341	341
516	519	493	484	500	505	508	531
350	359	360	365	407	394	384	399
29	32	33	33	32	31	30	33
209	165	132	137	141	180	225	236
85	99	63	65	64	64	60	60
258	271	244	248	252	235	229	232
1,857	1,143	858	740	731	772	686	638
1,459	1,337	1,235	1,458	1,694	1,633	1,546	1,386
26	22	25	28	28	32	32	40
690	788	780	832	811	762	858	906
412	451	428	476	501	463	474	456
2,040	2,084	2,074	2,060	2,085	2,059	2,045	2,048
164	171	186	195	237	256	275	283
1,907	1,920	1,905	1,908	1,929	1,915	1,901	1,905
182	158	156	172	165	149	174	176
52	52	53	59	58	74	74	71
2,777	2,876	2,749	2,798	2,821	2,822	2,832	2,825
73	78	72	74	74	57	57	58
278	289	283	279	284	286	281	278
191	215	214	244	222	222	191	178
51	54	50	50	50	55	55	55
4,801	4,813	4,647	4,647	4,714	4,744	4,789	4,734
899	833	711	800	773	827	851	850
1,303	1,417	1,278	1,334	1,382	1,415	1,407	1,407
1,027	1,093	954	959	969	952	909	959
71	79	76	75	81	89	85	84
280	233	174	192	175	178	172	176
925	976	964	946	942	1,018	1,068	1,020
1,050	1,122	1,073	1,198	1,200	1,224	1,242	1,238
199	274	192	226	158	207	171	190

## MONTHLY EMPLOYMENT IN

Industry.	Average Number			
	July.	August.	Septem-ber.	October.
Shirts, collars, &c. .. ..	3,832	4,113	4,348	4,472
Smelting, iron rolling .. ..	2,174	2,190	2,210	2,220
Soap and candle .. ..	640	642	655	675
Stoves and ovens .. ..	316	321	297	290
Surgical instruments .. ..	196	198	198	198
Tailoring .. ..	5,310	5,372	5,680	5,886
Tanning and leather dressing .. ..	1,334	1,349	1,378	1,413
Tents and sailmaking .. ..	101	111	95	104
Tobacco and cigarettes .. ..	1,749	1,751	1,747	1,747
Toys, games, &c. .. ..	368	374	411	429
Tram and railway workshops .. ..	5,061	4,990	4,906	4,856
Umbrellas .. ..	83	80	86	79
Watches and clocks .. ..	41	41	42	44
Waterproof clothing .. ..	201	181	175	173
White lead, paint, &c. .. ..	108	111	121	132
Window blinds, &c. .. ..	28	29	26	28
Wireless apparatus .. ..	786	656	529	444
Wireworking .. ..	408	422	439	429
Wood turning .. ..	333	335	325	332
Woollen mills .. ..	6,630	6,670	6,691	6,678
Other factories .. ..	3,700	3,748	3,783	3,847
All Industries .. .. Total	111,686	112,429	115,308	118,372

## BUILDING STATISTICS, 1931-32.

In view of the great importance of statistics of building and construction, their collection was undertaken in Victoria in 1929. Owing, however, to the obvious incompleteness of the returns received, the information obtained was not considered satisfactory, and very few details were published. The data received from builders covering their operations for the years ending 30th June, 1930, 1931, and 1932 show evidence of much greater care in compilation, and are considered worthy of publication in full detail.

The particulars given below for the year 1931-32 were obtained from returns furnished by 681 builders.

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

## VALUE OF BUILDING WORK.

	1928-29.	1929-30.	1930-31.	1931-32.
	£	£	£	£
New buildings .. ..	5,747,671	5,025,237	1,958,307	1,029,957
Repairs and additions .. ..	519,243	1,041,503	570,032	490,732
Other construction .. ..	..	235,328	130,806	70,116
Total .. ..	6,266,914	6,302,068	2,659,145	1,590,805

FACTORIES, 1931-32—continued.

of Employees in—

November.	December.	January.	February.	March.	April.	May.	June.
4,490	4,580	4,376	4,663	4,722	4,723	4,806	4,761
2,217	2,371	2,356	2,424	2,476	2,584	2,647	2,609
684	686	662	677	686	640	659	647
301	301	317	328	332	320	349	353
199	199	198	200	198	199	197	200
5,966	6,046	5,622	5,874	6,087	6,205	6,216	6,003
1,507	1,487	1,440	1,609	1,638	1,724	1,752	1,732
121	133	122	126	123	128	129	122
1,737	1,730	1,689	1,690	1,667	1,660	1,628	1,626
447	413	388	383	394	405	414	411
4,890	5,052	4,843	5,041	5,125	4,900	5,157	5,245
82	87	83	88	99	108	118	106
45	46	46	44	45	45	45	45
185	193	190	235	259	270	294	274
138	147	143	146	144	145	146	152
28	28	28	28	26	25	25	25
413	476	529	527	742	895	1,002	1,029
454	465	431	438	430	441	461	478
320	335	335	359	360	378	387	356
6,793	6,887	6,928	7,171	7,489	7,717	7,918	8,072
4,018	4,090	4,048	4,206	4,265	4,360	4,369	4,411
121,465	121,924	116,469	123,683	127,901	128,173	128,254	126,153

The number of persons employed and the total salaries and wages paid are shown hereunder for the year 1931-32.

Persons Employed.				Number.	Salaries and Wages Paid.	Average Salary or Wage.
					£	£ s. d.
Working proprietors	..	..	..	756	107,129	141 14 1
Managers	..	..	..	62	18,794	303 2 7
Clerks—						
Male	..	..	..	38	5,978	157 6 4
Female	..	..	..	22	2,291	104 2 9
Others	..	..	..	1,811	255,620	141 3 0

The average wage paid to "Others," in which term is included all workers directly employed by the builders, is low, probably because work had been intermittent on account of a severe depression which prevailed in the building industry during the period. The following statement shows the payments to sub-contractors :—

## PAYMENTS TO SUB-CONTRACTORS, 1931-32.

£				£			
Plumbers	..	..	51,023	Bricklayers	..	..	26,259
Painters	..	..	27,178	Tilers	..	..	13,578
Electricians	..	..	23,184	Others	..	..	175,565
Joiners	..	..	35,740				
				Total	..	..	352,527

The term "Others" in this statement includes sub-contractors for excavations, concreting, asphaltting, fibro-cement and plaster work, plastering, &c., and where certain builders have been unable to dissect their costs the total has been included under this heading. 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 value of materials used has been, in most cases, carefully dissected, but some builders have been unable to give the details asked for. This is regrettable, as it is important that complete statistics in regard to materials used should be available. Where the details could not be supplied it was necessary to include the total cost of all materials used under the heading of "Other materials." The value of the materials used is shown below:—

Materials.				Value.		
				1929-30.	1930-31.	1931-32.
			£			
Timber	..	..	1,108,896	406,340	241,076	
Bricks	..	..	330,423	114,011	81,239	
Tiles	..	..	81,483	45,274	17,870	
Cement and lime	..	..	186,623	95,269	62,102	
Other materials	..	..	1,482,196	599,423	368,429	
Total	..	..	3,189,621	1,260,317	770,716	

In addition to payment 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 £81,817 in 1929-30, £43,894 in 1930-31, and £21,218 in 1931-32.

Capital invested in plant and machinery amounted to £136,139 in 1929-30, £100,852 in 1930-31, and to £70,414 in 1931-32; and capital invested in land and buildings used as workshops amounted to £106,246 in 1929-30, £97,685 in 1930-31, and £70,414 in 1931-32.

The following table is an analysis of the buildings completed during the years 1929-30, 1930-31, and 1931-32. 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 these respective years. The table published at the beginning of this review purporting to show value of work done is designed for this purpose.

**BUILDINGS COMPLETED DURING 1929-30, 1930-31,  
AND 1931-32.**

	1929-30.		1930-31.		1931-32.	
	Number.	Value.	Number.	Value.	Number.	Value.
		£		£		£
Business premises ..	361	1,473,018	142	757,680	111	534,893
Other buildings ..	..	835,360	..	372,900	..	235,905
Dwellings—						
Brick ..	927	1,215,338	273	388,109	186	298,618
Wood ..	1,727	1,252,667	465	298,524	212	106,396
Total Value ..	..	4,776,383	..	1,817,213	..	1,175,812

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.

**DWELLINGS CONSTRUCTED, 1931-32.**

Number of Rooms.	Brick Dwellings.		Average Value per Dwelling.	Wooden Dwellings.		Average Value per Dwelling.
	Number.	Value.		Number.	Value.	
		£	£		£	£
Three rooms ..	20	4,885	244	33	8,271	251
Four rooms ..	10	6,448	645	68	27,463	404
Five rooms ..	58	56,090	967	84	48,815	581
Six rooms ..	46	54,197	1,178	20	14,224	711
Seven rooms ..	16	23,259	1,454	4	3,512	878
Eight rooms ..	12	26,682	2,224	2	2,511	1,255
Nine rooms ..	6	16,288	2,715	..	..	..
Ten rooms ..	5	13,960	2,792	1	1,600	1,600
Over ten rooms ..	13	96,809	7,447	..	..	..
Total ..	186	298,618	1,605	212	106,396	502