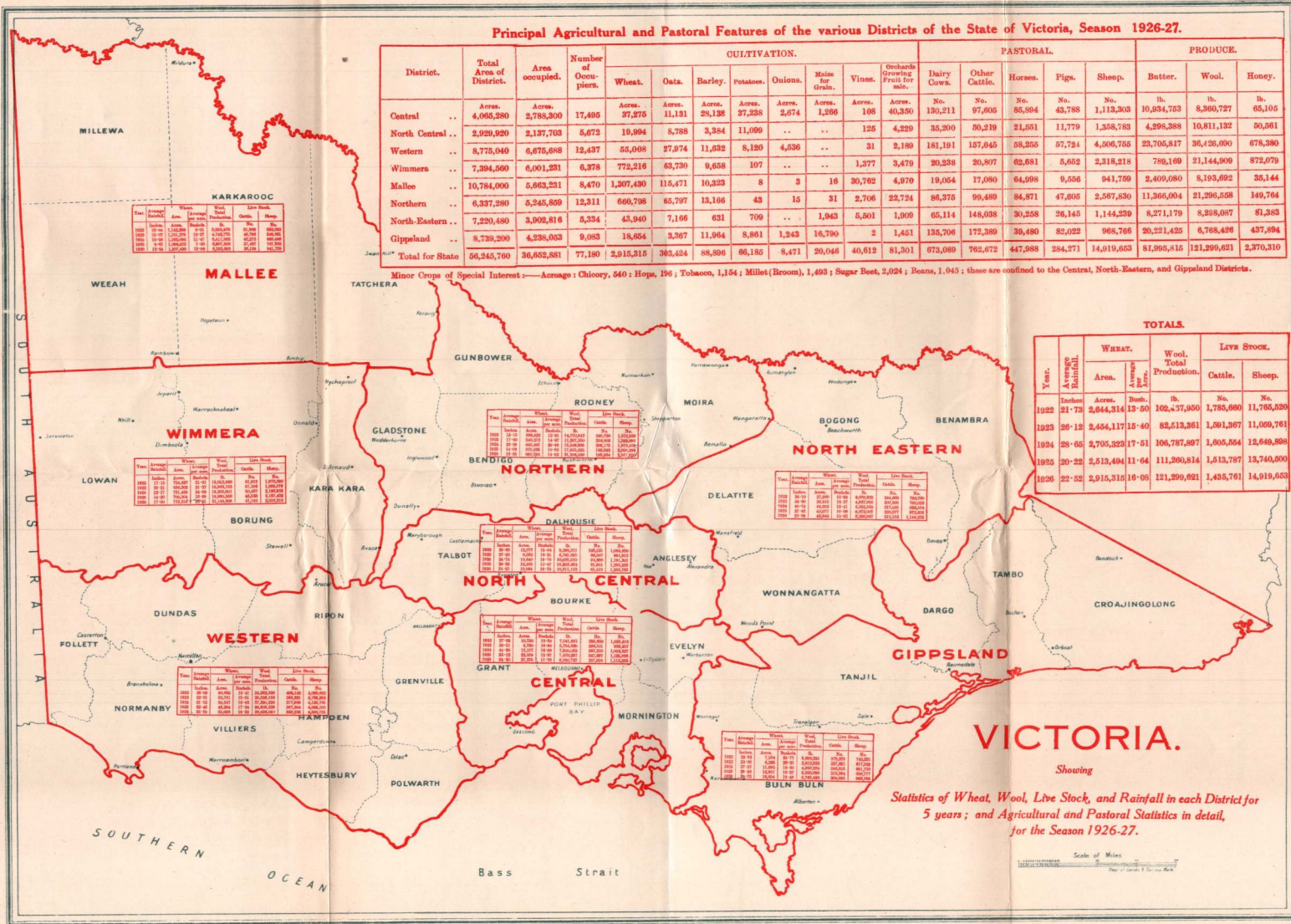


Principal Agricultural and Pastoral Features of the various Districts of the State of Victoria, Season 1926-27.

District.	Total Area of District.	Area occupied.	Number of Occupiers.	CULTIVATION.										PASTORAL.					PRODUCE.		
				Wheat.	Oats.	Barley.	Potatoes.	Onions.	Maise for Grain.	Vines.	Orchards (bearing fruit for sale).	Dairy Cows.	Other Cattle.	Horses.	Pigs.	Sheep.	Butter.	Wool.	Honey.		
Central ..	4,065,280	2,788,300	17,495	Acres. 37,275	11,131	28,138	37,258	2,674	1,306	Acres. 108	40,350	No. 130,211	No. 97,605	No. 85,894	43,788	No. 1,113,303	10,934,753	8,360,727	65,105		
North Central ..	2,929,920	2,137,703	5,673	19,994	5,788	3,384	11,099	..	..	125	4,229	35,300	50,219	21,551	11,779	1,358,783	4,298,388	10,811,132	50,561
Western ..	8,775,040	6,675,688	12,437	55,008	27,974	11,632	8,129	4,536	..	31	2,189	181,191	157,045	68,355	67,724	4,806,755	23,705,817	35,426,090	678,380		
Wimmera ..	7,394,560	6,001,391	6,378	772,216	63,730	9,658	107	..	..	1,377	3,479	30,338	20,807	62,681	5,652	2,318,218	789,169	21,144,900	872,079
Mallee ..	10,784,000	5,663,231	5,670	1,307,430	115,471	10,323	8	3	16	30,762	4,070	19,054	68,375	99,489	84,871	47,605	2,567,430	11,366,004	21,296,558	149,764	
Northern ..	6,337,280	5,345,899	12,311	660,798	65,797	13,166	43	15	31	2,706	22,724	86,375	99,489	84,871	47,605	2,567,430	11,366,004	21,296,558	149,764		
North-Eastern ..	7,230,480	3,902,816	5,334	43,940	7,166	631	709	..	1,943	5,601	1,909	65,114	148,038	30,358	26,145	1,144,239	8,271,179	8,298,087	81,383		
Gippsland ..	8,739,200	4,238,063	9,083	18,654	3,767	11,064	8,861	1,243	16,790	2	1,461	135,706	172,389	36,480	82,022	968,766	20,221,425	6,768,426	437,894		
Total for State	56,245,790	36,663,981	77,180	2,915,315	363,424	68,896	66,185	8,671	20,046	40,612	61,301	673,989	762,672	447,988	284,271	14,919,653	87,905,416	121,299,621	3,370,319		

Minor Crops of Special Interest.—Aconage: Chicory, 640; Hops, 196; Tobacco, 1,154; Millet (Broom), 1,493; Sugar Beet, 2,024; Beans, 1,043; these are confined to the Central, North-Eastern, and Gippsland Districts.



PRODUCTION.

LAND SETTLEMENT, ETC.

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

	Acres.
Lands alienated in fee simple	25,589,484
Lands in process of alienation	8,856,710
Crown lands	21,799,566
Total	<u>56,245,760</u>

The Crown lands comprise—

Permanent forests (under Forests Act) ..	3,569,226
Timber reserves (under Forests Act) ..	736,355
State forests and Timber reserves (under Land Act)	329,385
Water reserves	314,397
Reserves for Agricultural Colleges, &c. ..	85,894
Reserves in the Mallee	406,840
Other reserves	328,095
Roads	1,794,218
Water frontages, beds of rivers, lakes, &c.; (unsold land in cities, towns, and boroughs)	2,288,740
Land in occupation under—	
Perpetual leases	100,873
Other leases and licences	69,044
Temporary grazing licences	6,025,518
Unoccupied	<u>5,750,981</u>
Total	<u>21,799,566</u>

Alienation
of land.

In the following table are shown the area of Crown lands sold absolutely and conditionally, and the area of lands alienated in fee simple in each year since 1916.

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, 1917 to 1926.

Year.	Area of Crown Lands Sold.		Crown Lands alienated in Fee Simple.	
	Absolutely, at Auction, &c.	Conditionally to Selectors.*	Area.	Purchase Money.
	Acres.	Acres.	Acres.	£
1917	2,075	89,164	82,042	79,992
1918	1,760	74,514	76,064	78,235
1919 . . .	1,166	70,729	102,294	114,654
1920	3,125	102,534	187,228	192,861
1921	1,800	99,519	110,056	100,890
1922	2,658	186,686	106,485	118,698
1923	3,015	200,517	142,940	167,669
1924	3,093	151,875	126,147	167,322
1925	2,920	92,996	185,038	129,187
1926	2,832	93,469	125,765	87,740

* Exclusive of Mallee selectors.

Amount
realized by
sale of Crown
lands.

From the period of the first settlement of the State to the end of 1926 the amount realized by the sale of Crown lands was £34,723,462, which represents an average of £1 0s. 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, 1926.

Location.	Classification.						Total.
	Agricultural and Grazing.					Auri-ferous.	
	First.	Second.	Third.	Fourth.	Un-classed.		
County.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Buln Buln ..	5,192	30,174	77,071	..	..	..	112,437
Croajingolong ..	2,510	1,756	565,859	..	837,400	13,850	1,421,375
Dargo ..	..	..	102,222	..	431,900	72,000	606,122
Tambo ..	..	..	219,797	..	398,850	900	619,547
Tanjil ..	..	..	109,548	..	364,300	67,000	540,848
Wonnangatta ..	..	39	159,878	..	942,100	..	1,101,817
Bogong ..	1,308	12,827	203,557	..	163,724	98,277	479,693
Benambra ..	..	403	294,160	..	320,474	90,811	705,848
Delatite ..	390	18,833	198,858	5,000	230,050	61,333	514,464
Moir ..	546	149	10,833	..	..	..	11,528
Anglesey ..	..	3,823	59,704	..	..	3,160	66,687
Bourke ..	..	162	..	..	..	..	162
Dalhousie ..	..	581	1,235	..	..	5,055	6,871
Evelyn ..	19	7,103	391	..	..	993	8,506
Mornington ..	..	994	9,184	..	..	..	10,178
Bendigo ..	86	757	3,333	..	..	3,998	8,174
Rodney ..	..	254	..	..	..	2,234	2,488
Borong ..	..	25	66,604	..	423	5,101	72,153
Gladstone ..	362	1,575	2,143	..	..	12,915	16,995
Lowan ..	..	604	141,495	28,905	10,343	..	181,347
Kara Kara ..	86	123	3,436	..	..	3,710	7,358
Talbot ..	246	791	701	..	..	41,487	43,225
Tatchera ..	20	70	..	..	..	..	90
Heytesbury ..	..	863	164,891	..	..	..	165,754
Polwarth ..	16,596	16,913	28,518	..	..	..	62,027
Grant ..	..	155	24,552	..	..	12,149	36,856
Grenville ..	..	311	..	..	..	9,476	9,787
Ripon ..	..	380	23,687	..	..	2,489	26,556
Normanby ..	..	267	119,319	5,765	8,810	..	134,161
Dundas ..	..	..	43,056	8,571	15,754	..	67,381
Villiers ..	..	..	1,268	..	..	..	1,268
Follett ..	..	1,252	160,639	..	37,473	..	199,364
Total ..	27,361	101,187	2,795,739	48,241	3,761,601	506,938	7,241,067
Throughout the State	Swamp or reclaimed lands						1,688
" " "	Lands which may be sold by auction						7,269
The north-western por- tion of the State	Mallee lands (such as are suitable to be eventually classed 1st, 2nd, 3rd or 4th class for selection)						4,526,475
Total area remaining for disposal							11,776,499

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

Pastoral occupation of Crown lands. The particulars of Crown lands for which licences had been issued for pastoral occupation on 31st December, 1926, are as follows :—

Number of Licences	5,382
Area (acres)	6,025,518
Annual Rental	£24,160

Persons who may select land. Any person of the age of 18 years or upwards is eligible to apply to select under the Land Acts a prescribed area varying according to the classification of the land—less the area of previous selections.

Concessions to land seekers. The Lands Inquiry Branch gives information to intending applicants and issues concession warrants for half fares on Victorian Railways to persons travelling to make inspection or take possession of land.

Area that may be selected. An applicant may select in the Mallee, under Selection Purchase Lease, 640 acres of first class, 1,000 acres of second class, 1,280 acres of third class, or 1,600 acres of fourth class land, or 4,000 acres of land classed 4A; and, in addition, may acquire privately an area equivalent to that which he selects from the Crown.

Grazing licences Grazing licences are renewable annually, and are only granted for waste lands of the Crown until required under the principal sections of the Act.

Land Laws. A conspectus of the provisions of the Victorian Land Acts appears in the *Year-Book* for 1916-17 and previous issues.

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, application must be made accompanied by strict proofs of the applicant's interest in the property. During 1926 there were submitted 458 applications to have brought under the Act land amounting to 16,487 acres in extent, and to £881,637 in value; while the land actually brought under the Act during the year by application was 16,909 acres valued at £637,006. Up to the end of 1926 there had been brought under the Act 3,125,504 acres valued at £65,729,730.

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 1926-27 comprised contributions £3,107, interest on stock £4,992, and interest on £75,073—advanced under *The Protection of Public Buildings Act 1835*—£3,003. During the year £301 was paid out of the fund in settlement of claims, and £5,144 as interest on securities under the *Special Funds Act 1920*, No. 3067. The balance at the credit of the assurance fund on 30th June, 1927, was £168,708. The amount paid up to 30th June, 1927, as compensation and for judgments recovered, including costs, was £8,328.

CLOSER SETTLEMENT.**Closer Settlement.**

Under the provisions of the Closer Settlement Act the Closer Settlement Board is empowered to expend at the rate of £500,000 per annum in the purchase—either by voluntary or compulsory acquisition—of lands (whether privately owned or held under lease from the Crown) for subdivision into suitable allotments according to the class of the land, and for disposal by the Board to eligible applicants, as stated hereafter. Lands well adapted for settlement are thus made available in those portions of the State in which railways, water supply and markets are provided, and in which roads and other facilities are good. The areas purchased comprise ordinary farming lands in a more or less improved condition, and lands in irrigated districts with plentiful supplies of water for irrigation.

Every application for a Closer Settlement allotment must be accompanied by the registration fee of 5s., a lease fee of £1, and a deposit (equal to at least 3 per cent. of the capital value of the land) which is deducted from the purchase money. The applicant is required to give evidence of suitability and fitness, &c., to occupy the land. If successful, a permit giving immediate possession is issued (followed by a lease as soon as practicable), and no further payment is required for six months. If the application be refused, the amount forwarded as a deposit in respect of the purchase money and the lease fee are returned to the unsuccessful applicant, but the registration fee is retained. Only one allotment of the maximum value can be granted to any one person, and the principle of residence for eight months in each year is a condition of the lease.

In addition to the provisions for the purchase of large estates for subdivision, the Closer Settlement Act provides that any one or more persons, who are eligible to acquire a farm allotment under the Closer Settlement Act, may enter into a provisional agreement with the owner of a block of private land for the purchase thereof, and

acquire it through the Closer Settlement Board—vide section 20, Act 2629. The value of the land must not exceed the maximum allowed under the Act. An application on the proper form must be filled in, and the agreement with full details and the application must be lodged with the Board, together with a valuation fee of £4. Where the agreement is submitted on behalf of more than one applicant, an additional fee of £2 must be lodged in respect of each additional applicant. The fee may be returned if, after a preliminary inspection, the Board does not approve of the application. Should the Board decide to acquire the land, the purchaser is required to deposit an amount not exceeding four half-yearly instalments, and is otherwise subject to all the provisions of the Closer Settlement Act with regard to payments, residence, improvements, &c.

Repurchased lands are disposed of as farm allotments, agricultural labourers' allotments, and workmen's home allotments under conditional purchase lease. The principal terms of these leases, as regards farm allotments, are briefly stated herein. They are given in detail in each title as issued.

Conditional purchase leases are granted to successful applicants under the Closer Settlement Act, and are for such a term not exceeding $36\frac{1}{2}$ years as may be agreed upon between the lessee and the Board. The purchase money is payable by 73 or a less number of half-yearly instalments. In some cases the Board has granted applications for extension of payments under a lease to $46\frac{1}{2}$ years, the payments being by 93 half-yearly instalments. The deposit lodged with the application is credited as part of the principal, and the balance bears interest at 5 per cent. Each instalment includes interest upon the balance of purchase money remaining unpaid, and is 3 per cent. half-yearly (6 per cent. per annum) of the capital value of the allotment (less the amount of the deposit). Payments in advance may be made at any time, at the option of the lessee, and a proportionate reduction of interest secured thereby.

In special cases, when a lessee is unable to meet the instalments of purchase money as they fall due, the Board has power to suspend such payments up to an amount not exceeding 60 per cent. of the value of the improvements effected by him. Interest at the rate of 5 per cent. per annum is charged on the amount in arrear or on any instalments which may have been suspended.

The lessee must reside on the allotment for eight months during each year. Personal residence by the lessee's wife, or child over 18 years of age, or parent dependent for support, may, with the approval of the Board, be considered personal residence by the lessee. A farm lessee cannot transfer, assign, mortgage, or sublet the whole or any part of his allotment within the first three years of the lease. The Crown grant may be issued to the lessee at the end of any half-year after the first twelve years have expired, on payment of the balance of purchase money. The residence condition is not carried into the Crown grant.

Farm allotments.

Lands for farm allotments are subdivided into suitable areas, of which none must exceed in value £2,500 except in the case of blocks mainly consisting of grazing land, when the value may be increased to £3,500; and no lease of any of these areas can be granted to a person who at the date of application is directly or indirectly the owner of any other land in Victoria (township land excepted) the value of which, together with that of the allotment applied for, exceeds the amount stated. The *Closer Settlement Act* 1925, No. 3422, empowers the Closer Settlement Board to increase the maximum value of a farm allotment to any amount not exceeding £3,000 in the case of any conditional purchase lease issued before the commencement of the said Act, where, in the opinion of the Minister after consulting the Board, the lessee has a reasonable chance of success if the area of his allotment is increased. Improvements of a permanent and substantial character must be effected by the lessee of a farm allotment to the value of at least two instalments of the purchase money before the end of the first year from the date of the lease, 10 per cent. of the purchase money before the end of the third year, and a further 10 per cent. before the end of the sixth year. Improvements must thus be made to the value of at least 20 per cent. of the total purchase money payable for the allotment. If an approved deputy is fulfilling the residential condition, the value of the improvements must be at least 30 per cent. of the total purchase money. If they are made in excess of requirements during the first three years, the excess is set off against the expenditure necessary by the end of the sixth year. Where special circumstances warrant action, the Minister, upon the recommendation of the Board, may modify the improvement conditions.

Advances to settlers.

The Closer Settlement Act provides for advances by the Closer Settlement Board to settlers who are—

- (a) Lessees under the *Closer Settlement Act* 1915.
- (b) Licensees of an agricultural or grazing allotment under the *Land Act* 1915.
- (c) Licensees under section 86 of the *Land Act* 1915 or corresponding sections of any repealed Act.
- (d) Conditional purchase lessees under the *Land Act* 1915; or
- (e) Conditional purchase lessees under the Murray Settlements Act, now Section 245, *Land Act* 1915.
- (f) Selection purchase lessees under Sections 46 and 50, *Land Act* 1915, during the first six years of the term of the leases.
- (g) Perpetual lessees under Section 54, *Land Act* 1915.

Advances of money to assist in effecting improvements may be granted by the Board up to 80 per cent. of the value of the permanent improvements effected, such advances to be repaid by half-yearly instalments extending over twenty years, bearing interest at 5 per cent. Advances to acquire stock and for the purchase of seed, manure, and implements can also be made. The total advances for all purposes must not exceed

£625, or in the case of a mountainous area lease, or of a Mallee allotment, or of any allotment of land which in the opinion of the Minister is mainly grazing land, £1,000; but where the whole or part of an advance is repaid the Board may make a further advance up to a total of £625 or (as the case may be) £1,000.

Advances not exceeding £250 may be made to persons holding approved share-farming or leasing agreements, for the purchase of stock and implements, and for such other purposes as the Board thinks fit, to enable them to carry out the share-farming or leasing agreement.

The period for repaying the advances on improvements is usually limited to twenty years, and for live stock, seed, manure, and implements, to five years, interest at 5 per cent. per annum being charged on the unpaid balance of the amount advanced.

Group Settlement in Mountainous Areas. Land may be acquired by the Board in mountainous areas for disposal to any group of settlers (not being less than five), and provision is made for freedom from payment of instalments for any period not exceeding ten years, subject to certain improvement conditions. Special provision is also made to enable the Board to provide road access to such areas. Interest at the rate of 5 per cent. per annum for the free period fixed by the Minister of Lands will be added to the capital value of the allotment, and will be repaid as part of the instalments of purchase money.

The Board may authorize an advance to be made for the purpose of clearing and improving the land, and may make progress payments to the lessee as the work for which the advance is intended progresses.

The Board will also assist in the erection of the dwelling-house and out-buildings required for the allotment. Advances made by the Board for this purpose are repayable on the same terms as those made to assist in effecting improvements which are referred to above.

Wire netting advances. Advances of wire netting may be made by the Board to Crown lessees and owners of land generally under the *Closer Settlement Act 1915*, the *Vermin Destruction Act 1915*, and the *Wire Netting Act 1924*.

The wire netting supplied is :—

- (a) Rabbit proof—No. 17 gauge, 1½-in. mesh, 42 inches wide, "A" grade.
- (b) Dog proof—No. 16 gauge, 4-in. mesh, 42 inches wide, "A" grade.

Netting is supplied for cash or on terms, advances being repayable over a period of thirteen years with interest at 4 per cent. per annum; payment of instalments is postponed during the first three years of an advance, and each advance is limited to a quantity sufficient for 6 miles of vermin-proof fencing. Where the netting is erected on a boundary immediately adjoining unoccupied Crown land, or separated only by a public road therefrom, a rebate of 50 per cent. of the cost thereof is allowed.

Estates purchased.

A complete statement of all estates acquired by the Closer Settlement Board at 30th June, 1927, 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 period from 1st January, 1926, to 30th June, 1927.

A summary of the lands acquired, exclusive of estates purchased for discharged soldiers' settlement (vide page 484), is given in the following statement:—

CLOSER SETTLEMENT LANDS ACQUIRED AT 30TH JUNE, 1927.

	Area.	Purchase Money, including Discount on Stock Debentures	Total Cost to Date.*	Number of Lessees.			Area Unallotted.
				Farm Allotments.†	Workmen's Homes.	Agricultural Labourers' Allotments.	
Dry Areas.	acres.	£	£	Number.	Number.	Number.	acres.
Lands purchased (Farms)...	795,553	5,307,377	5,485,041	2,931	..	146	19,049
Crown lands taken over (Farms) ..	21,352	19,560	23,422	22	..	17	11,460
Repurchased lands (Workmen's Homes)	642	64,133	95,544	..	967	..	3
Crown lands taken over (Workmen's Homes)...	355	6,372	8,470	..	79	..	13
Total Dry Areas ..	817,902	5,397,442	5,612,477	2,953	1,046	163	30,525
Irrigable Areas.							
Repurchased lands (Farms)...	168,064	2,148,244	2,282,449	1,860	..	152	19,735
Crown lands taken over (Farms) ..	601	4,302	4,380			..	..
Total Irrigable areas	168,665	2,152,546	2,286,829	1,860	..	152	19,735
Total acquired at 30th June, 1927	986,567	7,549,988	7,899,306	4,813	1,046	315	50,260
Less area disposed of under Discharged Soldiers Settlement Acts	66,949	658,309	658,309	..	..	..	..
Total (net) ..	919,618	6,891,679	7,240,997	4,813	1,046	315	50,260

* Includes (a) Purchase money, £7,549,988; expenses prior to disposal, £79,723; public works, £238,274; and interest capitalized, £31,321.

† Not including 632 lessees of farm allotments disposed of under the Discharged Soldiers Settlement Acts.

Up to 30th June, 1927, the Board had acquired 302 properties, with a total area of 986,567 acres, of which 50,260 acres were then unallotted. The Land Settlement Agreement of 1922 resulted in 238 approved migrants from overseas being settled. Under the agreement of 1925 between the Imperial and Commonwealth Governments (by which loan moneys are advanced at a very low rate of interest), Victoria at 30th June, 1927, had received £790,000 for approved settlement

schemes at Childers, Katandra, and Maffra-Sale. Portions of estates amounting in the aggregate to 53,941 acres, have been sold by public competition and for public reserves without any restrictions, and are not under conditional purchase lease.

Up to 30th June, 1927, 632 allotments containing 6,949 acres, had been sold to discharged soldiers and transferred to the Discharged Soldiers Settlement Acts.

Extent of
Closer
Settlement.

The extent of the settlement effected by the Board up to 30th June, 1927, is given in the next statement:—

SUMMARY OF CLOSER SETTLEMENT TO 30TH JUNE, 1927.

Classification of Holdings.	Number.	Average Capital Value.	Average Area.	Total Area.
Dry Areas.	No.	£	Acres.	Acres.
Areas settled—				
Farms	2,949	1,584	238	701,353
Agricultural Labourers' Allotments ..	163	160	17	2,792
Workmen's Homes Allotments ..	1,050	90	3	787
Allotments disposed of under Discharged Soldiers Settlement Acts	194	1,365	192	37,325
Public Competition, Auction, &c. ..	..	..	..	44,111
Total area of land settled .. .. .	..	..	..	786,368
Area of land available for—				
Farm Lands and Agricultural Labourers' Allotments ..	..	..	..	26,870
Workmen's Homes .. .. .	..	..	..	11
Public Competition, Auction, &c. ..	..	..	..	716
Area of land acquired but not yet available ..	..	..	..	644
Loss of area on subdivision (roads, channels, reserves, &c.) ..	..	..	..	3,293
Total dry areas acquired .. .. .	..	..	..	817,902
Irrigation Areas.	No.	£	Acres.	Acres.
Areas settled—				
Farms	1,860	793	56	103,660
Agricultural Labourers' Allotments ..	152	107	6	930
Allotments disposed of under Discharged Soldiers Settlement Acts	438	898	68	29,624
Public Competition, Auction, &c. ..	..	..	..	9,830
Total area of land settled .. .. .	..	..	..	144,044
Area of land available for—				
Farm Lands and Agricultural Labourers' Allotments ..	..	..	..	13,666
Public Competition, Auction, &c. ..	..	..	..	406
Area of land acquired but not yet available ..	..	..	..	9,068
Loss of area on subdivision (roads, channels, reserves, &c.) ..	..	..	..	1,481
Total irrigation areas acquired .. .. .	..	..	..	168,665
TOTAL AREAS acquired to 30th June, 1927 ..	..	..	..	986,567

Financial
statement of
Closer
Settlement.

The liabilities and assets of Closer Settlement at 30th June, 1927, are shown hereunder :—

FINANCIAL STATEMENT OF CLOSER SETTLEMENT AT 30TH JUNE, 1927.

Liabilities—					£
For Loans, Advances, and Interest (accrued) .. .. .	..	..	..	..	7,159,330
Crown Lands taken over .. .. .	..	..	..	..	12,487
Discharged Soldiers Settlement for land taken over .. .. .	..	..	..	..	1,164,864
Sundry Creditors .. .. .	..	..	..	..	27,132
Reserves, &c. .. .. .	..	..	..	..	239,658
					<hr/>
					8,603,471
Assets—					
Balance of purchase money not accrued due by lessees and others	..	..	..	..	4,959,293
Land on hand .. .. .	..	..	..	..	458,714
Balance of advances on improvements not accrued due .. .. .	..	..	..	..	1,274,888
Government Securities .. .. .	..	..	..	..	130,000
Cash (including balance at credit of Closer Settlement Fund) .. .. .	..	..	..	..	294,854
Sundry assets (including Interest accrued but not yet payable) .. .. .	..	..	..	..	366,590
Arrears on land and advances (less £2,787 bad debts written off)—					
Principal—					£
Land .. .. .	..	..	..	..	187,405
Advances .. .. .	..	..	..	..	226,622
Interest—					
Land .. .. .	..	..	..	..	582,799
Advances .. .. .	..	..	..	..	122,306
					<hr/>
					1,119,132
					<hr/>
					8,603,471

At 30th June, 1927, payments by settlers on land and advances amounted to £5,458,733, of which amount £2,813,771 was paid on account of principal and £2,644,962 on account of interest.

Eighty per cent. of the value of the improvements can be accepted as security for arrears.

Arrears secured by improvements	£806,645
Arrears secured by principal repaid on land	58,912
Arrears secured by stock mortgage, lien on crop, or unsecured	253,575
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Total	£1,119,132
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The sum of £6,599,911 had been paid to the Closer Settlement Fund up to 30th June, 1927. Of that amount £3,145,371 had been transferred to revenue to meet interest due to stockholders. £103,373 had been invested to replace amounts written off estates re-valued, £100,000 had been placed in securities under the Discharged Soldiers

Settlement Acts, and £2,956,313 had been utilized for redemption and cancellation of stock and for capital and working expenditure, the balance to the credit of the fund on 30th June, 1927, being £294,854. The balance of unredeemed securities is now £6,863,536, on which the interest payable amounts to £278,471 per annum. Up to 30th June, 1927, 12,913 persons had received advances aggregating £2,606,870, to effect improvements, or upon improvements already effected, and 3,835 persons had received advances amounting to £124,468 for the purchase of wire netting.

**Discharged
Soldiers
Settlement.**

By Acts 2916 of 1917, 2988 of 1918, 3039 of 1919, 3061 of 1920, 3130 of 1921, 3253 of 1922, and 3370 of 1924, provision was made for the settlement of discharged soldiers on the land and for other matters. The operation of these acts is under the control of the Closer Settlement Board, with the limitation that the closer settlement areas under irrigation conditions, and situated within an Irrigation and Water Supply District within the meaning of the *Water Act* 1915, are managed by the State Rivers and Water Supply Commission.

Up to 30th June, 1927, the Closer Settlement Board and the State Rivers and Water Supply Commission had acquired for the settlement of discharged soldiers 2,398,485 acres at a cost of £14,475,171, including 66,949 acres of Closer Settlement land taken over and disposed of under the Discharged Soldiers Settlement Acts. Of these lands 150,403 acres were granted to civilians under Closer Settlement Acts.

The following is a summary of the lands acquired :—

**LANDS ACQUIRED FOR DISCHARGED SOLDIERS
SETTLEMENT TO 30TH JUNE, 1927.**

	Area.	Cost.
	acres.	£
Land specially purchased (3,435 properties) ..	1,756,004	13,311,507
Crown Lands taken over	575,532	505,355
Closer Settlement Lands taken over	66,949	658,309
Total area and cost of purchase	2,398,485	14,475,171
Expenses prior to disposal .. ..	..	105,221
Public Works effected .. ..	..	704,871
Interest capitalized .. ..	..	143,853
Total cost to 30th June 1927 .. ..	..	15,429,116
Less land granted to civilians under Closer Settlement Acts	150,403	1,474,598
Total net area and cost	2,248,082	13,954,518

Extent of
Soldier
Settlement.

The extent of settlement at 30th June, 1927, is given in the table which follows:—

SUMMARY OF DISCHARGED SOLDIERS SETTLEMENT TO 30TH JUNE, 1927.

	Dry Areas.	Irrigation Areas.
	acres.	acres.
Area of land settled—Soldiers	1,972,009	57,014
Area of land settled—Civilians (Closer Settlement Acts)	133,883	16,520
Area of land available	8,715	1,175
Area of land acquired but not yet available	1,626	19,940
Sales by Auction, &c.	157,606	15,611
Total land acquired to 30th June, 1927	2,273,839*	110,260*
Farms, Number of—		
Soldier Settlers	6,288	1,130
Civilians	523	463
Total	6,811	1,593
Average area—acres	309	46
Average capital value	£1,763	£750

* Loss of area on subdivision amounted to 14,386 acres (dry and irrigable).

The number of soldiers settled up to that date was as follows:—

On land specially purchased by the Closer Settlement Board	6,603
On land specially purchased by the State Rivers and Water Supply Commission	1,472
On Closer Settlement old estates—Dry areas	36
On Closer Settlement old estates—Irrigable areas	570
On Crown Lands—Ordinary and Mallee Areas	1,440
On Crown Lands—Merbein and Nyah Irrigation Areas	186
Soldiers receiving assistance from the Closer Settlement Board, on share farming, leasing agreements and freehold land	845
Total	11,152

In addition to the above there were available or in process of being made available 7 allotments, of which 5 were on land specially purchased by the Closer Settlement Board, and 2 were on Crown land. There were also 727 blocks available under ordinary Closer Settlement conditions, for which returned soldiers could apply.

**Financial
statement
of Discharged
Soldiers
Settlement.**

The liabilities and assets of Discharged Soldiers Settlement are shown hereunder :—

**FINANCIAL STATEMENT OF DISCHARGED SOLDIERS
SETTLEMENT AT 30TH JUNE, 1927.**

Liabilities—					£
For Loans, Advances, and Interest	..	..	..	..	22,726,964
Crown Lands taken over	..	..	..	..	506,369
Closer Settlement for land taken over	..	..	..	..	152,478
Sundry Creditors	..	..	..	..	37,660
Reserves, &c.	..	..	..	..	271,636
					<hr/> 23,695,107
Assets—					
Balance of purchase money not accrued due by lessees and others					14,074,403
Land on hand	..	..	..	..	137,463
Balance of advances on improvements not accrued due	..	..	..	..	3,815,761
Cash (including balance at credit of Discharged Soldiers Settlement Fund)	..	..	..	..	56,253
Concession of Interest and Administration expenses (State and Commonwealth)	..	..	..	..	1,578,748
Sundry assets (including Interest accrued but not yet payable)					238,366
Arrears on land and advances (less £32,505 bad debts written off)—					
Principal—					£
Land	..	..	..	..	240,564
Advances	..	..	..	..	1,569,550
Interest—					
Land	..	..	..	..	1,415,483
Advances	..	..	..	..	474,283
					<hr/> 3,699,880
Suspense Account	..	..	..	..	94,233
					<hr/> 23,695,107

At 30th June, 1927, payments by soldier settlers on land and advances amounted to £5,211,057, of which amount £3,771,699 was paid on account of principal and £1,439,358 on account of interest.

Up to 30th June, 1927, the amount of assistance rendered by the Board by way of advances was £8,348,799 to 11,152 soldier settlers.

Concessions granted by the State Government (£1,439,718) and the Commonwealth Government (£3,461,718)—representing interest, administration charges, and losses—have relieved the settlers to the extent of £4,901,436.

WATERWORKS.

All Victorian waterworks are controlled by official bodies, either State or local. The following table, particulars of which were obtained chiefly from the Twenty-second Annual Report of the State Rivers and Water Supply Commission, summarizes those waterworks on which the Government has expended or advanced moneys, and includes practically all waterworks in the State other than minor works constructed by municipalities out of municipal funds:—

**WATERWORKS—CAPITAL EXPENDITURE AND ADVANCES
BY STATE TO 30TH JUNE, 1927.**

Controlling Bodies.	Purposes of Supply.	Storage Capacity of Reservoirs.	Capital Expenditure and Advances by State.
		Acre feet.	£
State Rivers and Water Supply Commission—			
Coliban System ..	Domestic and Mining	42,870	1,388,458
Broken River Works ..	Stock and Domestic	..	14,853
Goulburn-Waranga (including Goulburn main channels) ..	Irrigation, &c. ..	354,100	2,604,814
Sugarloaf Reservoir (under construction) ..	" " ..	306,000	1,379,696
Kow Swamp Works ..	" " ..	40,860	187,708
Loddon River Works ..	" " ..	14,000	167,636
North-west (Kerang) Lakes	" " ..	92,000	21,657
Long Lake Pumping Works ..	Stock and Domestic	3,820	27,346
Lake Lonsdale Reservoir	" " ..	45,480	49,054
Lower Wimmera Compensation Works ..	" " ..	2,870	8,558
Wimmera Storages ..	" " ..	159,380	371,007
Maffra-Sale Scheme (including Glenmaggie Reservoir and channels)	Irrigation, &c. ..	150,000	907,410
Bacchus Marsh and Werribee Scheme ..	" " ..	31,850	170,575
Red Cliffs Scheme ..	" " ..	..	737,905
Irrigation and Water Supply Districts (tributary works)	" " ..	..	3,140,044
Millewa Waterworks Scheme ..	Stock and Domestic	..	370,881
Waterworks Districts (tributary works) ..	" " ..	36,410†	2,705,383
Flood Protection Districts	.. ..	..	380,010
Surveys, &c. ..	.. ..	..	210,686
Other expenditure ..	.. ..	..	147,538
Carried forward ..	.. ..	1,279,640	14,991,219

WATERWORKS—CAPITAL EXPENDITURE AND ADVANCES BY STATE TO
30TH JUNE, 1927—*continued.*

Controlling Bodies.	Purposes of Supply.	Storage Capacity of Reservoirs. *	Capital Expenditure and Advances by State.
		Acre feet.	£
Brought forward ..	.. .. .	1,279,640	14,991,219
River Murray Agreement Works (Commission the constructing authority) ..	Irrigation, &c. ..	1,000,000	1,426,820
Total State Rivers and Water Supply Commission	.. .. .	2,279,640	16,418,039
First Mildura Irrigation and Water Supply Trust and Mildura Urban Trust ..	Irrigation, &c. ..	..	119,782
Abolished Irrigation and Water Supply Trusts (8)	" " ..	..	32,754
Waterworks Trusts ..	Stock and Domestic	5,730	1,759,564
Municipal Corporations ..	" "	11,420	783,677
Free Grants to Local Authorities ..	.. .. .	..	147,046
Melbourne and Metropolitan Board of Works ..	Domestic ..	23,730	7,798,912
Geelong Waterworks and Sewerage Trust ..	" ..	9,930	779,325
Total ..	.. .. .	2,330,450	27,839,099

* Total capacity of Storages, when works in hand are completed.

† Includes miscellaneous Storages, the expenditure on which has been debited to the districts concerned.

NOTE.—One acre foot of water equals 43,560 cubic feet, or 272,250 gallons.

Of the expenditure given in the case of the Melbourne waterworks, £3,189,934 represents money borrowed by the State, all of which had been redeemed at 30th June, 1924—£800,000 out of consolidated revenue, and £2,389,934 by payments from the Melbourne and Metropolitan Board of Works, to which body the waterworks were transferred in 1891. Further particulars relating to this Board will be found on page 238, Part V., of this volume.

The Geelong Waterworks were sold by the Government to the Geelong Waterworks and Sewerage Trust in 1908 for £265,000. The expenditure shown in the above table includes, in addition to this amount, the outstanding State loan liability on account of the works, viz., £159,358, and the capital expenditure by the Trust since acquiring the works, viz., £354,967.

The next table summarizes the amounts disbursed on State works and those granted and lent to local bodies by the State on account of waterworks. In addition to their receiving free grants large sums have been written off the liabilities of the local bodies.

STATE EXPENDITURE ON WATERWORKS TO 30TH JUNE, 1927.

	Expenditure by State.	Capital Written Off.	Payments towards Redemption.	Free Head-works and Advances.	Amount standing at Debit, 30th June, 1927.
—	£	£	£	£	£
State Rivers and Water Supply Commission—					
Free Headworks	1,252,462	..	420	1,252,042	..
Other Main Supply Works (including Coliban)	7,155,096	..	1,591	..	7,153,505
Irrigation and Water Supply Districts	3,140,044	575,152	30,985	..	2,533,907
Waterworks Districts	2,705,383	175,055	49,628	..	2,480,700
Flood Protection Districts	380,010	..	..	..	380,010
Surveys, &c.	210,686	..	..	..	210,686
Other expenditure	147,538	..	..	..	147,538
	14,991,219	750,207	82,624	1,252,042	12,906,346
River Murray Agreement Works ..	1,426,820	..	..	..	1,426,820
Total State Rivers and Water Supply Commission	16,418,039	750,207	82,624	1,252,042	14,333,166
First Mildura Irrigation and Water Supply Trust and Mildura Urban Trust	119,782	..	8,445	..	111,337
Abolished Irrigation and Water Supply Trusts (8)	32,754	32,724	30	..	..
Waterworks Trusts	1,759,564*	316,537	250,171	..	1,192,856
Municipal Corporations	783,677†	163,760	125,363	..	494,554
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	459,593	..	300,235	..	159,358
Total	22,910,389	1,263,228	3,956,802	1,399,088	16,291,271

* Amount includes £6,871 representing Interest Capitalized.

† „ „ £43,979 „ „ „

In addition to the capital written off, as shown above, arrears of interest amounting to £579,786 have been written off certain liabilities to the State, viz., £342,773 from the liabilities of what were originally Irrigation and Water Supply Trusts, £85,556 from the liabilities of Waterworks Trusts, and £151,457 from the liabilities of Municipal Corporations. Thus the amount which has actually been written off the liabilities of the Trusts (Irrigation and Waterworks) and Corporations is £1,843,014. Interest outstanding at 30th June, 1927, amounted to £29,854, viz., £13,483 against the First Mildura Trust, £14,230 against Waterworks Trusts, and £2,141 against Municipal Corporations.

IRRIGATION.

Progress of 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 intrusted with the management of all irrigation works, except those controlled by the First Mildura Trust. This authority is embodied in the *Water Act* 1915—which consolidates the *Water Acts* of 1905 and 1909, of which epitomes have been given in previous issues of this work—and the *Water Acts* 1916 and 1918. The chief difficulties under which the Irrigation Trusts laboured were sparse settlement, and the absence of powers to make compulsory charges on the properties commanded by the irrigation channels. Since the assumption of control by the Commission a policy of closer settlement on the lands served by the irrigation channels has been inaugurated and vigorously pushed on, and a system of compulsory rating enforced, along with which there has been the allotment of water as a right to properties in channelled areas.

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.
Supplied from the Goulburn—	Acres.	Acres.
Shepparton .. ..	..	14,849
South Shepparton (three years) ..	..	2,837
Rodney	32,356	50,663
Stanhope	2,000	10,554
Tongala	3,000	14,584
Rochester	500	30,394
Echuca North .. ..	..	2,915
Dingee .. ..	..	3,583
Tragowel Plains	20,000	37,457
Supplied from the Murray—		
Leitchville (two years) ..	..	4,321
Cohuna	12,000	18,409
Gannawarra	7,825	18,263
Koondrook	5,029	14,091
Swan Hill	5,410	15,501
Third Lake (one year) ..	..	2,509
Nyah	569	2,715
Merbein	202	7,629
Tresco .. ..	..	1,417
Mystic Park .. ..	..	2,515
Supplied from the Werribee—		
Bacchus Marsh	31	2,589
Werribee .. ..	..	6,197
Total	88,922	263,992

The area under irrigated culture in the whole State, in 1926-27, for all kinds of crop, was 406,532 acres, the largest yet recorded, being an increase of 62,847 acres compared with the area irrigated in the previous year, and 70,056 acres above the average of the previous five years.

Total area
irrigated.

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.	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
	acres.	acres.	acres.	acres.	acres.	acres.
Cereals	23,715	60,304	32,240	45,215	57,987	40,655
Lucerne	24,124	92,679	94,479	103,200	116,753	119,721
Sorghum and other annual fodders ..	8,094	35,591	33,356	30,683	37,340	29,476
Pastures	50,541	88,787	91,912	119,563	51,345	131,725
Vineyards and orchards	17,524	61,061	64,647	66,780	69,108	69,042
Fallow	4,988	8,850	4,523	4,863	5,102	9,992
Miscellaneous ..	785	3,455	3,401	5,199	6,050	5,921
Total ..	129,771	350,727	324,558	375,503	343,685	406,532

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 1926-27—406,532 acres—the percentages devoted to different purposes were as follows :—Pastures, 33 ; cereals, 10 ; lucerne, 29 ; vineyards, orchards, and gardens, 17 ; sorghum and other annual fodder crops, 7 ; fallow, 3 ; and miscellaneous, 1.

Closer
Settlement in
Irrigation
Districts.

The Commission during 1926-27 provided 239 holdings under ordinary Closer Settlement conditions for 24 discharged soldiers, 154 local civilians, and 61 approved oversea settlers. The main feature of the year in connexion with Closer Settlement in irrigation areas was the readiness with which land seekers took up blocks in the subdivided portions of the recently acquired areas at Katandra, Maffra and Sale, and Narre Warren and Hallam.

The principal development took place at Katandra and North Shepparton, where 13,400 acres had been purchased. Of this area, 6,700 acres at Katandra and 1,280 acres at North Shepparton have now been subdivided into 88 Closer Settlement holdings, of which 70 have already been selected.

In the Maffra-Sale District, an additional 2,500 acres were purchased, making a total area in that district of 10,570 acres, of which 7,000 acres have been subdivided, and 101 settlers placed on allotments.

The popularity of the Closer Settlement area at Narre Warren and Hallam is evidenced by the continued demand for allotments thereon. The properties acquired, totalling 3,370 acres of rich land eminently suited for intense culture, are being drained and subdivided into small holdings suitable for market gardening and poultry farming. The district is about 24 miles from Melbourne, and, as the areas adjacent to the metropolis hitherto used for market gardening purposes are being gradually absorbed by extensions of suburban residential areas, the settlement now plays an important part in the supply of market garden produce for the city. Of the area subdivided 50 blocks have been taken up, and other blocks are being made available. Water is delivered under pressure from a main supply pipe of the Mornington Peninsula System.

The Commission has practically completed the work of repatriating discharged soldiers; the chief responsibility now being to see to the welfare of the men already settled, and, by an adequate system of advances, help towards permanent improvements to their holdings. Since the commencement of the repatriation of Victoria's soldiers, the Commission has placed 2,217 discharged soldiers on irrigable blocks.

The Commission has in hand 28,800 acres of suitable land available for settlement awaiting the extension of the storage and irrigation schemes. Of this area, 3,620 acres are in the Katandra District, which will be served by the East Goulburn Channel (now enlarged and extended); and 3,900 acres are at Calivil, near the River Loddon; 15,000 acres of the irrigable portion of Red Cliffs Soldier Settlement; about 3,570 acres at Maffra-Sale; and 2,370 acres at Hallam and Narre Warren. These will be made available for settlement as the occasion demands and as soon as the progress of the works permit.

The following statement shows the lands purchased for civilians and discharged soldiers by the State Rivers and Water Supply Commission and the extent of settlement on each estate after subdivision. The subdivided portions are already supporting nearly 18 times as many families as were living on them previously, and, in addition, there are some 2,300 town dwellers in urban portions of the subdivided estates. The statement contains also particulars of settlement effected under

section 20 of the *Closer Settlement Act* 1915 outside the large estates subdivided by the Commission :—

Closer Settlement Estates.	Area of Lands purchased by the State in Acres.	Properties Subdivided.						
		Area in Acres.	Number.	Number of Families thereon when Purchased.	Subdivided into—		Number of Closer Settlement Blocks now occupied.	Present Increase in Number of Families.
					Number of Closer Settlement Blocks.	Average Area in Acres.		
Shepparton	14,170	14,170	33	29	389	34	370	341
East Goulburn	13,400	9,780	20	19	111	79	93	74
Rodney	3,230	3,230	8	5	55	57	41	36
Stanhope	21,500	21,500	7	13	290	63	260	247
Kyabram	4,600	4,420	9	12	69	62	65	53
Tongala	19,090	18,930	41	36	317	58	305	269
Koyuga	4,200	4,200	..	..	54	73	51	51
Cornelia Creek	2,500	2,500	} Pt. 1		19	161	17	17
Nanneella	9,040	9,040	18	8	125	70	119	111
Echuca	3,600	3,600	8	4	30	105	30	26
Bamawm	13,400	13,400	28	21	192	65	190	169
Dingee	500	500	3	1	20	23	15	14
Calivil	3,900	..	..	..	..	..	..	..
Cohuna	12,000	12,000	29	10	142	80	117	107
Koondrook	9,060	9,060	14	10	132	63	104	94
Swan Hill	12,500	12,500	34	16	329	36	308	292
Nyah	3,800	3,800	8	1	237	15	231	230
Merbein (Crown)	3,300	8,300	..	..	423	20	423	423
Red Cliffs	33,000	18,000	1	3	706	17	699	696
Bacchus Marsh	70	70	1	..	2	36	2	2
Verribee	10,000	10,000	1	11	233	36	229	218
Hallam	3,370	1,000	5	3	59	17	50	47
Maffra	10,570	7,000	15	16	142	45	101	85
Properties acquired under Section 20, <i>Closer Settlement Act</i> 1915, outside above Estates, <i>vide</i> page 477	215,800	187,000	284	218	4,076	42	3,820	3,602
	19,540	..	..	..	..	..	200	..
	235,340							

Progress of Irrigated Closer Settled Areas.

The development of irrigation in all parts of the world is one of slow but generally sure growth, and it is therefore gratifying to note that progress in the various irrigation districts of this State has been very satisfactory, and compares most favorably with the records of like districts in other parts of the world. This progress is shown in many ways, but chiefly in the increase in the area irrigated in the State, in the increase in the value of stock, implements owned by settlers, and permanent improvements effected by them, in the increase in the population, and the general prosperity of the towns in the irrigated areas.

The increase in population in the irrigation districts as a result of the intensive methods of agriculture has been most significant, especially at a time when there has been a decrease in the rural population of the State as a whole. Thus, since the constitution of the State Rivers and Water Supply Commission, although there has been a

decrease in the rural population of the State outside the irrigation districts, there has been an increase of 30,000 in the irrigation areas.

In the Shire of Shepparton, an increase of 29 per cent. in the population has taken place since the inception of irrigation. About fifteen years ago, 9,200 acres were purchased, since which time additional areas amounting to 4,970 acres have been acquired. All of these areas have been subdivided into 389 blocks, on which 370 families are settled as contrasted with 29 before irrigation. The early days of the settlement were devoted principally to dairying, but now fruit growing is the main industry. Between 1916 and 1926, the area under fruit increased from 2,026 acres to 5,000 acres, and the value of stock and improvements from £85,553 to £261,000.

Following the successful years of the established packing and canning factories in this State, a settlers' co-operative packing company has been formed at Murrabit for the packing and marketing of citrus fruits from this area. The co-operative companies at Red Cliffs and Woorinen, despite private competition, processed the greater portion of the dried fruits from their respective districts. The Shepparton and Ardmona canneries again had a successful season. At Shepparton, however, owing to the ravages of the thrip and the vagaries of the season, the amount processed (5,445 tons) was slightly less than that for the previous season, which was a record. Extensions are being made at the Ardmona Cannery to cope with the supply of fruit at peak periods.

The suitability of the irrigation districts for dairying has again been demonstrated by the results in competitions and agricultural shows. Of the 65 Herd Testing Associations in the State, 21 are in irrigation districts. Grazing and fattening of sheep also receive considerable attention.

The development of market gardening at Bacchus Marsh, Werribee, and Narre Warren and Hallam is most marked. Glasshouses, for the early production of tomatoes, cucumbers, &c., have been built. At Narre Warren, several of the settlers devote their whole attention to the growing of flowers for the Melbourne market.

The viticultural areas had one of the best seasons ever experienced. The high yield and good drying season enabled the large crop of 75,296 tons of lexias, 582,418 tons of sultanas, and 135,464 tons of currants to be processed satisfactorily.

The Irrigation Research Committee, the formation of which was mentioned in the 1923-24 issue of this publication, continued its experiments and demonstrations. The results may be seen in the marked increase in the use of manures and the planting of grasses. As a result of its research work at Tresco, it is hoped that definite advice as to the best system of draining salted land will be shortly made available.

Supply of water for domestic and stock purposes. 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 23,188 square miles—slightly more than 27 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:—79 towns of a total population of 113,060 supplied by the Commission, 108 towns with a total population of 182,800 supplied by Waterworks Trusts, and 18 towns with a total population of 73,720 supplied by Local Governing Bodies.

STORAGE AND SUPPLY SCHEMES.

Total Storages in State. In 1902 the total capacity of storages in the State was 172,000 acre-feet. The present capacity under the control of the State Rivers and Water Supply Commission is about 1,162,000 acre-feet, and, when the Wimmera Storages and Maffra Storages have been completed, the total capacity will be about 1,280,000 acre-feet. The Hume Reservoir, which is in course of construction, and is not included in the storages referred to, will contain 2,000,000 acre-feet (vide page 500), half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria. The construction of storage works by the State Rivers and Water Supply Commission was continued during the year. Details as to storage capacity will be found on pages 487 and 488 of this issue.

Goulburn Storages. The dam for the Sugarloaf Reservoir is situated on the Goulburn River, below the junction of the Delatite River, about 18 miles from Alexandra. The construction of the main retaining wall has been completed. It consists of a diaphragm of concrete, built from bedrock (which, in places, is 75 feet below ground surface) to crest level (139·75 feet above the river bed), a wall of clayey material on the upstream side of the diaphragm, and supporting masses of rock on both sides. The reservoir was first filled to full capacity (306,000 acre-feet) at the end of August, 1927.

The State Electricity Commission is now proceeding with its scheme of hydro-electric works at the Sugarloaf Reservoir (vide page 501), in connexion with which the Water Commission has already provided a separate outlet for emergency or power purposes.

At the Waranga Reservoir, which has a storage capacity of 333,400 acre-feet, the construction of the reinforced concrete core wall—4½ miles in length—which was commenced in 1923, has been completed.

**Wimmera
Storages.**

Progress was made with the works for supplementing the domestic and stock supplies to the districts served by the Wimmera-Mallee system. The building of the embankment for the first stage of Pine Lake Reservoir and the construction of the valve tower and outlet structures have been completed, and good progress has been made with the earthwork of the second stage. This has increased the available capacity, from 22,000 acre-feet to the volume now held, 34,000 acre-feet. The ultimate holding capacity of this storage will be 62,000 acre-feet.

The storage provision of the Wimmera-Mallee Supply Scheme now reaches 164,870 acre-feet as against 69,000 acre-feet a few years ago. Storage works now in course of construction will carry the capacity to no less than 212,870 acre-feet. The water is distributed throughout a total area of about 11,000 square miles by main and distributary channels aggregating 5,200 miles in length (exclusive of an approximately equal length of farmers' connecting branches). Full supplies are furnished to six urban Waterworks Trusts within the Wimmera-Mallee areas, in addition to the reticulated systems of 31 towns directly controlled by the Commission.

**Northern
Mallee
Water Supply.**

In the Walpeup portion of the Northern Mallee, comprising an area of about 1,250,000 acres, which adjoins the Wimmera-Mallee districts, but is generally too high for inclusion in the gravitation channel system, the Commission has met the water supply needs of settlers by sinking bores, and excavating large public tanks. There are now 99 successful public bores in this area with an average depth of 460 feet, and 260 tanks with a total storage capacity of 1,210,000 cubic yards.

The Commission has further assisted settlers in this area by clearing and grubbing 4,565 miles of roads, in addition to which 244 sandhills have been made passable for heavy wagons by rubbing with local limestone.

**Millewa
Water Supply.**

The extensive domestic and stock supply scheme for the supply of water by pumping to an area of about 1,000,000 acres in the extreme north-western portion of the State (opened up by the 55 miles of railway from Red Cliffs), comprises a lift of 19 feet from the River Murray to Lake Cullulleraine (a depression on the river flats), a second lift of 113 feet, and a third lift of 19 feet, to command the whole of the lower level channel system which supplies the area which has been constituted the Lower Millewa Waterworks District, and a fourth lift, of 145 feet, to command the higher level channel system which supplies the area of 205,000 acres, which will be constituted the Upper Millewa Waterworks District. The length of channels actually constructed is 563 miles. The total area served (at present wholly within the Lower Millewa Waterworks District) is 600,000 acres, all of which has been allotted to settlers. The

balance of the lands in the whole system can be served expeditiously, as soon as such lands are being made available for settlement.

Carwarp Waterworks Districts. The Carwarp Waterworks District, of 200,000 acres, lying to the south-east of Lower Millewa District, and served by a system of channels 141 miles in length, is supplied from the Red Cliffs pumping station. The high lands surrounding the Carwarp Railway Station are supplied by a pump, a rising main, and 13 miles of distributary channels; and these lands comprising 14,800 acres, have been formed into a separate district—called “Carwarp Central.”

Mornington Peninsula Scheme. The important scheme of reticulated supply to the Naval Base, the inland towns of Berwick, Beaconsfield, Pakenham, Noble Park, Spring Vale, Dandenong, Somerville, Cranbourne, and Bittern, and the bay-side towns of Mornington, Frankston, South Frankston, Seaford, Carrum, Chelsea, Edithvale, Aspendale, and Hastings, is in full working order. Extensions of services in all directions are being applied for. The reservoirs at Beaconsfield, Dandenong (Heywood's Hill), Frankston, South Frankston, Mornington, and Bittern are kept fully supplied.

The main race has now been extended 33 miles from Toomuc Creek, to tap the Cannibal Creek and River Bunyip, as outlined in the original scheme. This will ensure adequate supplies to meet the increasing demands of reticulations already connected, and to provide when required, for the townships of Garfield, Bunyip, Kooweerup, and the bay-side towns of Dromana, Rosebud, Rye, Sorrento, and Portsea. A full supply of water is now available for the irrigation, by pressure pipes, of small blocks suitable for market gardening and intensive culture. In this connexion the estates in the Hallam Valley, comprising 3,370 acres, purchased by the Commission for Closer Settlement purposes, are being subdivided and allotted to settlers for intensive culture under irrigation. Extensive works for the systematic drainage and reclamation of the portions of the above estates not yet subdivided have been carried out, and about 1,000 acres, between Berwick and Dandenong, have been settled.

Goulburn Irrigation Areas. Following the completion of the Sugarloaf Reservoir and the Waranga Reservoir enlargement and improvement works, considerable expansion of the whole Goulburn system is taking place. The main Eastern channel is being enlarged and extended for 17 miles, and, with distributary channels in course of construction, is supplying a continually increasing area, including 34,000 acres south of the Broken River, now included in South Shepparton Irrigation District, and 40,000 acres, north of Shepparton Irrigation District, and 10,000 acres of Closer Settlement lands at Katandra.

On the west of the Goulburn River, the Tandarra-Calivil main channel and distributaries are supplying a new area of 24,000 acres, lying north-west of Dingee Irrigation District; and many requests for further extensions are under consideration.

On the west of the Loddon River, the Waranga-Western main channel is being extended to supplement the supply to Boort Irrigation District, hitherto dependent entirely on the uncertain quantities of water obtainable from the River Loddon.

**Loddon-Murray
Irrigation
Areas.** In the districts administered from the Cohuna and Kerang centres, the abnormally dry conditions during the irrigation season of 1926-27 created an exceptionally heavy demand for water, which, however, was fully met entirely by gravitation from the Torrumbarry Weir. Many existing districts have been extended and new districts constituted.

In many places the old timber structures and iron flumes have been replaced by modern reinforced concrete head checks, syphons, and culverts, and channels cleaned and treated to prevent leakage.

Drainage works, comprising about 25 miles of main and branch drains, to serve the Murrabit Closer Settlement Estates and other lands of an area of about 5,000 acres, are in operation, and the Barr Creek was converted from an irrigation channel to act in its natural capacity as a drain.

In the Cohuna District, several new occupation bridges were built, and four old important road bridges replaced by new ones.

**Maffra-Sale
District
Irrigation
Scheme.** The construction of the Glenmaggie Weir on the Macalister River has been so far advanced that 80,000 acre feet of water can now be stored, and arrangements can be made to increase this to the full capacity of 150,000 acre feet during the coming season, if required. The Maffra Irrigation District has now been extended to include a total area of 20,000 acres, and a new district of 15,000 acres—known as "Sale"—has been constituted. The channel system is being further extended.

**Red Cliffs
Irrigation
District.** At Red Cliffs, the scheme, which ranks first in importance among the pumping systems of the State, supplies water to an area totalling 18,000 acres, including the township and 700 occupied soldier settlement blocks. The plant is capable of delivering 500 acre-feet of water per day, lifted 105 feet. The total length of channels constructed to date is 124 miles. Channels having a total length of 11½ miles have been lined with concrete, with the result that 99 per cent. of the total number of blocks in the settlement are protected from seepage from channels. The area now planted to vines and citrus is 8,750 acres, the whole of which is in bearing. The yield of dried fruit for 1927 was 11,000 tons. Following considerable

progress in the township, which has been proclaimed an Urban Water-works District, a concrete standpipe, 70 feet high and 26 feet in diameter, has been erected, and reticulation extended to meet requirements.

Flood Protection Schemes. The Commission has under construction a comprehensive scheme of works for the reclamation of the extensive swamps in West Gippsland, known as Kooweerup and Cardinia, and for the protection from periodical flooding of the surrounding low-lying lands, aggregating in all 100,000 acres. These areas have been constituted Flood Protection Districts under the provisions of the Water Acts. The construction of the huge main drains, feeders and subsidiary works has reached the stage that provides the landholders affected with protection from all but abnormal floods, and flood protection charges have been levied accordingly.

Flood protection works at Loch Garry (below Shepparton) for the regulation of Goulburn flood waters have effectively served their purpose. The area benefited—about 40,000 acres—is known as the “Loch Garry” Flood Protection District. Further down the Goulburn (at Kanyapella) works constructed for the relief from flooding of an area of about 13,500 acres have similarly been effective. This area is called the “Kanyapella” Flood Protection District.

River Murray Waters. The scheme of works provided in the River Murray Waters Acts passed by the Governments of the Commonwealth and of the States of New South Wales, Victoria, and South Australia comprises storages on the Upper River Murray and at Lake Victoria, locks and weirs in the course of the River Murray from its mouth to Echuca, and also locks and weirs on the lower part of the River Darling or the River Murrumbidgee, as may be decided by the Government of New South Wales. The Acts provide that for purposes of construction the Minister for Public Works of New South Wales shall be the Constructing Authority for that State; that, for the State of South Australia, the Commissioner of Public Works shall be the Constructing Authority; and that the State Rivers and Water Supply Commission shall be the Constructing Authority for Victoria.

Under the River Murray Agreement of 1914 the estimated total cost of the whole of the works is set down at £4,663,000. It is now clear, from the experience gained in connexion with the works which have been put in hand to date, that the total cost of the works will be more than double that amount. The four contracting Governments have agreed to share equally in the total cost of the works. The total expenditure incurred up to 30th June, 1927, on the portion of the scheme completed and in course of construction was £5,106,000.

The site of the Hume Reservoir is a little below the junction of the rivers Murray and Mitta Mitta. Originally it was designed to provide for a capacity of 1,100,000 acre-feet, but, at a conference of Ministers representing the four interested Governments, held on the 8th and 9th

days of August, 1924, the following proposals raised by the Government of Victoria were agreed to :—

- (a) That the work of construction of the Hume dam, of sufficient dimensions to provide for a reservoir of 2,000,000 acre-feet, proceed for a period not exceeding three years, and that the question of the ultimate capacity and completion of the reservoir be then the subject of a further conference. All waters to be used to meet the present allocation obligations and as a reserve for dry years.
- (b) That provision be made for outlet works at the Hume Reservoir suitable for hydro-electric generation purposes, provided, however, that the use of the reservoir for these purposes does not interfere with the volumes of water required for the purposes set out in the River Murray Agreement. The cost of such additional outlet works, estimated at £40,000, shall be borne in equal shares by the States of New South Wales and Victoria, which Governments should have the sole use of any power generated at the reservoir.

A conference of the members of the River Murray Commission and the engineers of the three Constructing Authorities, held at Hume Reservoir on 12th August, 1926, unanimously agreed to recommend that the above resolutions be given effect to. This recommendation was agreed to by the four Contracting Governments, and the Commission so advised on 31st December, 1926.

The work is being carried out by the Constructing Authorities for the States of New South Wales and Victoria. On the New South Wales section considerable progress has been made, and work is now being proceeded with on the concrete structure. On the Victorian side the construction of the main embankment is being steadily advanced, and the concrete bridge over the River Murray for Bethanga District is being constructed.

The Torrumbarry Weir and Lock (near Echuca) has been in successful operation since December, 1923, and water has been diverted for the various irrigation districts benefited.

Weir and Lock No. 11—situated about $\frac{1}{2}$ mile downstream from Mildura—now practically completed, will form a lock pool for about 40 miles upstream, providing a local reserve storage of great value and reducing the suction lift at the Mildura and Red Cliffs Pumping Stations. The lock and lock canal have been completed and half of the navigation pass in the river has been constructed. The Constructing Authority for New South Wales is proceeding with the construction of No. 10 Weir and Lock at Wentworth, and has commenced work on Weir and Lock No. 15 at Euston; while, in the South Australian section, Weir and Lock No. 1 at Blanchetown and No. 3 near Lake Bonney have been completed and brought into operation. Nos. 5 and 9 have been completed, Nos. 2 and 4 are approaching completion, and No. 6 has been commenced. Lake Victoria Storage Works have been completed with the exception of the improvement of the inlet and outlet channels.

**Artesian
Bores.**

The following particulars relating to artesian boring have been supplied by the State Rivers and Water Supply Commission :—

ARTESIAN AND SUB-ARTESIAN BORING (MALLEE).

Number of Bores Sunk.*		Total Depth of Bores.*	
State.	Private.	State.	Private.
99	275	Feet. 46,100	Feet. 53,600

* At 31st December, 1926.

**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 following particulars are an indication of the prosperity of the settlement :—

POPULATION OF MILDURA SHIRE, 1891 TO 1927.*

1891	April (Census)	..	2,321	1923	December ..	..	13,950
1901	March (Census)	..	3,325	1924	.. ..	..	14,250
1911	April (Census)	..	6,119	1925	.. ..	..	14,450
1921	April (Census)	..	13,183	1926	.. ..	..	15,000
1922	December ..	..	13,760	1927	.. ..	..	15,100

* Including the population of the town of Mildura, which up to 1920 was part of the shire.

The capital value of property in the Shire of Mildura in 1913 was £1,294,160. In 1927 in the same area it had risen to £4,247,020. The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1927, were as follows :—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION TRUST, 1926-27.

<i>Receipts.</i>		£	<i>Payments.</i>		£
Horticultural Rates	..	41,306	Wages and Salaries	..	17,606
Special Waterings, &c.	..	5,416	Firewood	..	13,053
Miscellaneous	..	4,179	Interest, Sinking Fund and		
			Depreciation	..	4,404
			Miscellaneous	..	4,513
Total ..	..	50,901	Total ..	..	39,576

The extent of watering done represented 22,876 water acres in 1917-18, 39,895 acres in 1918-19, 41,808 acres in 1919-20, 35,632 acres in 1920-21, 44,150 acres in 1921-22, 42,807 acres in 1922-23, 42,854 acres in 1923-24, 39,212 acres in 1924-25, 42,230 acres in 1925-26, and 42,134 acres in 1926-27.

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 1924, 1925, and 1926, and the average yearly amount of rainfall deduced from all available records to December, 1926, 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. 1926.
	1924.	1925.	1926.	
	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	28.72	23.04	27.13	26.34
Fitzroy, Eumeralla, and Merri Rivers ..	26.73	22.64	27.76	28.10
Hopkins River and Mt. Emu Creek..	31.94	20.14	24.04	24.88
Mt. Elephant and Lake Corangamite ..	27.99	19.16	20.42	24.89
Cape Otway Forest ..	44.71	32.71	38.52	39.21
Moorabool and Barwon Rivers ..	32.28	17.34	19.00	24.21
Werribee and Saltwater Rivers ..	31.89	17.36	18.47	23.46
Yarra River and Dandenong Creek ..	49.40	26.34	30.68	33.94
Koo-wee-rup Swamp ..	47.57	29.29	29.09	35.93
South Gippsland ..	40.95	35.08	33.24	38.93
Latrobe and Thomson Rivers ..	47.21	34.35	34.72	38.29
Macallister and Avon Rivers ..	25.91	22.03	21.64	24.43
Mitchell River ..	25.85	26.59	22.48	26.05
Tambo and Nicholson Rivers ..	28.61	26.86	22.93	27.47
Snowy River ..	33.66	36.62	31.08	34.38
Murray River ..	23.56	14.14	17.46	16.86
Mitta Mitta and Kiewa Rivers ..	46.10	32.29	36.47	33.35
Ovens River ..	42.14	28.18	37.29	33.70
Goulburn River ..	32.38	21.11	24.66	26.44
Campaspe River ..	28.33	15.25	18.83	22.80
Loddon River ..	24.93	14.33	17.40	20.20
Avoca River ..	22.14	13.11	14.48	17.11
Avon and Richardson Rivers ..	20.08	11.91	13.84	15.39
Eastern Wimmera ..	26.32	16.58	20.70	21.38
Western Wimmera ..	22.05	15.44	17.73	19.90
Mallee ..	14.24	8.97	11.79	12.66
Weighted Averages ..	28.65	20.22	22.52	24.24

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 12.66 inches per annum, as compared with 24.24 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 1926 and the quarterly averages up to 1926 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.
	points	points	points	points	points	points	points	points
Glenelg and Wannon Rivers ..	135	353	1,004	792	963	903	611	586
Fitzroy, Eumeralla, and Merri Rivers	194	424	1,027	828	647	944	608	614
Hopkins River and Mt. Emu Creek	147	415	924	710	704	783	629	580
Mt. Elephant and Lake Corangamite	140	429	718	694	594	782	590	584
Cape Otway Forest ..	405	591	1,328	1,169	1,174	1,320	945	841
Moorabool and Barwon Rivers ..	227	469	645	653	541	702	487	597
Werribee and Saltwater Rivers ..	368	511	614	594	485	642	430	599
Yarra River and Dandenong Creek	475	701	1,123	862	727	926	743	905
Koo-wee-rup Swamp ..	441	688	977	982	752	1,009	739	914
South Gippsland ..	739	791	949	1,080	882	1,130	754	892
Latrobe and Thomson Rivers ..	597	732	978	978	878	1,108	1,019	1,011
Macallister and Avon Rivers ..	678	632	522	552	492	604	472	655
Mitchell River ..	680	666	620	590	523	685	425	664
Tambo and Nicholson Rivers ..	699	703	616	652	517	672	461	720
Snowy River ..	808	810	875	887	743	905	682	836
Murray River ..	417	315	678	498	438	489	213	384
Mitta Mitta and Kiewa Rivers ..	506	608	1,412	906	1,065	1,034	664	787
Ovens River ..	412	544	1,610	998	1,118	1,103	589	725
Goulburn River ..	448	463	939	760	659	805	420	611
Campaspe River ..	212	406	705	679	596	719	370	476
Loddon River ..	253	350	589	602	592	627	306	441
Avon and Richardson Rivers ..	41	278	672	526	528	543	207	384
Avoca River ..	27	249	719	467	478	499	190	327
Eastern Wimmera ..	90	294	900	654	762	722	318	468
Western Wimmera ..	55	247	707	619	682	702	329	422
Mallee District ..	121	223	563	367	337	390	153	286
The whole State ..	318	438	828	683	660	740	446	563

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	29·969	29·923	30·080	30·077
Monthly range of pressure of air—Inches	0·895	0·768	0·817	0·979
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	63	58	66	73
Mean rainfall in inches	7·32	5·90	6·51	5·79
Mean number of days of rain	38	24	34	42
Mean amount of spontaneous evaporation in inches	10·22	17·28	7·86	3·62
Mean daily amount of cloudiness—Scale 0 to 10	6·0	5·2	5·9	6·4
Mean number of days of fog	1	1	6	12

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1926 and for the last 71 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 1926.	Average for 71 Years.	Extremes between which the Yearly Average Values have oscillated in 71 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ..	29·984	30·012	30·106	29·945
Highest " " " ..	30·567	30·607	30·770	30·488
Lowest " " " ..	29·202	29·254	29·495	28·868
Range (inches)	1·365	1·353	1·719	1·104
Mean temperature of air in shade (°Fahr.)	59·6	58·4	59·9	57·3
Mean daily maximum .. (°Fahr.)	68·4	67·3	69·0	65·4
Mean daily minimum	50·8	49·5	51·2	47·2
Absolute maximum	104·0	105·1	111·2	96·6
Absolute minimum	32·0	30·8	34·2	27·0
Mean daily range	17·5	17·8	20·4	15·0
Absolute annual range	72·0	74·3	82·6	66·0
Solar Radiation (mean maxima) ..	117·8	117·8	127·6	106·0
Terrestrial Radiation (mean minima) .. (°Fahr.)	42·9	43·9	46·8	39·5
Rainfall (in inches)	20·51	25·58	38·04	15·61
Number of wet days	149	138	171	102
Year's amount of free evaporation (in inches)	43·00	38·92	45·66	31·59
Percentage of humidity (saturation =100)	64	65	76	62
Cloudiness (scale 10 = overcast, 0 = clear)	5·8	5·9	6·4	4·8
Number of days of fog	25	19	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, engaging 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.

The staff consists of a Professor of Agriculture and about fifteen lecturers, some of whom are whole-time University officers, while the others are senior officers of the State Agricultural Department.

By Act of Parliament the Minister for Agriculture is empowered to employ graduates of the School as Science Field Officers in the State Department.

A number of free places for this course for the degree in Agricultural Science (B.Ag.Sc.) are awarded annually by the State Government.

Government Experimental Farms. The great expansion in our rural industries during recent years has been largely brought about by the general adoption of better methods of farming and by the introduction of more prolific wheats, and it is claimed that these improvements have been adopted as the result of the experimental and demonstration work of the Department of Agriculture. In 1912 a Central Research Farm was established at Werribee, and it is there that the initiative with regard to practically all experimental and research work is now undertaken. The State farms at Rutherglen and Longerenong are used as district experimental stations for the North-

East and the Wimmera respectively. In addition, there are a number of subsidized experimental and demonstration areas located on private farms throughout the State.

**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.

In addition to the college and farm lands, provision was made by the Act of 1884 to permanently reserve from sale an area of not more than 150,000 acres of Crown lands, and to vest it in trustees to be appointed, who should hold it in trust for the benefit of and by way of an endowment for State agricultural colleges and experimental farms. The land so reserved now amounts to 71,412 acres, and is let for grazing and agricultural purposes.

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.

**School of
Primary
Agriculture
and
Horticulture.**

This institution is situated in the Burnley Gardens, close to the Hawthorn and Heyington railway stations. The classes are open to male and female students above fourteen years of age. The Course for the Certificate in Horticulture occupies two years, and is intended for those who propose to follow orchard or garden work as a profession. Part time classes are also held for those who are unable to devote full time to the subject. Another feature of the work at the school is the holding of regular classes of instruction in Agricultural Science for those desirous of taking the subject either in the Intermediate or the Leaving grade at the Annual Public Examinations conducted by the University. A practical training is obtained in the orchards, gardens, and nursery connected with the school; the course also includes lectures and demonstrations by various expert teachers. Excursions to up-to-date farms, orchards, and nurseries form part of the work of the school. In 1926 the students enrolled numbered 139.

**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, 1926.

Particulars.	Central Research Farm, Werribee.	Ruther- glan Farm, &c.	Dookie Agri- cultural College.	Long- enong Agri- cultural College.	Burnley School of Primary Agriculture, &c.
	No.	No.	No.	No.	No.
Professional Staff	1	2	13	8	3
Hands employed	50	26	37	18	9
Students	10	9	94	52	121
	£	£	£	£	£
Value of plant and machinery ..	3,015	2,749	7,850	6,912	150
Value of produce for year ..	7,641	2,607	11,360	10,004	1,200
Receipts—					
Government Grant	14,920	5,384	14,382*	5,141	2,416*
Fees .. ..	..	..	4,163	2,066	73
Sale of produce, &c.	7,641	3,092	7,200	8,147	899
Other	182	12	..	..	18
Total receipts	22,693	8,488	25,745	15,354	3,406
Expenditure—					
Salaries—					
Professional Staff	372	807	4,850	2,840	1,296
General Staff	6,945	4,298	6,837	2,420	1,098
Buildings and maintenance ..	3,412	1,649	13,998	6,072	551
Other	3,107	1,520	..	..	461
Total expenditure	13,836	8,274	25,745	11,332	3,406
Area under—	acres.	acres.	acres.	acres.	acres.
Cereals for Grain	500	210	420	507	..
Hay	280	145	293	183	1
Fruit trees, &c. .. ..	..	1½	12	20	10
Vines .. ..	..	101	15	5	½
Green fodder	50	5	45	93	..
Other crops	100	80	22	200	..
Total area under crop	930	492½	807	1,008	11½
Area of land in fallow	700	231½	560	318	4
Area under artificially sown grasses ..	350	130	..	32	9
Area resting	100	208	933	511	..
New ground broken up .. ..	..	..	..	70	..
Total area of arable land	2,080	1,062	2,300	1,939	24½
Balance of area	131	291	3,655	447	8½
Total area of farm	2,211	1,353	5,955	2,386	33
	No.	No.	No.	No.	No.
Live Stock—					
Horses	108	45	98	51	1
Dairy cows	100	17	49	27	6
All other cattle	68	15	72	44	6
Sheep	1,000	490	3,899	1,327	..
Pigs .. ..	..	22	185	18	..

* Including grant received from the Council of Agricultural Education.

**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 Department has purchased fumigating outfits for the purpose of fumigating citrus trees for the control of scale insects, and is performing the work for citrus growers at cost price. Much satisfaction has been expressed by growers at this being done.

Special attention is being paid to the grading and packing of fruit; packing classes have been established and are successfully conducted by departmental officers in a number of fruit districts throughout the State. In addition to this, individual growers receive personal instruction.

Lectures and demonstrations are given on the various other phases of horticulture; experiments are carried out in the treatment of diseases; and sites are selected on the farms of intending fruit-growers, to whom advice is given as to the most suitable varieties to be planted and their subsequent treatment.

The fear of introducing the fruit-flies *Tephritis tryoni* and *Halterophora capitata* and diseases arising from other causes has necessitated a thorough examination of fruit from Queensland, New South Wales, and elsewhere. The fruit-fly question is a very grave one, and, should either of the above-named insects obtain a footing in Victoria, a great portion of the large and important fruit industry of our State will be practically ruined.

Plants and cuttings coming from foreign parts are fumigated if a certificate that they have been treated at the port of shipment does not accompany the consignment. Even when they have been thus certified the Senior Fruit Inspector has the right of examination, and, if necessary, of ordering a second fumigation.

Forestry.

The State forests are controlled by a Commission of three, which was appointed in 1919. The State has a wooded area of about 8,000,000 acres, of which about 4,330,450 acres are set aside as permanent State forests and timber reserves. The wooded area consists of—

1. Three million acres of merchantable forest, mainly situated along the Dividing Range with its spurs and foothills and also including the red gum forests of the northern river basins and of the River Glenelg in the south-western district.

2. Three million acres of forest in the more rugged portions of the mountain region. These forests are not at present accessible for practical working, owing to difficulties of transport; their protection, however, is essential for the maintenance of streams and springs.

3. Two million acres in the north-west of the State, known as Mallee, bearing at intervals a thick growth of stunted eucalypts and interspersed with belts of cypress pine and belar.

The forests of Victoria may be divided into four main classes which are referred to hereunder:—

- (a) The coastal region, extending from the shore line some fifty miles northward, carries chiefly messmate and three species of stringybark. In Cape Otway district, however, bluegum, mountain ash, and spotted gum predominate; whilst, in the extreme south-east of the State, silvertop, small-fruited bluegum, bastard mahogany, bloodwood, and Gippsland grey box are found.
- (b) The mountain region. In the western half of the State the predominant species in the hill forests are messmate, bluegum, manna gum, brown and red stringybarks, and yellow box. In the eastern half of the State the prevailing species are mountain ash, spotted gum, messmate, peppermint, red ash or woollybutt, and bluegum, with stunted snow gums on the steep granitic slopes near the mountain summits.
- (c) The foothills, stretching from the Dividing Range northward down to the plains, bear three valuable species, red ironbark, white ironbark or yellow gum, and grey box.
- (d) The river basins of the Murray and the streams flowing over the northern plain, and of the River Glenelg in the south-western district, bear broad belts of river redgum.

The timbers of commercial value in Victoria number about twenty, all species of the eucalyptus family. In addition, there are a number of woods of fine grain, many of them, however, being small trees confined to limited areas.

With careful conservation and management Victoria's forests are capable of yielding considerable amounts of timber for all time, despite the ravages made upon them in the past by bush fires, settlement, and mining.

The State is notably deficient in softwoods or conifers, though over extensive areas the conditions are suitable for their growth once they are introduced. To encourage their growth, both in State and in private plantations, three large nurseries have been established, at Creswick, Macedon and Broadford, and a number of plantations have been formed, the principal ones being situated at Creswick, Mount Macedon, Frankston, Anglesea, Port Campbell, Bright, Castlemaine, Harcourt, Scarsdale, Mount Disappointment, and Mt. Difficult. 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.

A Forest School for training cadets is maintained at Creswick. The Commission also controls a State sawmill in the Warburton district, and Timber Seasoning Works at Newport, from which seasoned weatherboards, cabinet stock, floorings and linings are supplied, largely for use in the building of State schools and for other public works.

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 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.

During the financial year 1924-25, authority was given by Act No. 3386 to raise the sum of £500,000 over a period of six years from 1st January, 1925, for the development of State forests.

The revenue derived from forest sources during the financial year 1926-27 was £156,700, and the expenditure was £319,547—£101,405 of which was paid out of the Consolidated Revenue, £151,633 under the Forests Loan Act No. 3386, and the balance—£66,509—from the Forestry Fund. The balance at the credit of the Fund at 30th June, 1927, was £40,056.

It is estimated that the quantity of timber produced in the rough in 1926-27 was 110,392,800 super. feet. In addition, 376,028 tons measurement of fuel timber was produced.

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 appended table summarizes for the last five years the items of State expenditure from consolidated revenue in this direction, and shows the amount of revenue

received by the Department of Agriculture, which consists chiefly of payments by exporters for packing produce for export, and from State Forests and Nurseries, consisting chiefly of Royalties :—

EXPENDITURE AND REVENUE CONNECTED WITH AGRICULTURE, ETC., 1922-23 to 1926-27.

	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
<i>Expenditure.</i>	£	£	£	£	£
Agricultural Branch ..	35,063	41,549	30,652	35,271	45,636
Horticultural Branch ..	..	..	27,938*	30,168*	32,984*
Grants to Agricultural and Horticultural Societies, &c. ..	675	775	875	675	675
Development of Export Trade ..	60,316	53,372	50,679	48,362	60,875
Viticultural Education and Inspection of Vineyards ..	6,334	4,454	2,092	881	315
Maffra Beet Sugar Factory ..	75,291	74,497	105,680	85,825	55,891
Advances to Settlers for losses by bush fires, floods, &c. ..	7,300	659	1,190	18,587	32,987
Technical Agricultural Education &c. ..	26,123	31,824	28,478	30,580	29,103
Publishing Agricultural Reports ..	329	250	213	234	254
Rabbit and Vermin Extirpation ..	47,410	85,489	84,368	88,874	91,929
Stock and Dairy Branch ..	43,887	48,627	53,527	69,210	85,853
Labour Colonies ..	..	..	..	..	..
State Forests and Nurseries ..	157,347	168,880	179,278	95,555†	101,380†
Miscellaneous ..	3,104	6,006	6,239	5,369	12,355
Total ..	463,179	516,382	571,209	509,591	550,237
<i>Revenue.</i>					
Department of Agriculture ..	78,017	73,282	81,687	77,547	85,440
Maffra Beet Sugar Factory ..	74,678	92,231	129,732	137,997	79,435
State Forests and Nurseries ..	163,038	166,446	162,786	161,608	156,700
Total ..	315,733	331,959	374,205	377,152	321,575

* Previously included under Agricultural Branch.

† Vide expenditure out of Forestry Fund and State Forests Loan Act.

Included in the expenditure on State Forests and Nurseries are net payments into the Forestry Fund; these amounts are as follows :—£17,020 in 1921-22, £16,205 in 1922-23, £5,919 in 1923-24, and £6,333 in 1926-27. In 1924-25 and 1925-26, owing to increased expenditure, £21,968 and £91,619 respectively—not included in the above statement—were paid out of the Fund, and, in 1925-26 and 1926-27, amounts of £87,527 and £151,633 were expended out of the State Forests Loan Act 1924, No. 3386.

In addition to the expenditure shown, various sums have been advanced from loans and votes for the purpose of aiding closer settlement, 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 in 1926-27 was £1,931,166—£984,911 having been expended on discharged soldiers' land settlement, £881,450 on closer settlement, £32,338 on wire netting, £31,066 on the Maffra Beet Sugar Factory, and £1,401 on Agricultural Colleges.

AGRICULTURE.

Progress of cultivation.

All divisions of the State are suitable for cultivation, but the Wimmera, Mallee, and Northern are the principal wheat-growing districts and furnish about 94 per cent. of the total area under this crop. In recent years the chief extensions of the wheat-growing areas have been in the Mallee. In this district, which has a rainfall at one time thought wholly inadequate, wheat growing was rendered practicable by the introduction of machinery specially suited to the conditions, the extension of railway lines, and storage of water for domestic and stock supplies; and, with more of these facilities being made available each year, further areas are gradually being brought under cultivation. An indication of the growing importance of the Mallee is afforded by recent figures, which show that, of the wheat produced in the State in the last five seasons, the proportion obtained from the Mallee was over 31 per cent., as against slightly less than 5 per cent. in 1891-92. The area under cultivation in the Mallee last season for all purposes was 2,674,979 acres.

The area cultivated in the State in 1926-27 was 7,303,194 acres, as against an annual average of 6,895,288 acres for the previous five seasons, 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 £3,057,630; milk and cream from £5,455 to £1,271,908; and meats from £502,285 to £1,583,296.

The increase in cultivation has been associated with new and improved farming methods. The chief of these are the practice of fallowing, the use of fertilizers, the selection of suitable seeds, and the increasing attention given to crop rotation. The more general adoption of improved methods in recent years has contributed greatly to

the production of the State. The following table shows the progress of cultivation from period to period during the last 72 years:—

ACREAGE CULTIVATED ANNUALLY, 1855 to 1927.

Period or Year (ending in 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
1915-20	4,523,308	1,567,258	6,090,565
1920-21	4,489,503	1,935,747	6,425,250
1921-22	4,530,312	2,052,964	6,583,276
1922-23	4,862,548	2,186,881	7,049,429
1923-24	4,682,144	2,294,297	6,976,441
1924-25	4,761,394	2,215,270	6,976,664
1925-26	4,433,492	2,457,136	6,890,628
1926-27	4,735,173	2,569,021	7,304,194

Areas under
Principal
Crops.

The principal crops grown in the State are wheat, oats, barley, potatoes and hay. The average annual acreage of these for periods from 1855 to 1920 and the acreage for each of the last seven seasons are given in the next table:—

ANNUAL ACREAGE OF FIVE PRINCIPAL CROPS, 1855 to 1927.

Period or Year (ending in March).	Average Annual Area of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	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
1915-20	2,725,728	398,232	84,973	60,606	1,015,585
1920-21	2,295,865	443,636	93,954	62,687	1,333,397
1921-22	2,611,198	318,681	100,127	63,895	1,159,135
1922-23	2,644,314	492,356	102,773	61,741	1,261,408
1923-24	2,454,117	520,654	56,564	59,306	1,277,606
1924-25	2,705,323	517,229	63,764	61,295	1,120,312
1925-26	2,513,494	437,696	103,395	63,369	1,013,613
1926-27	2,915,315	363,424	88,896	66,185	1,080,993

Production of principal crops.

The average annual production of the five principal crops for periods, from 1855 to 1920, and the production for each of the last seven seasons were as follows :—

ANNUAL PRODUCTION OF PRINCIPAL CROPS, 1855 to 1927.

Period or Year (ending in March).	Average Annual Production of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	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
1915-20 ..	37,503,989	7,127,504	1,812,447	165,486	1,376,142
1920-21 ..	39,468,625	10,907,191	2,495,762	171,628	1,984,854
1921-22 ..	43,867,596	6,082,258	2,336,246	173,660	1,548,453
1922-23 ..	35,697,220	8,093,459	2,442,041	148,354	1,665,089
1923-24 ..	37,795,704	9,366,205	1,455,435	238,520	1,541,287
1924-25 ..	47,364,495	9,572,003	1,444,823	139,043	1,492,588
1925-26 ..	29,255,534	4,998,165	1,774,963	160,729	929,068
1926-27 ..	46,886,020	4,884,006	1,920,722	162,909	1,387,971

Principal crops in Districts.

The percentage in each district of the total area under each principal crop during last season was as given below :—

PERCENTAGE IN EACH DISTRICT OF TOTAL AREA UNDER EACH PRINCIPAL CROP, 1926-27.

Districts.	Percentage in each District of Area under—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.
Central	1·28	3·67	31·65	56·27	15·62	31·32
North-Central	0·69	2·90	3·81	16·77	5·82	2·50
Western	1·89	9·22	13·09	12·27	13·09	6·70
Wimmera	26·49	21·00	10·86	0·16	17·69	1·92
Mallee	44·84	38·06	11·61	0·01	23·75	13·97
Northern	22·66	21·68	14·81	0·06	14·28	15·96
North-Eastern	1·51	2·36	0·71	1·07	4·16	6·76
Gippsland	0·64	1·11	13·46	13·39	5·59	20·87

NOTE.—For counties contained in each District, see table on page 519.

The area under the principal crops in proportion to the total area under crop in each district during last season was as follows :—

RELATIVE AREAS DEVOTED TO DIFFERENT CROPS IN EACH DISTRICT, 1926-27.

Districts.	Percentage of Area under all Crops devoted to—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.
Central	10·06	3·00	7·59	10·05	45·59	23·71
North-Central	17·67	7·76	3·00	9·81	55·56	6·20
Western	20·91	10·64	4·42	3·09	53·80	7·14
Wimmera	74·09	6·11	0·93	0·01	18·35	0·51
Mallee	75·61	6·68	0·60	0·00	14·85	2·26
Northern	70·38	7·01	1·40	0·00	16·44	4·77
North-Eastern	37·75	6·16	0·54	0·61	38·67	16·27
Gippsland	11·53	2·08	7·40	5·48	37·34	36·17
Total for Victoria ..	61·56	6·41	1·88	1·40	22·83	5·92

NOTE.—For counties contained in each District, see table on page 519.

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

AREA AND PRODUCTION OF FIVE PRINCIPAL CROPS PER HEAD OF POPULATION, 1922-23 to 1926-27.

Year ended March—	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Area per Head of Population.				
	acres.	acres.	acres.	acres.	acres.
1923	1·67	·31	·07	·04	·80
1924	1·51	·32	·03	·04	·79
1925	1·63	·31	·04	·04	·68
1926	1·49	·26	·06	·04	·60
1927	1·70	·18	·05	·04	·63
	Produce per Head of Population.				
	bushels.	bushels.	bushels.	tons.	tons.
1923	22·61	5·13	1·55	·09	1·05
1924	23·25	5·76	·89	·15	·95
1925	28·58	5·77	·87	·08	·90
1926	17·37	2·97	1·05	·10	·55
1927	27·39	2·85	1·12	·10	0·81

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.

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.
	£	£	£	£	£
1922-23	8,031,875	1,416,355	436,235	1,040,662	6,327,338
1923-24	8,189,069	1,455,331	262,210	701,229	5,229,162
1924-25	11,993,546	934,538	354,006	682,878	3,639,496
1925-26	6,665,150	684,320	290,166	1,309,470	3,497,253
1926-27	9,546,812	653,291	295,739	671,673	4,719,925
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Value per acre 1922-23	3 0 9	2 17 6	4 4 11	16 17 1	5 0 4
„ „ 1923-24	3 6 9	2 15 11	4 12 9	11 16 6	4 1 10
„ „ 1924-25	4 8 8	1 16 2	5 11 0	11 2 10	3 5 0
„ „ 1925-26	2 13 0	1 11 3	2 16 1	20 13 3	3 9 0
„ „ 1926-27	3 5 6	2 3 1	3 6 6	10 3 0	4 7 4

The value of the five principal crops was £15,887,440 in 1926-27, as against £12,446,359 in 1925-26, £17,604,464 in 1924-25, £15,837,001 in 1923-24, and £17,252,465 in 1922-23.

On the experience of the last five seasons the area under wheat for grain represented 56 per cent. of the total under all crops. The acreage, the total production, and the yield

Wheat
production.

per acre are given in the next table for decennial periods from 1860 to 1920, and for each of the last seven seasons :—

WHEAT PRODUCTION, 1860 TO 1927.

Period or Season (ending in March).	Annual Average.		
	Area under Crop.	Production.	Yield per Acre.
	acres.	bushels.	bushels.
1860-70	194,714	3,480,765	17·87
1870-80	431,444	5,510,125	12·77
1880-90	1,077,575	10,793,936	10·02
1890-1900	1,563,403	12,610,595	8·07
1900-10	1,983,874	19,242,402	9·70
1910-20	2,570,540	30,632,514	11·92
1921	2,295,865	39,468,625	17·19
1922	2,611,198	43,867,596	16·80
1923	2,644,314	35,697,220	13·50
1924	2,454,117	37,795,704	15·40
1925	2,705,323	47,364,495	17·51
1926	2,513,494	29,255,534	11·64
1927	2,915,315	46,886,020	16·08

Although a large area in districts of limited rainfall has been brought under cultivation for wheat growing during late years, the yield per acre for the State on the average of the last ten seasons was 14·13 bushels, which is better than the corresponding averages for decennial periods of earlier date back to 1870. This satisfactory result is largely due to the use of more prolific varieties of seed and to the more general practice of fallowing and fertilizing. In addition to the area shown for grain, 101,243 acres of wheat were cut for hay last season, so that the total area under wheat in 1926-27 was 3,016,558 acres.

The production of wheat in the other Australian States in 1926-27 was as follows :—New South Wales, 47,288,600 bushels; South Australia, 35,558,711 bushels; Western Australia, 30,021,616 bushels; Queensland, 379,339 bushels; and Tasmania, 536,358 bushels. The total production for the Commonwealth was 160,670,644 bushels.

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.		
	1925.	1926.	1927.	1925.	1926.	1927.	1925.	1926.	1927.
	acres.	acres.	acres.	bushels.	bushels.	bushels.	bush.	bush.	bush.
Central—									
Bourke ..	4,633	8,424	15,266	92,337	89,704	261,510	19·93	10·65	17·13
Grant ..	3,106	12,248	19,787	145,297	171,072	348,533	17·92	13·97	17·61
Mornington ..	319	1,082	1,889	5,302	22,041	47,312	16·62	20·37	23·79
Evelyn ..	99	305	233	1,699	3,293	5,432	17·16	10·80	23·31
North-Central—									
Anglesey ..	1,198	1,097	1,142	20,143	13,259	19,076	16·81	12·69	16·70
Dalhousie ..	2,622	2,168	2,239	45,135	32,026	39,292	17·21	14·77	17·55
Talbot ..	12,820	13,120	16,613	263,480	159,047	316,494	20·55	12·12	19·05
Western—									
Grenville ..	4,562	5,943	8,632	72,130	88,315	165,902	15·81	14·86	19·22
Polwarth ..	49	85	172	532	1,166	4,080	10·86	13·72	23·72
Heytesbury ..	4	1	19	49	37	350	12·25	37·00	18·42
Hampden ..	9,821	11,027	11,305	173,857	205,562	178,105	17·70	18·64	15·75
Ripon ..	31,852	27,227	29,473	616,983	467,825	621,057	19·37	17·18	20·72
Villiers ..	861	926	1,514	15,449	18,923	28,834	17·94	20·44	19·04
Normanby ..	752	961	1,315	11,965	17,714	23,628	15·91	18·43	18·20
Dundas ..	2,302	1,849	1,766	33,726	29,722	28,567	14·65	16·07	16·18
Follett ..	44	185	312	809	1,787	6,512	18·16	9·66	20·87
Wimmera—									
Lowan ..	173,652	163,996	185,638	3,972,195	2,904,283	3,805,448	22·87	17·71	20·50
Borong ..	408,387	403,638	440,649	10,713,127	8,347,436	10,384,649	26·23	20·68	23·60
Kara Kara ..	149,441	132,670	146,529	3,377,400	2,046,978	2,662,471	22·66	15·43	20·22
Mallee—									
Millewa ..	6,378	18,399	45,636	11,826	68,672	544,269	18·54	3·75	11·93
Weeah ..	175,260	168,166	181,342	1,968,002	1,311,433	2,277,975	11·23	7·80	12·56
Karkaroc ..	628,200	568,041	678,484	6,984,439	3,930,625	8,711,586	11·12	6·92	12·84
Tatchera ..	382,258	342,067	401,968	4,712,863	2,864,893	5,415,076	12·33	6·91	13·47
Northern—									
Gunbower ..	37,240	35,798	42,923	622,473	379,415	579,318	16·72	10·60	13·50
Gladstone ..	120,587	108,644	129,554	2,614,400	1,063,114	2,200,078	21·68	9·79	16·98
Bendigo ..	125,790	116,543	143,968	2,359,618	1,137,194	2,093,201	18·76	9·76	14·54
Rodney ..	85,052	76,810	95,944	1,725,647	867,143	1,377,811	20·29	11·29	14·36
Moir ..	276,738	238,040	248,409	5,854,344	2,838,678	3,608,748	21·15	11·92	14·53
North-Eastern—									
Delatite ..	8,005	8,138	8,686	119,831	105,772	113,895	14·97	13·00	13·10
Bogong ..	36,305	31,706	34,874	606,930	294,455	348,040	16·72	9·29	9·98
Benambra ..	293	233	380	5,022	3,703	4,828	17·14	15·89	12·71
Wonnangatta ..	..	..	..	..	..	..	..	..	..
Gippsland—									
Croajingolong ..	..	21	3	..	257	58	..	12·24	19·33
Latrobe ..	53	60	80	1,186	370	1,328	22·38	6·17	16·60
Dargo ..	332	280	538	5,794	8,565	11,251	17·45	22·54	20·91
Tanjil ..	10,523	12,463	16,379	196,734	244,617	314,749	18·70	19·63	19·22
Bula Bula ..	785	1,033	1,654	13,771	16,539	35,936	17·54	16·01	21·73
Total ..	2,705,323	2,513,494	2,915,315	47,364,495	29,255,534	46,886,020	17·51	11·64	16·08

The table which follows gives the average yield of wheat per acre in the principal wheat growing counties for each of the last ten years :—

**AVERAGE YIELD OF WHEAT PER ACRE IN WHEAT
GROWING COUNTIES, 1917-18 TO 1926-27.**

Districts and Counties.	Average Yield of Wheat per Acre (in Bushels) during Year ended March—									
	1918.	1919.	1920.	1921.	1922.	1923.	1924.	1925.	1926.	1927.
Western District—										
Ripon	13·27	10·06	16·26	21·74	19·63	19·62	15·33	19·37	17·18	20·72
Wimmera District—										
Lowan	16·52	15·78	13·47	20·94	21·53	21·17	17·48	22·87	17·71	20·50
Borong	22·62	20·01	15·76	23·79	28·05	22·72	23·65	26·23	20·68	23·60
Kara Kara ..	17·68	14·39	14·10	21·25	22·05	19·12	18·10	22·60	15·43	20·22
Mallee District—										
Weeah	10·21	6·38	3·43	14·28	8·89	8·75	10·49	11·23	7·80	12·56
Karkaroc ..	10·94	7·15	3·29	13·42	10·88	8·14	12·36	11·12	6·92	12·84
Tatchera ..	12·30	9·44	4·60	13·65	13·13	7·41	13·01	12·33	6·91	13·47
Northern District—										
Gunbower ..	14·23	8·74	8·96	15·27	15·76	10·71	12·58	16·72	10·60	13·59
Gladstone ..	14·17	11·52	12·08	18·72	18·65	14·66	13·07	21·68	9·79	16·98
Bendigo	13·85	11·83	9·30	14·56	17·25	12·59	13·82	18·76	9·70	14·54
Rodney	12·67	10·80	6·85	15·79	15·77	13·65	14·68	20·29	11·29	14·36
Molra	11·38	10·70	4·79	17·46	16·83	12·34	16·13	21·15	11·92	14·52
Total State ..	14·03	11·40	7·75	17·19	16·80	13·50	15·40	17·51	11·64	16·08

**Analysis of
Grain Pro-
duction.**

For the season 1926-27 an analysis of the number of acres producing a given yield per acre was made for counties typical of the three important wheat growing districts of Victoria, and the resultant classification is shown hereunder :—

CLASSIFICATION OF VICTORIAN WHEAT AREAS, 1926-27.

WIMMERA DISTRICT.

COUNTY OF BORUNG.

(Average yield 23·60 bushels.)

Production per acre.	Farms in Group.	Area of Crop.			Production.	
		Total.	Proportion of whole.	Average Size.	Total.	Proportion of whole.
	No.	acres.	per cent.	acres.	bushels.	per cent.
Under 3 bushels	3	275	·1	92	420	..
3 and under 6	11	533	·1	48	2,490	..
6 " 9	31	2,591	·6	84	19,231	·2
9 " 12	41	5,168	1·2	126	54,510	·5
12 " 15	85	17,308	3·9	204	239,063	2·3
15 " 21	480	111,823	25·4	233	2,078,369	20·0
21 " 27	725	186,751	42·4	258	4,465,176	43·0
27 " 33	426	98,875	22·5	232	2,945,413	28·4
33 " 39	84	16,648	3·8	198	576,478	5·6
39 and over	2	77	·2	39	3,499	..
Total ..	1,888	440,049	100·0	233	10,384,649	100·0

MALLEE DISTRICT.

COUNTY OF KARKAROOC.

(Average yield 12·84 bushels.)

Production per acre.	Farms in Group.	Area of Crop.			Production.	
		Total.	Proportion of whole.	Average Size.	Total.	Proportion of whole.
	No.	acres.	per cent.	acres.	bushels.	per cent.
Under 3 bushels	80	17,218	2·5	215	27,105	·3
3 and under 6	304	71,726	10·6	236	321,538	3·7
6 " 9	419	108,742	16·0	260	810,297	9·3
9 " 12	441	118,905	17·5	270	1,234,550	14·2
12 " 15	373	100,143	14·8	268	1,334,694	15·3
15 " 21	613	202,174	29·8	330	3,574,225	41·0
21 " 27	166	55,736	8·2	336	1,296,052	14·9
27 " 33	14	3,440	·5	246	98,936	1·1
33 " 39	1	400	·1	400	14,592	·2
Total ..	2,411	678,484	100·0	281	8,711,989	100·0

CLASSIFICATION OF VICTORIAN WHEAT AREAS, 1926-27 — *continued.*

NORTHERN DISTRICT.

COUNTY OF MOIRA.

(Average yield 14·53 bushels.)

Production per acre.	Farms in Group.	Area of Crop.			Production.	
		Total.	Proportion of whole.	Average Size.	Total.	Proportion of whole.
	No.	acres.	per cent.	acres.	bushels.	per cent.
Under 3 bushels	62	5,143	2·1	83	8,251	·2
3 and under 6	151	12,176	4·9	81	57,380	1·6
6 „ 9	274	26,018	10·5	95	200,163	5·6
9 „ 12	323	36,298	14·6	112	382,091	10·6
12 „ 15	333	46,819	18·8	141	624,680	17·3
15 „ 21	574	94,198	37·9	164	1,680,424	46·6
21 „ 27	147	25,080	10·1	171	574,545	15·9
27 „ 33	22	2,467	1·0	112	73,614	2·0
33 „ 39	3	210	·1	70	7,600	·2
Total ..	1,889	248,409	100·0	132	3,608,748	100·0

In Borung, 42·4 per cent. of the area under wheat yielded from 21 to 27 bushels per acre, and, in Karkaroc and Moira, 29·8 per cent. and 37·9 per cent. respectively, yielded from 15 to 21 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.

Enquiries in regard to the area sown under each variety of wheat, the quantity of seed sown, and the manure used, per acre, for the 1927-28 season were made with the view of enabling the Agricultural Department to advise growers as to the most suitable varieties and the quantities to use in a particular district.

Analyses of the replies of the growers who supplied the information are given in the appended tables :—

VARIETIES OF WHEAT SOWN IN THE STATE, 1927-28.

Varieties.	Percentage (according to acreage) of total area in the State.	Varieties.	Percentage (according to acreage) of total area in the State.
	per cent.		per cent.
Federation ..	38·42 (44·76)	Turvey ..	2·09 (1·70)
Currawa ..	9·51 (9·89)	Wannon ..	2·01 (1·18)
Rance ..	5·95 (1·39)	Huf's Imperial ..	1·96 (2·45)
Major ..	5·62 (6·49)	Nizam ..	1·41 (0·33)
Gallipoli (Free) ..	5·47 (1·33)	Dollar ..	0·56 (0·87)
Penny ..	4·44 (5·42)	Graham ..	0·45 (0·45)
Rajah ..	3·46 (3·06)	Yanward ..	0·44 (0·51)
Bald Early ..	3·14 (3·51)	Warden ..	0·35 (0·48)
Yandilla King ..	2·77 (2·76)	Other varieties ..	4·67 (5·32)
Joffre ..	2·66 (2·37)		
Gluyas ..	2·47 (3·16)		
Mac's White ..	2·15 (2·57)	Total ..	100·00 (100·00)

Note.—The figures in parentheses refer to the 1926-27 season.

In all, over 140 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.

PERCENTAGE OF TOTAL AREA, NUMBER OF GROWERS, AND SEED AND MANURE USED, 1927-28.

District.	Percentage (according to acreage) of total area in the State.	Number of Growers.	Weight per acre of—	
			Seed Sown.	Manure Used.
	per cent.		lbs.	lbs.
Central ..	1·83	1,149	63	104
North Central ..	0·97	821	101	95
Western ..	2·43	1,092	88	105
Wimmera ..	26·41	3,792	76	99
Mallee ..	43·97	4,591	61	73
Northern ..	22·24	5,570	70	86
North Eastern ..	1·51	927	75	87
Gippsland ..	0·64	487	91	94
Total State ..	100·00	18,429	72	89

The quantities of seed sown and manure used in the whole State were approximately 1,322,500 lbs. and 1,532,000 lbs, respectively. The rate of sowing ranged from 47½ lbs. of seed per acre in the County

of Millewa to 101 lbs. in Talbot. and Dalhousie. Manure used varied from 50 lbs. in Millewa to 118 lbs. in Hampden.

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 61.30 lbs. on the average of the last ten years. The following statement shows the variation in the f.a.q. standard weight of a bushel of Victorian wheat for each season since 1916-17:—

F.A.Q. WHEAT STANDARD, 1918 TO 1927.

Season ended March—			Weight of Bushel (f.a.q.).	Season ended March—			Weight of Bushel (f.a.q.).
			lbs.				lbs.
1918	..	..	60	1923	..	..	61 $\frac{1}{4}$
1919	..	..	62 $\frac{1}{2}$	1924	..	..	61
1920	..	..	62	1925	..	..	62 $\frac{1}{2}$
1921	..	..	60 $\frac{1}{2}$	1926	..	..	61 $\frac{1}{2}$
1922	..	..	60	1927	..	..	61 $\frac{1}{4}$

It is estimated that about 12,000,000 bushels of wheat are required locally for food and seed. The stocks of wheat and flour in the State on 31st October, 1925, 1926, and 1927, and on 30th June, 1922, and at the same date in each of the previous eight years, were as follows:—

WHEAT AND FLOUR ON HAND, 1914 TO 1927.

Year.				Quantity in Bushels.		
				Wheat.	Flour (equivalent in Wheat).	Total.
1914	..	..	..	8,002,311	940,138	8,942,449
1915	..	..	..	582,448	510,300	1,092,748
1916	..	..	..	42,578,379	519,162	43,097,541
1917	..	..	..	63,852,078	1,078,875	64,930,953
1918	..	..	..	70,031,000	1,658,000	71,689,000
1919	..	..	..	53,023,000	3,284,000	56,307,000
1920	..	..	..	11,780,159	4,861,000	16,641,159
1921	..	..	..	14,883,400	800,000	15,683,400
1922	..	..	..	5,065,600	883,150	5,948,750
1923	} Not collected	..	{	..	..	..
1924				..	..	..
1925	..	..	..	1,446,240	2,955,640	4,401,880
1926	..	..	..	1,629,124	472,750	2,101,874
1927	..	..	..	3,595,800	1,406,600	5,002,400

Oats. In 1926-27 the area harvested for oats in Victoria was 303,424 acres, from which a yield of 4,884,006 bushels was obtained, giving an average of 16·10 bushels to the acre. The appended statement shows the harvest results for this crop for each of the last seven seasons, and for periods prior thereto back to 1865 :—

OATS GROWN, 1865 TO 1927.

Period or Year (ending in March).	Annual Average.		
	Area under Crop.	Produce.	Average per Acre.
	acres.	bushels.	bushels.
1865-75	129,384	2,636,747	20·38
1875-85	147,343	3,297,468	22·38
1885-95	210,901	4,649,393	22·05
1895-1905	340,957	6,649,453	19·50
1905-15	390,643	7,342,468	18·79
1915-20	398,232	7,127,504	17·90
1921	443,636	10,907,191	24·59
1922	318,681	6,082,258	19·09
1923	492,356	8,093,459	16·44
1924	520,654	9,366,205	17·99
1925	517,229	9,572,003	18·51
1926	437,696	4,998,165	11·42
1927	303,424	4,884,006	16·10

In addition to the area for grain shown for last season there were 959,019 acres of oats cut for hay, so that the total area sown with oats in 1926-27 was 1,262,443 acres. During 1926-27 there were exported from Victoria to oversea countries 95,017 bushels of oats and 6,695 lbs. of oatmeal, etc.

Varieties of Oats. Enquiries in regard to the different kinds of oats sown for the 1927-28 season showed that, of those growers who supplied the information, 91 per cent. planted principally Algerian, and 6 per cent. Mortgage Lifter oats.

The area under barley in 1926-27 was 88,896 acres, of which 59,935 were under malting, and 28,961 under other barley. The figures in the subjoined table show the acreage, production, and yield per acre, for each of the last five years :—

CULTIVATION OF BARLEY, 1922-23 to 1926-27.

Year ended March—	Area under Crop.		Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	acres.	acres.	bushels.	bushels.	bushels.	bushels.	bushels.
1923 ..	64,648	38,125	1,525,744	916,297	23·60	24·03	23·76
1924 ..	39,588	16,976	1,037,114	418,291	26·20	24·64	25·73
1925 ..	42,217	21,547	971,532	473,291	23·01	21·97	22·66
1926 ..	72,244	31,151	1,189,081	585,882	16·46	18·81	17·17
1927 ..	59,935	28,961	1,186,733	733,989	19·80	25·34	21·61

During 1926-27, 2,000,523 bushels of barley were used locally in the production of 1,943,575 bushels of malt.

The area planted with potatoes in 1926-27 was 66,185 acres, and the production was 162,909 tons, which represented a yield of 2·46 tons per acre, as compared with 2·54 tons in the previous season, 2·27 tons in 1924-25, and 4·02 tons in 1923-24. The following table shows the potato returns for the last thirty-seven years :—

POTATO PRODUCTION, 1890 To 1927.

Period or Year (ending in June).				Annual Average.		
				Area under Crop.	Produce.	Average per Acre.
			acres.		tons.	tons.
1890-1900			47,738	155,432	3·26	
1900-10			48,857	142,307	2·91	
1910-20			60,127	166,677	2·77	
1921			62,687	171,628	2·74	
1922			63,895	173,660	2·72	
1923			61,741	148,354	2·40	
1924			59,306	238,520	4·02	
1925			61,295	139,043	2·27	
1926			63,369	160,729	2·54	
1927			66,185	162,909	2·46	

The estimated value of the potatoes produced last season was £671,673 as against £1,309,470 in 1925-26, £682,878 in 1924-25, £701,229 in 1923-24, and £1,040,662 in 1922-23.

In 1927 the production of hay amounted to 1,387,971 tons, as against 929,068 tons in 1926, 1,492,588 tons in 1925, 1,541,287 tons in 1924, and 1,665,089 tons in 1923. The quantity of straw returned for the season 1926-27 was 23,985 tons as against 31,994 tons for the previous year. The hay returns for decennial

periods from 1890 to 1920, and each of the last seven seasons, are shown in the table which follows :—

HAY PRODUCTION, 1890 to 1927.

Period or Year (ending in March).	Annual Average.		
	Area cut for Hay.	Produce.	Average per Acre.
	acres.	tons.	tons.
1890-1900	467,668	576,618	1·23
1900-10	664,387	894,108	1·35
1910-20	984,797	1,269,767	1·29
1921	1,333,397	1,984,854	1·49
1922	1,159,135	1,548,453	1·34
1923	1,261,408	1,665,089	1·32
1924	1,277,606	1,541,287	1·21
1925	1,120,312	1,492,588	1·33
1926	1,013,613	929,068	0·92
1927	1,080,993	1,387,971	1·29

The estimated value of the hay crop was £4,719,925 for 1927, as compared with £3,497,253 for 1926, £3,639,496 for 1925, £5,229,162 for 1924, and £6,327,338 for 1923. Of the total hay produced in 1927, 1,225,539 tons were oats, 127,844 tons were wheat, and 34,588 tons were made from lucerne and other crops; the yields per acre of these varieties of hay were 1·28, 1·26, and 1·67 tons respectively.

Information is obtained direct from growers, in February or March of each year, in regard to the prices of the leading agricultural products other than the main crop of potatoes, the price of which is ascertained in June or July. The following table gives the average price of each product for each of the last ten years :—

PRICES OF PRODUCE, 1918 to 1927.

Year.	Average Price in February and March.						
	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.
1918 ..	4 0	3 1½	4 2¾	3 4½	59 0	79 0	55 0
1919 ..	4 9	4 5½	5 0½	3 11¾	83 0	210 0	149 0
1920 ..	7 8½	5 7¼	6 7¼	5 8	134 0	219 0	178 0
1921 ..	7 3	2 4½	4 0½	3 1	53 0	101 0	64 0
1922 ..	4 9½	3 0¾	4 0¼	2 11	57 0	94 0	60 0
1923 ..	4 6	3 6	3 11	3 0	76 0	170 0	136 0
1924 ..	4 3	3 1¼	3 9¼	3 2¼	72 0	111 0	53 0
1925 ..	5 0¾	1 11½	5 3¾	4 0½	48 9	121 0	94 0
1926 ..	4 6¼	2 9	3 4¾	3 0	75 3	194 0	158 0
1927 ..	3 9¼	2 5½	3 0	2 6¾	64 9	170 0	69 0

NOTE.—Prior to 1925, only freight and handling charges were deducted; but, for 1925 to 1927, the cost for bags and seed, and, for 1927, manure also, was deducted from the F.O.B. charges.

Other Crops.

The area under other than principal crops and the production since March, 1924, are shown in the subjoined table:—

OTHER THAN PRINCIPAL CROPS, 1924-25 to 1926-27.

Crop.	Area.	Production.	Area.	Production.	Area.	Production.
	1924-25.		1925-26.		1926-27.	
	acres.	bushels.	acres.	bushels.	acres.	bushels.
Maize.. ..	23,126	891,987	21,913	768,761	20,046	685,407
Rye	1,029	13,000	978	10,788	864	10,443
Peas	11,759	256,160	14,094	166,543	10,431	198,947
		tons.		tons.		tons.
Mangel-wurzel ..	736	10,022	1,046	10,333	690	6,715
Beet, Carrots, Parsnips and Turnips	238	1,847	624	2,758	286	1,994
Onions	4,504	26,555	5,379	21,728	8,471	43,928
Green Forage ..	99,531	..	107,873	..	87,241	..
Grass and Clover		bushels.		bushels.		bushels.
Seeds	1,424	8,597	1,290	7,330	854	5,876
		cwt.		cwt.		cwt.
Hops	269	4,240	312	3,934	196	1,169
Tobacco	1,228	3,199	1,179	7,871	1,154	†
Vines—Grapes	42,467	2,142,349	40,712	2,253,884	40,612	3,587,224
		800 seed.		1,200 seed		
Flax	130	17 fibre	154	660 fibre	388	†
		3 tow		80 tow		
		2,600		..		
		straw				
Gardens and Orchards ..	85,358	..	82,665	..	83,215	..
Minor Crops	7,052*	..	7,097*	..	8,161*	..
Land in Fallow	2,215,270	..	2,457,136	..	2,569,021	..
Artificial Grasses	843,095	..	820,337	..	835,049	..

* For details see page 537.

† Not available.

‡ Not yet treated.

Maize. The area under maize for grain in 1926-27 was 20,046 acres, and the production was 685,407 bushels, which represented a yield of 34·19 bushels per acre, as compared with 35·08 bushels in 1925-26, 38·57 bushels in 1924-25, 50·33 bushels in 1923-24, and 34·04 bushels in 1922-23. Of the total production for last season 91 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 seven seasons and for periods prior thereto back to 1890 :—

MAIZE PRODUCTION, 1890 to 1927.

Period or Year (ending in June).	Annual Average.		
	Area under Maize for Grain.	Production.	Produce per Acre.
	acres.	bushels.	bushels.
1890-1900	8,688	452,907	52·13
1900-10	12,082	716,158	59·27
1910-20	20,811	922,461	44·33
1921	24,149	1,065,880	44·14
1922	23,227	951,960	40·99
1923	25,846	879,915	34·04
1924	29,104	1,464,731	50·33
1925	23,126	891,987	38·57
1926	21,913	768,761	35·08
1927	20,046	685,407	34·19

On the average of the last five seasons the yield per acre was 39·1 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.

Rye. The area under rye in 1926-27 was 864 acres, from which 10,443 bushels of grain were obtained. The production was 10,788 bushels in 1925-26, 13,000 bushels in 1924-25, 11,151 bushels in 1923-24, and 15,718 bushels in 1922-23. Rye was grown principally in the counties of Bourke, Dalhousie, Delatite, and Talbot last season. The area under this crop in the four counties mentioned was about 67 per cent. of the total for the whole State.

Peas. The area under peas in 1926-27 was 10,431 acres, and the return, 198,947 bushels, as compared with 14,094 acres and 166,543 bushels for the previous year. Last season peas were grown to some extent in all districts with the exception of the Mallee. The counties from which the largest returns were obtained and the yields of these counties were as follows:—Grant, 50,713 bushels; Buln Buln, 34,317 bushels; Bourke, 32,877 bushels; Mornington, 19,753 bushels; and Tanjil, 9,488 bushels. The production of peas in the five counties mentioned was equal to 74 per cent. of the total for the whole State.

Mangel-wurzel. In 1926-27 there were 690 acres under mangel-wurzel, as against 1,046 in 1925-26, 736 in 1924-25, 854 in 1923-24, and 684 in 1922-23. The production last year was 6,715 tons, as compared with an annual average of 9,762 tons for the preceding five-year period. Mangolds are grown principally in the Gippsland, Western, and Central districts.

Beet, carrots,
parsnips, and
turnips.

The cultivation of beet, carrots, parsnips, and turnips, exclusive of those grown in market gardens, showed a considerable decrease in area as compared with the previous season. In 1926-27 the extent of land sown was 286 acres, as against 624 in 1925-26, 238 in 1924-25, 538 in 1923-24, and 433 in 1922-23. The produce for last year was 1,994 tons, as compared with 2,758 in 1925-26, 1,847 in 1924-25, 4,222 in 1923-24, and 1,878 in 1922-23.

Onions.

Onions are grown in nearly every county south of the Dividing Range. The returns for last season show that in Villiers the yield was 10,109 tons from 1,511 acres; in Grenville, 10,011 tons from 1,744 acres; in Polwarth, 7,024 tons from 1,122 acres; in Bourke, 4,947 tons from 850 acres; in Buln Buln, 4,876 tons from 1,213 acres; in Grant, 3,370 tons from 1,239 acres; and in Mornington, 2,520 tons from 531 acres. The following statement shows the area and yield for each of the last five years:—

ONION CULTIVATION, 1922-23 to 1926-27.

Year ended March—					Area.	Produce.
					acres.	tons.
1922-23	..	..	..	..	6,954	44,409
1923-24	..	..	..	..	4,714	31,683
1924-25	..	..	..	..	4,504	26,555
1925-26	..	..	..	..	5,379	21,728
1926-27	..	..	..	..	8,471	43,928

The value of onions grown was £110,839 in 1926-27, as compared with £267,793 in 1925-26, £209,803 in 1924-25, £215,444 in 1923-24, and £139,888 in 1922-23.

Green
forage.

The area devoted to green forage in 1923-27 was 87,241 acres, 107,873 in 1925-26, 99,531 in 1924-25, 107,371 in 1923-24, and 102,451 in 1922-23.

Ensilage.

The practice of preserving forage in a green state has existed in Victoria for many years, but only a small number of farmers have adopted it. The returns for the last five seasons are given in the next table:—

ENSILAGE RETURNS, 1922-23 to 1926-27.

Year ended March—					Number of Farms on which made.	Number of Silos (Pits and Stacks).	Materials used.
							tons.
1923	..	..	..	..	103	138	5,674
1924	..	..	..	..	61	88	3,649
1925	..	..	..	..	106	149	6,667
1926	..	..	..	..	113	150	6,092
1927	..	..	..	..	94	110	6,132

Grass and
clover
seed.

The area harvested for grass and clover seed last season was 854 acres, as compared with 1,290 in 1925-26, 1,424 in 1924-25, 1,306 in 1923-24, and 1,468 in 1922-23. The production in 1926-27 was 5,876 bushels, as against 7,330 in 1925-26, 8,597 in 1924-25, 6,466 in 1923-24, and 7,859 in 1922-23.

Hops. The hop-growing industry attained its maximum development in 1883-84, when 1,758 acres yielded 15,717 cwt. In 1926-27 the return from 196 acres was 1,169 cwt. Delatite, Bogong, Heytesbury, and Tanjil were the only counties in which hops were grown last season.

Flax. No flax was sown during the year 1923-24, but the Commonwealth Flax Committee, before winding up, supplied to Drysdale farmers seed for sowing in the 1924-25 season. An area of 130 acres was then sown, followed by 154 acres in 1925-26, and 388 acres in 1926-27. Owing to discontinuance of operations by the local co-operative company, the latter harvest has not yet been treated. Particulars of the crop for each of the last five years are given in the following statement:—

FLAX, 1922 TO 1926.

Year ended December—			Area under Crop.	Seed Produced.	Fibre Produced.	Tow Produced.	Straw awaiting Treatment.
			acres.	cwt.	cwt.	cwt.	tons.
1922	..	..	590	1,725	435	25	..
1923	..	..	Nil	..	..	..	..
1924	..	..	130	800	17	3	130
1925	..	..	154	1,200	660	80	..
1926	..	..	388	*	*	*	*

* Harvest not yet treated.

NOTE.—For particulars of New Zealand flax, not included in above statement, vide page 537.

In 1926-27 imports into Victoria from countries outside Australia included linseed to the value of £44,688, linseed oil worth £38,707, and fibre worth £209,191.

Tobacco. Tobacco production reached its maximum in 1880-81, when 17,333 cwt. of dry leaf was produced. Subsequent years were marked by great variations in area and produce, but since 1920-21 increasing areas have been devoted to the industry. The area devoted to this product last year was 1,154 acres, of which 602 were in Delatite, and 419 in Bogong. Particulars relating to the cultivation of tobacco for each of the last five years are as follows:—

CULTIVATION OF TOBACCO, 1922-23 TO 1926-27.

Year ended June—				Area.	Produce.
				acres.	cwt. (dry).
1922-23	..	..	..	890	4,151
1923-24	..	..	..	1,047	1,165
1924-25	..	..	..	1,228	3,199
1925-26	..	..	..	1,179	7,871
1926-27	..	..	..	1,154	*

* Not available.

Vine Production. During the period 1904-15 the area under vines decreased by 6,712 acres, or by nearly 24 per cent., and the number of growers decreased by 521, or by 23 per cent. Since 1915 there has been a fairly large increase in the area and the number of growers. 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 2,924,862 cwt. of grapes; Swan Hill, 405,164 cwt.; Rutherglen, 121,273 cwt.; and Rodney, 24,380 cwt. At Mildura the crop is principally dried for raisins and currants. The results of five years' operations are given below :—

VINE PRODUCTION, 1923 to 1927.

Year ended June—	Number of Growers.	Area.	Produce.				
			Grapes gathered.	Wine made.	Raisins made.		Currants made.
					Lexias.	Sultanas.	
		acres.	cwt.	gallons.	cwt.	cwt.	cwt.
1923 ..	2,775	38,892	1,879,964	1,717,490	67,850	217,670	98,081
1924 ..	3,047	42,599	2,707,729	2,177,127	71,993	366,834	150,867
1925 ..	2,999	42,467	2,142,349	1,368,765	70,695	296,304	104,948
1926 ..	2,876	40,712	2,253,884	1,637,274	54,021	297,485	123,733
1927 ..	2,832	40,612	3,587,224	2,346,314	75,296	582,418	135,464

Of the total quantity of grapes gathered in 1927, it is estimated that 417,502 cwt. were used for making wine and spirits, 3,077,038 cwt. for raisins and currants, and 92,684 cwt. for table consumption and export. Of the 582,418 cwt. of sultanas made, 494,971 cwt. were from Mildura, and 84,068 cwt. from Swan Hill.

Raisins are produced in Victoria upon a scale far in excess of the State's requirements. It is estimated that a year's consumption of raisins is about 88,000 cwt.; consequently, about 570,000 cwt. of the production in 1927 were available for interstate or oversea export. A year's consumption of currants is about 30,000 cwt., which would enable approximately 105,000 cwt. of last season's production to be exported to other States or oversea.

Orchards. The total number of persons in the State growing fruit for sale was 7,425 in 1926-27, as against 7,673 in 1925-26, 7,414 in 1924-25, 7,387 in 1923-24, and 7,758 in 1922-23. The area under orchards in each of those years was 81,301, 80,251, 83,369, 83,469, and 83,880 acres respectively. The orchards are distributed over the whole State. The counties having the largest areas last season were as follows :—Mornington, 14,859 acres; Bourke, 12,187 acres; Evelyn, 11,711 acres; Rodney, 10,119 acres; Moira, 7,838 acres; Talbot, 3,959 acres; and Bendigo, 3,323 acres.

The following is a statement of the number of bearing and not-bearing fruit trees and plants for the seasons 1922-23 and 1925-26 :—

**RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS,
ETC., IN ORCHARDS AND GARDENS WHERE FRUIT WAS
GROWN FOR SALE. 1922-23 AND 1925-26.**

Fruit.	Number of Trees, Plants, &c.					
	1922-23.			1925-26.		
	Bearing.	Not Bearing.	Total.	Bearing.	Not Bearing.	Total.
Apples ..	2,302,089	854,643	3,156,732	2,281,817	751,046	3,032,863
Pears ..	729,775	360,403	1,090,178	803,344	247,341	1,050,685
Quinces ..	72,316	33,041	105,357	77,950	15,733	93,683
Plums ..	368,355	153,020	521,375	305,348	64,826	370,174
Prunes ..	*	*	*	74,118	46,019	120,137
Cherries ..	182,093	33,802	215,895	112,324	29,228	141,552
Peaches ..	778,650	341,485	1,120,135	876,635	222,333	1,098,968
Apricots ..	349,242	130,114	479,356	397,402	67,532	464,934
Nectarines ..	15,295	1,645	16,940	13,539	3,570	17,109
Oranges ..	279,146	224,117	503,263	338,290	259,710	598,000
Lemons ..	100,544	96,207	196,751	130,634	64,881	195,515
Limes ..	..	..	†	360	58	418
Grapefruit ..	..	..	†	1,597	5,959	7,556
Pomelo - Shaddock ..	..	..	†	350	114	464
Loquats ..	3,337	1,138	4,475	3,346	1,092	4,438
Medlars ..	55	27	82	71	15	86
Figs ..	29,149	7,069	36,218	31,967	6,050	38,017
Guavas ..	182	92	274	68	67	135
Pomegranates ..	107	243	350	69	59	128
Persimmons ..	384	427	811	535	205	740
Total Large Fruits ..	5,210,719	2,237,473	7,448,192	5,449,764	1,785,838	7,235,602
Raspberries ..	308,647	..	308,647	..	351,201	351,201
Loganberries ..	139,084	..	139,084	..	147,901	147,901
Strawberries ..	2,432,038	..	2,432,038	..	3,662,153	3,662,153
Gooseberries ..	185,922	29,418	215,340	196,494	20,114	216,608
Mulberries ..	901	355	1,256	858	259	1,117
Olives ..	1,577	208	1,785	1,576	300	1,876
Currants (Red, White, and Black) ..	29,779	6,939	36,718	36,369	7,444	43,813
Passion-fruit ..	41,148	27,133	68,281	54,245	35,019	89,264
Almonds ..	21,987	9,792	31,779	23,272	16,287	39,559
Walnuts ..	5,223	7,019	12,242	7,382	4,481	11,863
Filberts ..	628	246	874	259	502	761
Chestnuts ..	692	262	954	462	254	716
Total Nuts ..	28,530	17,319	45,849	31,375	21,524	52,899

* Included in Plums.

† Not collected.

Census of Fruit Trees. In 1926, a special census was taken to ascertain the number of trees of each variety of each kind of fruit planted in Victoria, in order to facilitate consideration of the problems of marketing. The Department of Agriculture, Victoria,

published a detailed statement of each variety in each county in the State, and copies may be had on application thereto.

The results are briefly summarized in the following table :—

CENSUS OF FRUIT TREES, 1926.

Kind and Variety.	Trees of Bearing Age.	Young Trees not Bearing.	Kind and Variety.	Trees of Bearing Age.	Young Trees not Bearing.
	No.	No.		No.	No.
Apples—			Apricots—		
Jonathan	910,146	247,572	Moorpark	195,679	29,486
Rome Beauty .. .	253,012	98,555	Oullin's Early ..	46,412	4,979
London Pippin (Five Crown)	183,438	36,636	Mansfield	41,338	6,136
Yates	135,140	57,251	Others	113,973	26,931
Delicious	46,112	75,146	All Varieties ..	397,402	67,532
Dunn's (Munro's Favorite)	91,761	18,893			
Stewart's	56,303	35,452	Cherries—		
Gravenstein .. .	58,011	18,569	Bedford Prolific ..	21,695	6,804
Cleopatra (N.Y. Pippin)	46,290	12,412	Early Purple Guigne	15,355	2,647
Granny Smith .. .	21,936	29,672	Burgsdorf's Seedling	11,216	3,568
Reinette de Canada	42,801	6,935	Biggareau Twyford	13,623	1,089
Statesman	35,240	12,748	Others	50,435	15,120
Rokewood	38,668	6,348	All Varieties ..	112,324	29,228
King David	35,648	6,304			
Others	327,311	88,553	Nectarines—		
All Varieties ..	2,281,817	751,046	Goldmine	9,436	1,580
			Others	4,103	1,990
Pears—			All Varieties ..	13,539	3,570
Williams (Bartlett)	376,609	85,222			
Beurre Bosc	80,168	32,500	Peaches—		
Packham's Triumph	55,112	46,608	Pullar's Cling .. .	237,914	31,081
Kieffer	51,324	9,104	Elberta	65,595	2,771
Josephine de Malines	38,891	17,740	Brigg's Red May ..	55,778	11,587
Others	201,240	56,167	Hales' Early	56,856	10,188
All Varieties ..	803,844	247,341	Nicholls' Orange Cling	61,246	2,402
			Goodman's Choice ..	44,955	12,590
Oranges—			Others	354,291	151,714
Washington Navel ..	198,363	130,728	All Varieties ..	876,635	222,333
Valencia Late .. .	67,902	70,995			
Others	54,243	36,120	Plums and Prunes—		
All Varieties ..	320,508	237,843	Grand Duke	45,431	13,824
			Diamond	40,985	6,820
Mandarins—			Prune d'Agen .. .	23,019	23,071
Emperor	12,029	13,534	Angelina Burdett ..	28,823	7,261
Others	5,753	8,333	Others	175,441	42,996
All Varieties ..	17,782	21,867	All Varieties ..	313,699	93,972
Lemons—			Plums (Japanese)—		
Lisbon	89,629	37,775	Burbank	22,886	4,153
Eureka	34,153	24,781	Santa Rosa	11,503	2,918
Others	6,852	2,325	Satsuma (Blood) ..	10,865	3,177
All Varieties ..	130,634	64,881	Others	20,513	6,925
			All Varieties ..	65,767	16,873
Grape Fruit—					
Marsh's Seedless ..	1,017	5,306	Figs—		
Triumph	239	415	White Genoa	15,750	1,453
Others	341	238	White Adriatic .. .	5,610	585
All Varieties ..	1,597	5,959	Brown Turkey .. .	3,641	1,657
			Others	6,966	2,350
			All Varieties ..	31,967	6,050

The area of orchards growing fruit for sale in 1926-27—81,301 acres—showed an increase of 1,050 acres as compared with the area for the previous year. Details of the produce from such orchards in the last five years are given in the subjoined statement :—

**ORCHARDS GROWING FRUIT FOR SALE, 1922-23
TO 1926-27.**

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.
1923	7,758	83,880	2,089,017	666,631	63,837	258,117	*	92,407
1924	7,387	83,469	1,663,308	858,611	76,167	241,818	*	63,662
1925	7,414	83,369	2,233,230	910,915	81,160	308,638	*	51,299
1926	7,673	80,251	2,063,214	840,113	81,365	203,334	50,408	69,639
1927	7,425	81,301	543,106	500,995	42,695	172,724	37,060	29,817

Large Fruits Gathered—continued.

	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Nectarines.	Passion.	Other.
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1923	966,952	290,876	259,330	109,347	15,313	14,749	16,066	1,431
1924	938,908	352,604	210,595	95,443	27,772	14,649	15,986	3,942
1925	990,683	350,778	310,890	128,889	25,658	16,545	30,866	1,211
1926	1,221,582	247,600	286,216	131,154	22,568	15,289	10,495	860
1927	925,353	440,423	†	†	16,474	9,274	22,289	6,311

	SMALL FRUITS GATHERED.					NUTS GATHERED.			
	Rasp-berries.	Straw-berries.	Goose-berries.	Currants, Black, Red, & White.	Other.	Almonds.	Walnuts.	Filberts.	Chest-nuts.
	cwt.	cwt.	cwt.	cwt.	cwt.	lbs.	lbs.	lbs.	lbs.
1923	2,682	3,321	5,243	401	5,236	74,588	43,064	1,031	10,713
1924	2,160	3,831	3,657	283	3,046	76,905	29,665	964	6,190
1925	3,665	5,856	4,281	355	6,980	70,217	23,199	615	14,469
1926	3,548	4,022	4,675	329	5,881	71,480	61,845	201	16,793
1927	1,283	1,877	1,322	161	1,549†	68,315	31,254	59	15,495

* Included in Plums. † As the season for citrus fruits ends later than that for other fruits details are not yet available. ‡ Including 1,364 cwt. of loganberries, and 108 cwt. of blackberries.

The effects of the dry season and the ravages of the "thrip" pest, during 1926-27, are shown in the above table, except in the yields of apricots and passion fruit.

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 1926-27:—Melons, 7,917 cwt.; rhubarb, 5,331 dozen bundles; and tomatoes, 231,008 bushels. There were also 1,914 acres laid down in gardens growing fruit for private use; the value of the produce from these was estimated at about £9,600.

According to prices received by growers the value of fruit which reaches market was estimated to be £1,172,300 in 1922-23, £1,193,689 in 1923-24, £1,091,508 in 1924-25, £1,247,700 in 1925-26, and £970,831 in 1926-27. 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 1926-27 was 17,751 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 £887,550. 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 1926-27 the quantity produced was 756,324 lbs., which was 14 per cent. less than the quantity for the previous year. The production of the various kinds of dried fruit, with the exception of raisins and currants, the particulars of which appear on page 532, is shown in the following statement for each of the last five seasons:—

DRIED FRUIT, 1922-23 to 1926-27.

Year ended June—	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Pears.	Nectarines.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1923 ..	5,354	376,491	454,899	518,196	29,632	36,915	14,041	1,435,528
1924 ..	3,104	395,090	168,948	217,624	6,226	132,217	2,953	926,162
1925 ..	8,037	638,302	153,235	328,643	16,945	102,792	10,354	1,258,358
1926 ..	4,569	307,377	232,170	213,764	29,301	89,025	8,163	884,369
1927 ..	2,540	313,390	107,933	278,796	9,966	43,333	66	756,324

A feature of the returns for the season 1926-27, as compared with those for the previous year, is the decrease in all fruits except prunes and apricots.

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, 1925-26 AND 1926-27.

Crop.	1925-26.		1926-27.	
	Area.	Produce.	Area.	Produce.
	acres.		acres.	
Beans	961	19,008 bushels	1,045	18,204 bushels
Chicory	528	430 tons (dry)	540	257 tons (dry)
Flowers	327	.. ..	388	.. ..
Garlic	30	35 tons	35	55 tons
Flax—New Zealand ..	90	†58 tons fibre	90	*
Millet—Broom	669	{ 1,797 cwt. fibre 1,151 cwt. seed }	1,493	{ 4,487 cwt. fibre 2,847 cwt. seed }
„ Japanese	95	550 „ „	25	40 „ „
Nurseries	721	.. ..	815	.. ..
Pumpkins	1,179	5,472 tons	1,590	5,816 tons
Seeds—Agricultural and Garden ..	14	.. ..	79	.. ..
Sugar Beet	1,880	{ 21,194 tons clean beet, pro- ducing 2,315 tons market- able sugar 400 cwt. }	2,024	{ 9,851 tons clean beet, pro- ducing 1,177 tons market- able sugar 390 cwt. }
Sunflowers	63	.. ..	37	.. ..
Total	7,097	.. ..	8,161	.. ..

* Only cut every third year. † Partial failure.

Land in fallow.

The practice of fallowing has become very popular in recent years. This is no doubt due to the more enlightened methods adopted, especially in wheat farming, where results have justified the introduction of extensive fallowing in conjunction with heavy manuring. The acreage in fallow in the years 1901, 1906, 1911, 1916, 1921, and each of the last five years was as follows:—

LAND IN FALLOW.

Year ended March—	Acres.	Year ended March—	Acres.
1901	602,870	1923	2,186,881
1906	1,049,915	1924	2,294,297
1911	1,434,177	1925	2,215,270
1916	1,358,343	1926	2,457,136
1921	1,935,747	1927	2,569,021

Nearly all of the fallowed area is devoted to wheat production. Of the 2,569,021 acres in fallow last season, 797,657 were in the Wimmera, 945,898 in the Mallee, and 599,629 in the Northern District. The total for these three districts represented, therefore, 91 per cent. of the land fallowed in the State.

The increase in the proportion of farmers using manure indicates the popularity and the value of this method of treating the soil. Last year the number of farmers who used manure was 41,795, as compared with 37,835 in 1921, 26,159 in 1911, 11,439 in 1901, and 7,318 in 1898. The following table shows the number of farmers using manure, and the quantity used, in 1901, 1906, 1911, and 1916, and each of the last six years:—

MANURE USED FOR FERTILIZATION, 1901 to 1926.

Year ended March—			Farmers using.	Area used on.	Manure used—	
					Natural.	Artificial.
				acres.	tons.	tons.
1901	..	..	11,439	556,777	153,611	23,535
1906	..	..	23,072	1,985,148	205,906	60,871
1911	..	..	26,159	2,676,408	205,739	82,581
1916	..	..	33,165	3,870,742	181,268	117,812
1921	..	..	37,835	3,848,184	161,683	150,012
1922	..	..	40,037	4,148,780	173,343	172,897
1923	..	..	39,749	4,113,640	163,843	178,621
1924	..	..	39,393	4,301,558	151,611	184,140
1925	..	..	40,460	4,244,191	144,537	195,542
1926	..	..	41,795	4,601,239	142,334	214,234

NOTE.—The average weight of manure used per acre in each district will be found on page 523.

The area on which manure was used represented only 7 per cent. of that under crop in 1898, but since then the proportion manured has rapidly increased. In 1901, it was 19 per cent.; in 1903, 36 per cent.; in 1905, 56 per cent.; in 1909, 66 per cent.; in 1913, 77 per cent.; and in 1926, 97 per cent. During 1926-27 the quantity of fertilizers imported into Victoria from oversea countries was 221,243 tons valued at £528,605. This included 218,998 tons of rock phosphates valued at £496,785, most of which came from the Pacific Islands.

Characteristics
of Victorian
soils.

This subject is fully dealt with in the *Year-Book* for 1915-16, page 740

Persons
employed on
Farming, and
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, 1922 to 1926.

Year ended March—			Males.	Females.	Total.
1922	..	..	107,872	48,978	156,850
1923	..	..	105,933	46,218	152,151
1924	..	..	103,013	33,954	136,967
1925	..	..	98,059	19,124	117,183
1926	..	..	96,791	17,619	114,410

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. Prior to 1925, females who were only partly engaged in work on the holdings were included in the figures given, whereas, in that year, only those wholly employed 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 1926-27. The information has been furnished by the occupiers of holdings.

WAGES, AGRICULTURAL AND PASTORAL, 1926-27.

Occupations.			Range.	Prevailing Rate.
Ploughmen	..	..	30s. to 80s. per week ..	45s. per week
Farm labourers	..	..	27s. 6d. to 70s. per week	41s. per week
Threshing machine hands	..	..	12d. to 18d. per hour ..	15d. per hour
Harvest hands	..	..	10s. to 16s. per day ..	13s. per day
Milkers	..	..	25s. to 60s. per week ..	35s. per week
Maize pickers (without rations)	..	..	6d. to 10d. per bag ..	8d. per bag
Married couples	..	..	50s. to 90s. per week ..	60s. per week
Female servants	..	..	15s. to 40s. per week ..	25s. per week
Shearers, hand (without rations)	..	..	35s. to 50s. per 100 sheep	40s. per 100 sheep
„ machine (without rations)	..	..	38s. to 60s. per 100 sheep	40s. per 100 sheep
Gardeners, market	..	..	25s. to 70s. per week ..	40s. per week
„ orchard	..	..	40s. to 80s. per week ..	50s. per week
Vineyard hands	..	..	40s. to 80s. per week ..	50s. 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 year 1927.

LIVE STOCK IN VICTORIA, 1861 to 1927.

Year ended March—	Horses (including Foals).	Cattle—		Sheep.	Pigs.
		Dairy Cows.	Other.		
	number.	number.	number.	number.	number.
1861	76,536	197,332	525,000	5,780,896	61,259
1871	209,025	212,193	564,534	10,477,976	180,109
1881	275,516	329,198	957,069	10,360,285	241,936
1891	436,469	395,192	1,387,689	12,692,843	282,457
1901	392,237	521,612	1,080,772	10,841,790	350,370
1911	472,080	668,777	878,792	12,882,665	333,281
1921	487,503	620,005	955,154	12,171,084	175,275
1927	447,988	673,089	762,672	14,919,653	284,271
<i>Per Head of Population.</i>					
1861	·14	·37	·97	10·70	·11
1871	·29	·29	·77	14·32	·25
1881	·32	·38	1·11	12·01	·28
1891	·38	·35	1·22	11·13	·25
1901	·33	·43	·90	9·03	·29
1911	·36	·51	·67	9·79	·25
1921	·32	·41	·63	7·99	·12
1927	·26	·39	·45	8·72	·17
<i>Per Square Mile.</i>					
1861	·87	2·25	5·97	65·78	·70
1871	2·38	2·41	6·42	119·22	2·05
1881	3·14	3·75	10·89	117·88	2·75
1891	4·97	4·50	15·79	144·43	3·21
1901	4·46	5·94	12·30	123·36	4·00
1911	5·37	7·61	10·00	146·59	3·79
1921	5·55	7·05	10·87	138·49	1·99
1927	5·10	7·66	8·68	169·77	3·23

By reducing horses and cattle to an equivalent in sheep on the assumption that one of the former will eat as much as ten, and one of the latter as much as six 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 319 sheep in 1927, as compared with 302 in 1921, 306 in 1911, and 237 in 1881.

Size of holdings in 1913, 1919, and 1925.

Particulars of the size of holdings and cultivation thereon, together with the particulars of the total holdings in which only Crown land was held, are given in the following table for the years 1913, 1919, and 1925 :—

SIZE OF HOLDINGS AND CULTIVATION THEREON,
1913, 1919, AND 1925.

Privately-owned Land.				Crown Land held in conjunction with that privately owned.	Total Area Occupied.	Area under—	
Size of Holdings. (In acres.)	Year.	Number of Holdings.	Area Occupied.			Cultivation.	Pasture, &c.
			acres.	acres.	acres.	acres.	acres.
1 and under 100	1913	26,113	915,493	374,511	1,290,004	245,498	1,044,506
	1919	28,902	942,775	347,377	1,290,152	241,794	1,048,358
	1925	31,289	1,063,933	370,024	1,433,957	291,220	1,142,737
100 " 321	1913	18,483	3,819,680	1,216,829	5,036,509	875,525	4,160,984
	1919	19,930	3,967,377	840,116	4,807,493	807,434	4,000,059
	1925	21,718	4,268,016	698,212	4,966,228	932,530	4,033,698
321 " 641	1913	11,212	5,475,942	1,191,890	6,667,832	1,424,020	5,243,812
	1919	11,831	5,790,225	1,480,407	7,270,632	1,490,476	5,780,156
	1925	12,397	6,013,942	872,005	6,885,947	1,842,798	5,043,149
641 " 1,000	1913	5,221	4,187,010	1,241,667	5,428,677	1,075,000	4,353,677
	1919	5,709	4,523,331	1,071,162	5,594,493	1,105,867	4,488,626
	1925	6,901	5,470,464	616,611	6,087,075	1,644,026	4,443,049
1,000 " 2,500	1913	4,544	6,748,985	1,852,529	8,601,514	1,546,611	7,054,903
	1919	5,010	7,291,675	2,300,465	9,592,140	1,379,247	8,212,893
	1925	5,521	7,958,566	1,345,581	9,304,147	1,836,928	7,467,219
2,500 " 5,000	1913	820	2,803,419	1,085,769	3,889,188	352,258	3,536,930
	1919	855	2,825,855	716,245	3,542,100	270,426	3,271,674
	1925	899	2,974,753	741,294	3,716,047	284,495	3,431,552
5,000 " 10,000	1913	267	1,825,862	342,848	2,168,710	111,910	2,056,800
	1919	290	1,996,606	378,877	2,375,483	83,014	2,292,469
	1925	273	1,868,708	198,969	2,067,677	90,274	1,977,403
10,000 and upwards	1913	151	2,652,966	404,710	3,057,676	39,606	3,018,070
	1919	152	2,638,307	124,045	2,762,352	35,979	2,726,373
	1925	104	1,576,942	34,869	1,611,811	17,643	1,594,168
Total of privately-owned land	1913	66,811	28,429,357	7,710,753	36,140,110	5,670,428	30,469,682
	1919	72,679	29,976,151	7,258,694	37,234,845	5,414,237	31,820,608
	1925	79,102	31,195,324	4,877,565	36,072,889	6,939,914	29,132,975
Crown Land not held in conjunction with that privately owned	1913	1,892	..	1,078,688	1,078,688	36,151	1,042,537
	1919	1,651	..	899,289	899,289	76,783	822,506
	1925	935	..	733,335	733,335	36,800	696,535
Grand Total	1913	68,703	28,429,357	8,789,441	37,218,798	5,706,579	31,512,219
	1919	74,330	29,976,151	8,157,983	38,134,134	5,491,020	32,643,114
	1925	80,037	31,195,324	5,610,900	36,806,224	6,976,714	29,829,510

The number of holdings of privately-owned land of over 10,000 acres was 104 in 1925, as compared with 152 in 1919, 151 in 1913, 175 in 1910, and 195 in 1906, and the aggregate areas comprised therein in the corresponding years were 1,576,942 acres, 2,638,307 acres, 2,652,966 acres, 3,298,227 acres and 4,134,067 acres. The reduction in the period of nineteen years between March, 1906, and March, 1925, was equivalent to 47 per cent. in the number and 62 per cent. in the acreage of such estates. Subdivision of estates of over 10,000 acres was practically at a stand-still during the period between March, 1913, and March, 1919, but, since the latter date, such estates have declined by 32 per cent. in the number and 40 per cent. in the acreage. In all

other holdings of the sizes mentioned in the above table, excepting those between 5,000 and 10,000 acres, which declined in both numbers and acreage, between March, 1919, and March, 1925, there were increases in both numbers and acreage in the nineteen years referred to.

To illustrate the uses to which the land was applied in 1913, 1919, and 1925, various percentages relating to holdings of different sizes, of privately-owned land and Crown land held in conjunction therewith, are given for those years in the succeeding table, which also shows the live stock carried by the holdings, reduced to their equivalent in sheep:—

SIZE OF HOLDINGS AND HOW UTILIZED, 1913, 1919, AND 1925.

Size of Holdings of Privately-owned Land. (In Acres.)	Year.	Percentage in each Division to Total of—					Live Stock Grazed reduced to equivalent in Sheep.	
		Holdings.	Area Occupied.	Area under Cultivation.	Area used for Pasture, &c.	Equivalent in Sheep Grazed.	Total.	Per 100 Acres used for Grazing, &c.
1 and under	1913	39·08	3·57	4·33	3·43	7·08	1,766,873	169
	1919	39·77	3·46	4·47	3·29	6·50	1,909,552	182
	1925	39·56	3·97	4·20	3·92	7·97	2,072,251	181
100 "	1913	27·66	13·94	15·44	13·66	17·67	4,410,283	106
	1919	27·42	12·91	14·91	12·57	17·40	5,107,256	128
	1925	27·46	13·77	13·44	13·83	19·20	4,994,010	124
321 "	1913	16·78	18·45	25·12	17·21	17·14	4,278,079	82
	1919	16·28	19·53	27·53	18·17	17·48	5,132,920	89
	1925	15·67	19·09	26·55	17·31	17·68	4,599,327	91
641 "	1913	7·82	15·02	18·95	14·29	12·15	3,031,015	70
	1919	7·85	15·03	20·43	14·11	12·37	3,630,165	81
	1925	8·72	16·88	23·69	15·25	12·63	3,285,208	74
1,000 "	1913	6·80	23·80	27·27	23·15	20·34	5,076,868	72
	1919	6·89	25·76	25·47	25·81	22·23	6,539,378	80
	1925	6·98	25·79	26·47	25·63	21·55	5,607,738	76
2,500 "	1913	1·23	10·76	6·22	11·61	9·22	2,300,276	65
	1919	1·18	9·51	5·00	10·28	8·84	2,594,808	79
	1925	1·14	10·30	4·10	11·78	9·32	2,425,033	71
5,000 "	1913	·40	6·00	1·98	6·75	6·95	1,735,240	84
	1919	·40	6·38	1·53	7·20	6·85	2,011,066	88
	1925	·34	5·73	1·30	6·79	6·26	1,628,559	82
10,000 and upwards	1913	·23	8·46	·69	9·90	9·45	2,358,478	78
	1919	·21	7·42	·66	8·57	8·23	2,431,720	89
	1925	·13	4·47	·25	5·47	5·39	1,401,304	88
Total	1913	100·00	100·00	100·00	100·00	100·00	24,957,112	82
	1919	100·00	100·00	100·00	100·00	100·00	29,356,865	92
	1925	100·00	100·00	100·00	100·00	100·00	26,013,430	89

In the above table horses and cattle have been reduced to an equivalent in sheep on the assumption that one head of the former will eat as much as ten, and one of the latter as much as six sheep. On this basis every 100 acres under pasture was carrying the equivalent of 89 sheep in 1925, as compared with 92 in 1919, 82 in 1913, and 78 in 1910. Dairying is carried on principally on the small holdings,

and pigs are most numerous where dairying prevails. In 1925, 62 per cent. of the dairy cows and 67 per cent. of the pigs were on holdings of not more than 320 acres.

Particulars of the number of holdings of different sizes and of the cultivation and live stock thereon in March, 1925, are given in greater detail than in the above tables in the *Year-Book* for 1924-25, pages 537 and 538.

The following tables show the area of, and the land in occupation, in March, 1927, in districts, and the uses to which the land was applied :—

AREA OF AND LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1927.

(Areas of 1 acre and upwards.)

(Areas of 1 acre and upwards.)							
Districts.	Area of Districts.	Number of Occupiers.	Acres Occupied.				Total.
			For Agricultural Purposes.	For Pasture.		Other Purposes and Unproductive.	
				Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
	acres.						
Central ..	4,065,280	17,495	445,812	193,810	1,986,209	162,469	2,788,300
North-Central ..	2,929,920	5,672	136,883	25,669	1,872,410	102,741	2,137,703
Western ..	8,775,040	12,437	349,316	186,763	5,730,910	408,699	6,675,688
Wimmera ..	7,394,560	6,378	1,839,977	16,653	3,762,308	382,293	6,001,231
Mallee ..	10,784,000	8,470	2,674,979	6,061	2,257,745	724,446	5,663,231
Northern ..	6,337,280	12,311	1,538,547	112,293	3,552,008	43,011	5,245,859
North-Eastern ..	7,220,480	5,334	148,531	5,700	3,416,882	331,703	3,902,816
Gippsland ..	8,739,200	9,083	170,149	405,290	2,774,035	888,579	4,238,053
Total ..	56,245,760	77,180	7,304,194	952,239	25,352,507	3,043,941	36,652,881
PERCENTAGE OF TOTAL OCCUPIED IN EACH DISTRICT.							
Central ..	..	..	15.99	6.95	71.23	5.83	100.00
North-Central ..	..	..	6.40	1.20	87.59	4.81	100.00
Western ..	..	..	5.23	2.80	85.85	6.12	100.00
Wimmera ..	..	..	30.66	0.28	62.69	6.37	100.00
Mallee ..	..	..	47.23	0.11	39.87	12.79	100.00
Northern ..	..	..	29.33	2.14	67.71	0.82	100.00
North-Eastern ..	..	..	3.80	0.15	87.55	8.50	100.00
Gippsland ..	..	..	4.01	9.56	65.46	20.97	100.00
Total ..	..	..	19.93	2.60	69.17	8.30	100.00
PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.							
Central ..	..	22.67	6.11	20.35	7.83	5.84	7.61
North-Central ..	..	7.35	1.87	2.70	7.39	3.37	5.83
Western ..	..	16.12	4.78	19.61	22.60	13.43	18.21
Wimmera ..	..	8.26	25.20	1.75	14.84	12.56	16.37
Mallee ..	..	10.97	36.62	0.64	8.91	23.80	15.45
Northern ..	..	15.95	21.06	11.79	14.01	1.41	14.31
North-Eastern ..	..	6.91	2.03	0.60	13.48	10.90	10.65
Gippsland ..	..	11.77	2.33	42.56	10.94	29.19	11.67
Total ..	..	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, 47 per cent. in the Mallee, 31 per cent. in the Wimmera, and 29 per cent. in the Northern districts are devoted to agriculture, and these divisions supply nearly 83 per cent. of the cultivation in Victoria. In the North-Central, Western, and North-Eastern districts the land occupied is largely devoted to grazing; in Gippsland considerable attention is given to the cultivation of grasses, 43 per cent. of all the sown grasses in the State being found in that district.

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, 1927:—

AREA OCCUPIED AND STOCK THEREON, 1927.

Districts.	Area Occupied for—		Number of—		
	Agriculture.	Pasture.	Horses.	Cattle.	Sheep.
	acres.	acres.			
Central	445,812	2,180,019	85,894	227,816	1,113,303
North-Central ..	136,883	1,898,079	21,551	85,419	1,358,783
Western	349,316	5,917,673	58,255	338,236	4,506,755
Wimmera	1,839,977	3,778,961	62,681	41,045	2,318,218
Mallee	2,674,979	2,263,806	64,998	36,134	941,759
Northern	1,538,547	3,664,301	84,871	185,864	2,567,830
North-Eastern ..	148,531	3,422,582	30,258	213,152	1,144,239
Gippsland	170,149	3,179,325	39,480	308,095	968,766
Total	7,304,194	26,304,746	447,988	1,435,761	14,919,653

The area occupied does not include 3,043,941 acres which are mostly in an unproductive state. Compared with 1926, sheep increased by 8·6 per cent., while horses decreased by 3·3 per cent., and cattle by 5·2 per cent.

The following return shows the live stock in Victoria in each of the last five years. Tables showing the stock classified in conjunction with holdings and sheep classified in different-sized flocks in March, 1925, are given on page 538 of the *Year-Book* for 1924-25, and page 532 of this volume:—

LIVE STOCK IN VICTORIA, 1923 TO 1927.

Live Stock.	1923.	1924.	1925.	1926.	1927.
Horses (including foals)	494,947	486,075	473,236	463,051	447,188
Cattle—					
Dairy Cows	794,898	738,149	760,207	727,940	673,089
Other (including calves)	990,762	853,218	845,347	785,847	762,672
Sheep	11,765,520	11,059,761	12,649,898	13,740,500	14,919,653
Pigs	294,962	259,795	288,509	339,601	284,271

Prices of
Live Stock.

In the subjoined table will be found a statement of the average and the range of prices ruling in Melbourne during the years 1925-26 and 1926-27 for live stock. The information has been extracted from the Melbourne Stock and Station Journal:—

PRICES IN MELBOURNE OF LIVE STOCK, 1925-26 AND 1926-27.

Stock.	Prices in 1925-26.			Prices in 1926-27.		
	Average.	Range.		Average.	Range.	
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
<i>Horses.</i>						
Extra heavy draught	39 2 6	38 0 0 to 40 10 0		38 15 0	36 0 0 to 40 0 0	
Medium draught ..	28 2 6	27 10 0 to 29 0 0		28 0 0	26 0 0 to 29 0 0	
Delivery cart ..	13 15 0	13 0 0 to 14 10 0		13 7 0	12 0 0 to 14 10 0	
Indian Remounts ..	22 8 0	22 0 0 to 23 0 0		21 15 0	21 0 0 to 22 0 0	
Saddle and harness	4 0 0	3 15 0 to 4 15 0		3 15 0	3 10 0 to 4 0 0	
Ponies ..	7 0 0	6 10 0 to 7 10 0		7 2 6	7 0 0 to 7 10 0	
Order cart ..	8 0 0	7 10 0 to 8 10 0		8 0 0	7 10 0 to 8 10 0	
<i>Fat Cattle.</i>						
<i>Bullocks—</i>						
Extra prime ..	21 5 0	17 10 0 to 25 2 0		16 16 0	13 15 0 to 21 19 0	
Prime ..	19 3 0	16 1 0 to 23 0 0		14 18 0	12 14 0 to 18 2 6	
Good ..	17 2 0	14 18 0 to 20 10 0		13 2 0	10 16 0 to 15 9 0	
Good light and handy weights	14 19 0	12 19 0 to 17 19 0		11 5 6	9 7 6 to 12 17 0	
<i>Cows—</i>						
Best ..	12 2 0	9 19 0 to 14 9 6		11 4 0	9 11 0 to 13 4 9	
Others ..	9 4 0	7 3 0 to 10 18 0		6 5 0	5 9 6 to 7 5 0	
<i>Dairy Cattle.</i>						
Best milkers ..	15 16 0	12 17 0 to 18 9 0		*	*	
Springers, best ..	9 14 0	7 4 0 to 11 15 0		*	*	
<i>Fat Sheep.</i>						
<i>Wethers (cross)—</i>						
Extra prime ..	1 14 0	1 8 3 to 2 5 0		1 9 2	1 4 8 to 1 15 9	
Prime ..	1 11 4	1 5 5 to 2 1 11		1 6 3	1 2 0 to 1 13 0	
Good ..	1 8 0	1 2 5 to 1 18 1		1 2 11	0 19 2 to 1 9 8	
<i>Ewes (cross)—</i>						
Extra prime ..	1 8 8	1 0 3 to 2 1 5		1 2 3	0 17 2 to 1 9 0	
Prime ..	1 6 0	0 18 0 to 1 19 0		0 19 1	0 14 7 to 1 6 3	
Good ..	1 3 1	0 15 5 to 1 16 3		0 15 3	0 13 3 to 1 3 0	
<i>Wethers (merino)—</i>						
Extra prime ..	1 13 5	1 6 5 to 2 6 3		1 7 7	1 1 9 to 1 14 8	
Prime ..	1 10 8	1 4 5 to 2 3 3		1 4 11	0 19 5 to 1 12 3	
Good ..	1 7 3	1 1 2 to 1 18 8		1 1 2	0 16 5 to 1 8 4	
Ewes (merino) best	1 5 11	0 18 10 to 1 18 10		0 17 2	0 14 5 to 1 6 4	
<i>Fat Lambs.</i>						
Extra prime ..	1 9 10	1 2 9 to 1 18 3		1 6 0	1 3 3 to 1 12 2	
Prime ..	1 10 8	1 0 4 to 1 15 6		1 3 3	1 0 1 to 1 8 1	
Good ..	1 4 2	0 17 4 to 1 13 6		1 0 5	0 17 9 to 1 3 3	
<i>Pigs.</i>						
<i>Back Fatters—</i>						
Extra heavy prime	10 17 6	8 12 0 to 12 15 0		9 19 0	8 14 0 to 10 16 0	
Extra prime and weighty ..	7 8 0	5 12 6 to 8 13 0		7 15 0	6 0 0 to 8 17 6	
<i>Baconers—</i>						
Extra prime ..	5 11 0	5 0 0 to 6 11 0		4 19 0	4 2 6 to 6 0 0	
Prime ..	4 10 0	3 19 0 to 5 5 0		4 3 6	3 12 0 to 4 15 0	
Porkers ..	2 7 0	2 0 0 to 2 19 0		2 6 3	2 2 0 to 2 11 6	

* Not available.

The following is a statement of the stock slaughtered on farms and stations, as well as in municipal abattoirs, during each of the last five years :—

STOCK SLAUGHTERED, 1922 to 1926.

Year ended December—	Number Slaughtered.		
	Sheep and Lambs.	Cattle.	Pigs.
1922	5,863,195	424,199	308,172
1923	4,078,273	461,958	373,609
1924	3,591,219	499,840	368,918
1925	4,194,572	523,920	391,129
1926	4,528,113	499,519	410,062

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

PURPOSES FOR WHICH STOCK WERE SLAUGHTERED,
1922 to 1926.

Year ended December—	For Butcher and Private Use.*			For Export.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1922	3,184,411	413,650	107,022	2,657,515	4,251	..
1923	3,372,722	449,101	139,405	691,630	4,011	..
1924	2,548,327	484,244	139,808	1,035,799	7,391	..
1925	2,697,822	486,739	158,187	1,480,824	25,608	..
1926	3,160,485	483,660	167,850	1,346,425	10,472	2,908

Year ended December—	For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1922	9,763	2,955	200,901	11,506	3,343	249
1923	2,632	2,519	232,914	11,289	6,327	290
1924	4,452	4,323	228,869	2,641	3,882	241
1925	9,725	7,218	232,755	6,201	4,355	187
1926	12,030	2,857	239,099	9,173	2,530	205

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

Of the 4,528,113 sheep and lambs slaughtered in Victoria in 1926, 1,346,425, or 30 per cent., were frozen, as compared with 1,480,824, or 35 per cent., in 1925, 1,035,799, or 29 per cent., in 1924, 691,630, or 17 per cent., in 1923, and 2,657,515, or 45 per cent., in 1922. In 1926-27 the overseas exports included 47,281,544 lbs. of mutton and lamb, valued at £1,195,500.

Mutton and
Lamb frozen
for Export.

The soil and climate of Victoria are well suited to the economical production of both mutton and lamb, and, as there is practically no limit to the demand for these products in Europe, the possibilities for those engaged in raising sheep for export are very great, especially as the number of sheep in the world is not keeping pace with the increase in population. The importance of this export trade to Victorian sheep owners is evidenced by the figures in the appended statement showing the numbers of carcasses exported in each of the last thirteen years. In the four years 1915-16 to 1918-19 the quantity exported was small in comparison with earlier years. The chief reasons for this were, in 1915-16, a drought in the preceding year, and, in the three following years, the lack of shipping space. In the year 1919-20 the exports were much greater than in any previous year, due mainly to the accumulations of the previous three years. The quantities exported in 1920-21 were below the average, owing to the dry condition which had prevailed in the previous year. After a world-wide fall in values, the season 1922-23 was marked by exceptionally heavy exports of both mutton and lamb at improved prices. In the 1923-24 season the export of mutton practically ceased, while the number of lambs exported was only about 40 per cent. of that for the previous year. The abnormal activity in 1922-23 was, to some extent, responsible for the great reduction in exports in 1923-24. Other reasons were a tendency among owners to retain their flocks in expectation of high prices for wool, and the demand for breeding ewes from New South Wales, where a drought had depleted the flocks. The improvement manifested in 1924-25 and 1925-26 was not maintained in 1926-27.

FROZEN MUTTON AND LAMB EXPORTED.

Year (ended June).	Number of Carcasses Exported.		
	Mutton.	Lamb.	Total.
1914-15	653,329	1,056,823	1,710,152
1915-16 .. ..	..	47,546	47,546
1916-17	52,724	365,694	418,418
1917-18	48,743	147,524	196,267
1918-19	649,082	19,889	668,971
1919-20	2,468,091	1,533,411	4,001,502
1920-21	372,916	413,170	786,086
1921-22	314,564	872,140	1,186,704
1922-23	989,456	1,668,059	2,657,515
1923-24	12,945	678,685	691,630
1924-25	87,767	948,032	1,035,799
1925-26	171,803	1,309,021	1,480,824
1926-27	149,358	1,197,067	1,346,425

The average weights of carcasses of mutton and lamb exported from Victoria during the last decade were 48 lbs. and 32 lbs. respectively.

Dairying. The dairying industry is one of the principal sources of the wealth of the community. The value of dairy produce in 1927 was £10,483,760, as compared with £10,364,790 in 1926,

£10,381,175 in 1925, £10,561,940 in 1924, and £10,381,310 in 1923. 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, 1922-23 to 1926-27.

Year ended March—				Number of Cow-keepers.	Number of Dairy Cows.	Butter made.*	Cheese made.*
						lbs.	lbs.
1923	..	..	..	62,424	794,898	84,355,939	3,754,958
1924	..	..	..	61,685	738,149	86,888,723	7,216,938
1925	..	..	..	61,549	760,207	100,849,382	6,193,135
1926	..	..	..	58,933	727,940	81,747,291	5,279,009
1927	..	..	..	56,935	673,089	81,995,815	5,997,648

* Year ended 30th June.

Of the 56,935 cowkeepers in 1926-27, 27,284 had less than 5 cows; 10,796 had from 5 to 9; 5,407 had from 10 to 14; 5,925 had from 15 to 24; and 7,523 had 25 and upwards.

Butter and cheese made on farms.

The next table shows the quantities of butter and cheese made on farms in the last five years :—

BUTTER AND CHEESE MADE ON FARMS, 1922-23 to 1926-27.

Year ended June—				Butter.	Cheese.
				lbs.	lbs.
1923	..	..	..	5,582,469	418,873
1924	..	..	..	5,597,128	420,552
1925	..	..	..	5,395,087	228,779
1926	..	..	..	4,734,669	389,893
1927	..	..	..	3,887,324	516,063

Butter and cheese made in factories.

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

BUTTER, CHEESE, ETC., MADE IN FACTORIES, 1922-23 to 1926-27.

Year ended June—	Butter made.	Cream sold.	Cheese made.	Concentrated, Condensed, and Powdered Milk made.	Casein made.	Milk Sugar made.
	lbs.	gallons.	lbs.	lbs.	lbs.	lbs.
1923	78,773,470	213,170	3,336,085	38,314,261	2,639,240	410,155
1924	81,291,595	373,236	6,796,386	49,099,632	2,946,346	445,430
1925	95,454,295	495,458	5,964,356	45,693,120	2,716,042	415,753
1926	77,012,622	388,235	4,889,116	43,646,852	1,503,369	152,783
1927	78,108,491	344,605	5,481,585	48,186,040	1,803,049	350,570

The quantities of milk, in gallons, received at factories and creameries were 193,507,110 in 1921-22, 196,171,380 in 1922-23, 206,915,177 in 1923-24, 197,804,300 in 1924-25, 240,114,430 in 1925-26, and 205,441,560 in 1926-27.

Exports of butter and cheese.

In 1926-27 there were exported from Victoria to countries outside Australia 34,403,562 lbs. of butter, valued at £2,611,855, all of which was Australian produce, except 56,000 lbs., valued at £3,310, which came from New Zealand. The quantity sent to the United Kingdom was 26,863,815 lbs., valued at £2,012,500. The quantity of cheese exported to overseas countries was 112,854 lbs., and the value thereof, £6,358.

Wool production.

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 1926-27 and earlier seasons was as follows:—

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION.

Districts.	Wool Clip, 1926-27.			
	Sheep.	Lambs.	Total.	
	lbs.	lbs.	lbs.	
Central	6,358,310	408,585	6,766,895	
North-Central	8,194,742	555,716	8,750,458	
Western	27,679,251	1,803,165	29,482,416	
Wimmera	16,147,330	966,872	17,114,202	
Mallee	6,349,433	282,337	6,631,770	
Northern	15,943,826	1,293,122	17,236,948	
North-Eastern	6,252,022	464,258	6,716,280	
Gippsland	5,118,728	359,465	5,478,193	
Total Clip {	1926-27	92,043,642	6,133,520	98,177,162
	1925-26	84,101,370	6,512,929	90,614,299
	1924-25	83,932,699	6,819,164	90,751,863
	1923-24	63,806,820	3,519,735	67,326,555
	1922-23	71,088,919	5,105,031	76,193,950
<hr/>				
	1923-24.	1924-25.	1925-26.	1926-27.
	lbs.	lbs.	lbs.	lbs.
Wool clip	67,326,555	90,751,863	90,614,299	98,177,162
Wool stripped from Victorian skins and on Victorian skins exported (estimated) ..	15,186,806	16,036,034	20,646,515	23,122,459
Total production ..	82,513,361	106,787,897	111,260,814	121,299,621
Total value ..	£7,695,000	£11,444,240	£7,082,820	£7,876,683

In 1926-27 there were 11,863,262 sheep and 2,671,435 lambs shorn, as compared with 10,990,842 sheep and 2,899,787 lambs in 1925-26, 9,803,371 sheep and 2,790,054 lambs in 1924-25, 9,463,675 sheep and 1,614,147 lambs in 1923-24, and 9,920,239 sheep and 2,278,303 lambs in 1922-23.

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, 1922-23 to 1926-27.

Year.	Weight of a Fleece.		
	Sheep.	Lambs.	Sheep and Lambs combined.
	lbs.	lbs.	lbs.
1922-23	7·17	2·25	6·25
1923-24	6·74	2·18	6·08
1924-25	8·56	2·44	7·21
1925-26	7·65	2·25	6·52
1926-27	7·76	2·30	6·75

The production of wool in Victoria, the quantity and value of that used locally for manufacturing purposes, and the balance available for export, in each of the last five years, were as follows :—

WOOL PRODUCTION : HOME CONSUMPTION AND EXPORTABLE BALANCE, 1922-23 to 1926-27.

Year.	Production.		Used in Manufactures.		Available for Export.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	£
1922-23	102,467,950	6,380,600	20,732,809	1,382,187	81,735,141	4,998,413
1923-24	82,513,361	7,695,000	17,067,647	1,617,871	65,445,714	6,077,129
1924-25	106,787,897	11,444,240	18,886,458	2,124,727	87,901,439	9,319,513
1925-26	111,260,814	7,082,820	22,967,529	1,579,018	88,293,285	5,503,802
1926-27	121,299,621	7,876,683	31,205,206	2,080,347	90,094,415	5,796,336

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, 1924-25 to 1926-27.

Class of Wool.	Average Price per lb. in—		
	1924-25.	1925-26.	1926-27.
GREASY MERINO.			
Extra Super (Western District)	38d. to 41d.	35d. to 38d.	32d. to 35d.
Super	31d. to 34d.	28d. to 30d.	27d. to 30d.
Good	25d. to 27d.	23d. to 25d.	23d. to 25d.
Average	22d. to 24d.	19d. to 21d.	19d. to 21d.
Wasty and Inferior	16d. to 18d.	15d. to 17d.	15d. to 17d.
Extra Super Lambs	28d. to 30d.	32d. to 34d.	32d. to 34d.
Super Lambs	21d. to 23d.	24d. to 27d.	24d. to 27d.
Good Lambs	16d. to 18d.	18d. to 20d.	18d. to 20d.
Average Lambs	13d. to 15d.	14d. to 17d.	15d. to 18d.
Inferior Lambs	7d. to 10d.	8d. to 11d.	8d. to 10d.
GREASY CROSSBRED.			
Extra Super Comebacks	32d. to 34d.	30d. to 32d.	29d. to 31d.
Super Comebacks	27d. to 30d.	26d. to 29d.	25d. to 28d.
Fine Crossbred	21d. to 23d.	20d. to 22d.	20d. to 22d.
Medium Crossbred	17d. to 18d.	16d. to 18d.	16d. to 18d.
Coarse Crossbred and Lincoln	12d. to 14d.	11d. to 12d.	11d. to 12d.
Super Fine Crossbred Lambs ..	20d. to 22d.	22d. to 24d.	22d. to 24d.
Good Crossbred Lambs	15d. to 17d.	18d. to 19d.	18d. to 20d.
Coarse and Lincoln Lambs ..	11d. to 13d.	13d. to 15d.	12d. to 14d.
SCOURED.			
Extra Super Fleece	50d. to 54d.	45d. to 48d.	45d. to 48d.
Super Fleece	45d. to 47d.	38d. to 42d.	38d. to 42d.
Good Fleece	38d. to 40d.	34d. to 36d.	34d. to 36d.
Average Fleece	29d. to 34d.	25d. to 27d.	25d. to 27d.
RECORD PRICES FOR THE SEASON.			
Greasy Merino Fleece	53½d.	42½d.	41½d.
„ Comeback Fleece	50½d.	34½d.	32½d.
„ Merino Lambs	48½d.	33½d.	46½d.
„ Comeback Lambs	41½d.	26½d.	30d.
Scoured Fleece	61d.	48½d.	47d.

Flocks of
sheep in
districts.

Returns which were collected in March, 1925, give full information in regard to the flocks of sheep in Victoria. The numbers of flocks and of sheep at that time in the different districts were as follows :—

NUMBERS OF FLOCKS AND OF SHEEP IN DISTRICTS, 1925.

District.	Number of—		Average Number of Sheep to a Flock.	Percentage of—	
	Flocks.	Sheep.		Flocks.	Sheep.
Central	2,291	990,194	432	9·66	7·84
North-Central	2,098	1,190,606	567	8·84	9·43
Western	5,003	4,122,779	824	21·08	32·66
Wimmera	4,220	2,125,327	504	17·78	16·84
Mallee	1,849	665,674	360	7·79	5·27
Northern	4,647	1,971,660	424	19·58	15·62
North-Eastern	2,073	865,435	417	8·74	6·86
Gippsland	1,550	691,340	446	6·53	5·48
Total	23,731	12,623,015	532	100·00	100·00

The figures do not include 26,883 sheep which were travelling on roads or were located in cities and towns. A comparison with figures based on collections made in 1919 and earlier years appears on page 551 of the *Year-Book* for 1924-25.

Sizes of
flocks.

Excluding sheep travelling and those in cities and towns, the following table contains a classification for the whole State of sheep according to sizes of flocks :—

SHEEP ACCORDING TO SIZES OF FLOCKS, 1925.

Size of Flocks.	Number of—		Percentage of—	
	Flocks.	Sheep.	Flocks.	Sheep.
Under 500	17,187	2,939,575	72·42	23·29
500 and under 1,000	3,692	2,519,857	15·56	19·96
1,000	1,725	2,317,968	7·27	18·36
2,000	851	2,428,522	3·59	19·24
5,000	207	1,399,428	·87	11·09
10,000	62	824,643	·26	6·53
20,000 and upwards	7	193,022	·03	1·53
Total	23,731	12,623,015	100·00	100·00

The above figures are compared with the corresponding ones for 1919 on page 552 of the *Year-Book* for 1924-25. Six of the 7 largest, 42 of the 62 second largest flocks, and 130 of the 207 flocks of between 5,000 to 10,000 sheep in 1925 were in the Western District.

Live Stock
in Australia
and
New Zealand.

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	447,988	673,089	762,672	14,919,653	284,271
New South Wales ..	622,009	906,229	1,906,915	55,731,857	332,827
Federal Capital Territory	1,383	516	4,993	198,143	94
Queensland	571,622	611,227	4,853,518	16,860,772	183,622
South Australia ..	234,352	127,292	212,715	7,283,945	79,108
Northern Territory ..	27,791	788,396		6,000	329
Western Australia ..	166,463	69,627	757,676	7,458,766	69,798
Tasmania	36,830	67,457	145,655	1,807,558	38,906
New Zealand	303,713	1,303,225	1,954,504	25,649,016	520,143

Bee-keeping. The returns for 1926-27 show that there were in that year 2,968 bee-keepers, who owned 49,483 frame and 4,640 box hives, producing 2,342,746 lbs. and 27,564 lbs. of honey respectively, and 33,238 lbs. of beeswax. The number of bee-keepers owning 20 hives and upwards was 584, as compared with 690 in the previous season. In 1926-27, the quantity of honey produced in the Wimmera district was 872,079 lbs., in the Western district, 678,380 lbs., and in the Gippsland district, 437,894 lbs. The more important particulars of the industry for the last five years are given below :—

BEE-KEEPING, 1922-23 to 1926-27.

Season ended May—			Number of Bee-keepers.	Number of Hives.	Honey produced.	Beeswax produced.
					lbs.	lbs.
1923	..	..	3,756	52,060	2,285,000	27,182
1924	..	..	3,535	60,760	2,110,713	25,371
1925	..	..	3,483	71,918	4,054,975	47,117
1926	..	..	3,799	66,192	2,114,807	28,812
1927	..	..	2,968	54,123	2,370,310	33,238

State
expenditure
on rabbit
destruction.

Active operations for the destruction of rabbits, &c., on Crown lands were first undertaken by the Government in 1880, and from that date to 30th June, 1927, sums amounting to £1,317,010 had been expended in connexion therewith, including subsidies to Shire Councils for the destruction

of wild animals. The following are the amounts spent since 1879 :—

EXPENDITURE ON DESTRUCTION OF RABBITS, ETC.

	£		£
1879-80 to 1888-89 ..	142,963	1921-22	40,766
1889-90 to 1898-99 ..	208,638	1922-23	47,410
1899-1900 to 1908-09 ..	170,050	1923-24	85,489
1909-10 to 1918-19 ..	283,693	1924-25	84,368
1919-20	36,672	1925-26	88,874
1920-21	36,158	1926-27	91,929

In addition to the expenditure of £1,317,010 referred to above, sums have frequently been advanced from Loan Funds for the purchase of wire netting for supply to municipalities and land owners. The amounts of these advances in the last five years were as follows :—£23,731 in 1922-23, £26,275 in 1923-24, £32,399 in 1924-25, £42,628 in 1925-26, and £32,338 in 1926-27. A complete system, administered by an officer called the Chief Inspector under the Vermin Destruction Act, exists for effectually keeping the 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, 1922-23 to 1926-27.

Year ended June.	Rabbits.	Hares.	Wild-fowl.
	pairs.	brace.	brace.
1922-23	431,196	21	16,428
1923-24	448,656	42	8,148
1924-25	937,704	74	11,640
1925-26	1,916,460	783	14,784
1926-27	1,640,028	78	20,406

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, 1922-23 to 1926-27.

Year ended June.	Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
	Quantity.	Value.	Quantity.	Value.
	pairs.	£	lbs.	£
1922-23	141,312	10,176	2,140,915	237,853
1923-24	80,499	8,477	2,073,613	282,266
1924-25	54,174	5,196	2,020,070	349,956
1925-26	456,849	53,423	3,513,046	579,000
1926-27	403,147	44,999	2,211,153	381,334

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 1926-27 :—

VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED,
1926-27.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet	14	9	666	250
Barwon Heads and Ocean Grove ..	9	5	1,150	215
Brighton	5	4	71	46
Corner Inlet, Welshpool, Toora, and Port Franklin	80	60	7,542	3,546
Dromana and Rosebud	27	20	2,425	288
Frankston	17	11	472	261
Geelong	85	42	3,794	1,269
Gippsland Lakes	117	97	8,139	4,109
Kerang	3	3	11	25
Lake Boga	1	1	7	20
Lorne	5	3	150	85
Lindsay River	2	2	20	36
Mallacoota	10	6	230	290
Mentone	12	9	241	142
Mordialloc, Chelsea, and Carrum ..	65	39	3,459	1,068
Mornington	53	34	2,682	902
Portarlington and St. Leonards ..	96	56	4,731	1,284
Portland	43	31	4,964	652
Port Albert	76	45	4,110	1,307
Port Campbell	2	2	120	52
Port Fairy	40	34	6,400	592
Port Melbourne	46	29	2,282	1,046
Queenscliff	123	68	15,687	1,938
Rainbow	5	4	80	15
Sandringham and Black Rock ..	51	29	4,369	804
Sorrento, Portsea, and Rye ..	61	36	4,129	853
St. Kilda	16	10	564	192
Torquay	3	3	50	41
Warrnambool	9	8	482	39
Werribee	9	5	649	215
Waranga Basin	8	6	61	74
Western Port (Cowes, Hastings, Grantville, Flinders, San Remo, and Tooradin)	124	99	12,271	2,673
Williamstown	42	31	2,704	567
Wonthaggi	4	4	216	19
Total	1,263	845	94,928	24,915

Melbourne Fish Market. The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1925-26 and 1926-27 were as shown in the next table :—

**FISH SOLD IN THE MELBOURNE FISH MARKET,
1925-26 AND 1926-27.**

		1925-26.		1926-27.	
		Quantity.	Value.	Quantity.	Value.
			£		£
Fresh Fish (Victorian)	lbs.	8,720,225	148,970	8,417,904	140,298
Crayfish	doz.	41,745	45,920	33,507	32,670
Imported Fish (fresh or frozen) ..	lbs.	3,662,898	91,572	3,987,782	99,695
Oysters	bags	13,084	50,745	10,804	8,643
Total .. ..		..	337,207	..	281,306

In addition to the above, 1,347 cwt. of smoked fish, and 2,639 baskets of prawns were sold in this market in 1926-27.

Victorian fish sold. The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and elsewhere in 1926-27 were as follows :—

VICTORIAN FISH SOLD IN 1926-27.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lbs.	doz.	£	£
Melbourne	8,417,904	10,140	140,298	9,887
Ballarat	511,838	606	8,530	511
Other	392,193	1,821	6,536	1,593
Total	9,321,935	12,567	155,364	11,991

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

FISH IMPORTED, 1925-26 AND 1926-27.

		1925-26.		1926-27.	
		Quantity.	Value.	Quantity.	Value.
Fish—			£		£
Fresh or Frozen	lbs.	2,867,725	71,243	2,810,565	70,421
Smoked .. ..	..	18,783	2,360	31,019	2,478
Fresh Oysters .. ..	..	2,823	2,165	2,115	1,699
Potted or Concentrated, &c. ..	..	..	21,869	..	23,306
Preserved in tins, &c. ..	lbs.	7,648,551	335,419	8,797,022	414,628
N.E.I.	cwt.	2,815	8,695	2,633	8,018
Total .. ..		..	441,751	..	520,550

The most important item in this table is fish preserved in tins and other air-tight vessels, of which 4,050,918 lbs. came from Canada, 820,546 lbs. from Norway, 1,442,384 lbs. from the United Kingdom, and 1,998,836 lbs. from the United States of America, in 1926-27.

The figures relating to agriculture and live stock in Victoria and Great Britain (England, Wales, and Scotland) in 1926 are, for comparative purposes, placed side by side in the table which follows:—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1926.

					Victoria.	Great Britain.
Area	..	..	..	acres	56,245,760	56,208,959
Wheat	..	..	..	bushels	46,886,020	50,773,000
Oats	..	..	..	"	4,884,006	125,440,000
Barley	..	..	..	"	1,920,722	45,920,000
Peas	..	..	..	"	198,947	1,986,800
Potatoes	..	..	..	tons	162,909	3,662,000
Turnips and swedes	..	..	..	"	1,994*	17,876,000
Mangolds	..	..	..	"	6,715	7,142,900
Hay	..	..	..	"	1,387,971	8,121,000
Horses	..	..	..	No.	447,988	1,307,491
Cattle	..	..	..	"	1,435,761	7,450,913
Sheep	..	..	..	"	14,919,653	24,061,819
Pigs	..	..	..	"	284,271	2,345,431

* 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.

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 1926-27 from miners' rights was £2,015.

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 1926-27 was £3,852.

The area of Crown and private lands under occupation for mining purposes on 31st December, 1926, was 30,334 acres. The subjoined table shows the area being worked for different minerals:—

AREA UNDER OCCUPATION FOR MINING PURPOSES,
31st DECEMBER, 1926 (CROWN LAND AND PRIVATE LAND).

Nature of Mineral, &c.						Area.
						acres.
Gold	..	..	..	..	..	18,559
Coal (ordinary)	..	..	..	..	..	3,883
Coal (brown)	..	..	..	..	..	1,024
Coal (Black and Brown)	..	..	..	..	..	100
Aluminium	..	..	..	..	..	6
Bauxite	..	..	..	..	..	120
Bluestone	..	..	..	..	..	46
Clay	..	..	..	..	..	29
Clay and Chalk	..	..	..	..	..	6
Clay and Schist	..	..	..	..	..	4
Clay and Slate	..	..	..	..	..	3
Clay and Slum	..	..	..	..	..	20
Copper and Silver	..	..	..	..	..	72
Dolomite and Clay	..	..	..	..	..	1
Decomposed Slates and Sandstone	..	..	..	..	..	2
Fire Clay	..	..	..	..	..	18
Granite	..	..	..	..	..	25
Gypsum	..	..	..	..	..	716
Hematite and Iron Ores	..	..	..	..	..	8
Infusorial Earth, Clay and Pigments	..	..	..	..	..	9
Kaolin	..	..	..	..	..	35
Kaolin and Gold	..	..	..	..	..	20
Limestone	..	..	..	..	..	91
Limestone and Clay	..	..	..	..	..	27
Magnesite	..	..	..	..	..	126
Manganese	..	..	..	..	..	166
Manganese and Cobalt	..	..	..	..	..	19
Marble	..	..	..	..	..	6
Molybdenite	..	..	..	..	..	466
Ochre	..	..	..	..	..	5
Ochres, Chalks, and Gold	..	..	..	..	..	5
Oil	..	..	..	..	..	1,915
Pigments	..	..	..	..	..	43
Quicksilver	..	..	..	..	..	55
Sand	..	..	..	..	..	49
Sand and Gravel	..	..	..	..	..	5
Silicate of Alumina	..	..	..	..	..	51
Silver and Gold	..	..	..	..	..	129
Silver and Lead	..	..	..	..	..	196
Slate	..	..	..	..	..	117
Stone	..	..	..	..	..	26
Sulphates and Oil	..	..	..	..	..	224
Tin	..	..	..	..	..	1,035
Tin and Gold	..	..	..	..	..	176
Wolfram and Tin	..	..	..	..	..	52
Tailings Licences	..	..	..	..	..	120
Water-right Licences	..	..	..	..	..	524
Total	..	..	..	..	..	30,334

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, loan moneys amounting to £520,421 (including £249,399 expended on the State Coal Mine), and 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, 1927.

STATE EXPENDITURE ON MINING, 1922-23 to 1926-27.

Item.	Expenditure from Consolidated Revenue.				
	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
	£	£	£	£	£
Mines Department	27,085	26,176	24,567	23,569	25,687
State Coal Mine	436,753	519,536	458,380	471,530	605,218
Brown Coal Mine	48,886	45,830	*	*	*
Coal Mines Regulation—Sinking Fund and Depreciation Fund	22,342	39,628	37,002	41,807	54,555
Diamond drills for prospecting ..	9,411	10,597	12,476	12,242	12,864
Testing plants	3,148	3,499	3,571	3,120	2,378
Geological and underground surveys of mines	3,071	3,436	3,591	3,595	3,791
Mining Development— Advances to companies, &c., boring for gold, coal, &c. ..	6,963	6,711	8,739	12,368	10,678
Miscellaneous	1,806	2,107	2,431	2,143	2,065
Total	559,465	657,520	550,757	570,374	717,236

* The control of the Brown Coal Mine was transferred to the Electricity Commissioners on 1st April, 1924.

Yearly grants are also made to Schools of Mines, particulars of which will be found on page 353 of this work. Since 1st July, 1899, £520,421 has been apportioned from loan receipts and expended on mining development; details of this expenditure appear in the next statement:—

LOAN MONEY EXPENDED ON MINING DEVELOPMENT.

	£
Advances to companies—Development of mining ..	62,740
“ “ Boring for gold and coal, &c. ..	62,532
Construction of roads and tracks for mining purposes ..	57,579
Plant for testing metalliferous material	12,357
Construction of races and dams	8,260
Advances to miners for prospecting	27,839
Purchase of cyanide process patent rights	20,000
Equipping Schools of Mines with mining appliances ..	9,975
State Coal Mine	249,399
Miscellaneous	9,740
Total	520,421

The advances from loan moneys and revenue to mining companies to 30th June, 1927, for the development of mining, totalled £279,532, of which sum £40,941 had up to that date been repaid, £52,246 realized, and £160,821 written off, leaving £25,524 outstanding. Interest received during 1926-27 amounted to £584, and interest outstanding on 30th June, 1927, to £2,386.

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 1926 :—

TOTAL MINERAL PRODUCTION TO 31ST DECEMBER, 1926.

Metals and Minerals.	Recorded during 1926.		Total Recorded to end of 1926.	
	Quantity.	Value.	Quantity.	Value.
Gold	Fine ozs. 49,078	208,471	Fine ozs. 71,226,075	302,548,425
Silver.. .. .	{ 2,373	307	1,463,808*	222,592
Platinum .. ..	.. .. .	..	30,577	7,880
	.. .. .	..	311	1,671
Coal, black	tons 591,001	657,798	tons 11,850,304	8,628,068
„ brown	957,935	188,899	2,712,724	652,591
Ore—copper .. ..	.. .. .	..	18,730	218,590
„ tin	29	5,075	16,924	949,688
„ antimony .. ..	.. .. .	..	104,272†	612,035
„ silver-lead .. ..	.. .. .	..	793	5,760
„ iron .. .. .	.. .. .	..	5,434	12,540
„ manganese .. ..	.. .. .	..	407	1,949
Wolfram .. .. .	.. .. .	..	118	11,785
Diamonds .. ..	.. .. .	..	..	128
Sapphires, &c. ..	.. .. .	..	..	630
Gypsum	10,217	7,613	101,473	76,655
Magnesite	94	281	1,817	5,498
Kaolin	3,153	4,157	31,353	40,719
Diatomaceous earth ..	.. .. .	..	8,657	33,137
Pigment clays	2,278	1,275	4,431	5,133
Phosphate rock	120	120	15,781	16,764
Molydenite	42	7,350	868‡	30,911
Fluorspar .. ..	.. .. .	..	623	1,888
Jarosite (Red Oxide) ..	60	660	60	660
Bluestone, freestone, granite, &c.†	.. .. .	700,200	..	9,254,591
Limestone, &c.§	.. .. .	..	..	..
Total .. .. .	.. .. .	1,782,206	.. .. .	323,340,288

* 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 was first found in Victoria in 1849 in the Pyrenees Ranges, but it was not until 1851 that the first discovery of any importance took place. In the latter part of that year the Clunes, Anderson's Creek, Ballarat, and Bendigo fields were succes-

sively discovered, and over 200,000 ounces of gold were produced. Next year the gold rush took place, and it is estimated that, in 1852, 40,000 men were camped at Ballarat, 25,000 at Castlemaine, and 40,000 at Bendigo. The production of gold in 1852 amounted to 2,286,535 ounces, and in the ten years 1852-1861 it totalled over 25,000,000 ounces. The largest quantity produced in any one year was 3,053,744 ounces in 1856. The annual value of the output for the ten years 1852-1861 averaged over £10,000,000 sterling. The estimated value of the gold produced from 1851 to 1926 was £302,548,425, as shown in the preceding statement.

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 1926.

Period.	Quantity (Gross ozs.).	Period.	Quantity (Fine ozs.).
1851-60	23,334,263	1901-10	7,095,061
1861-70	16,276,566	1911-15	2,161,349
1871-80	10,156,297	1916-20	905,561
1881-90	7,103,448	1921-25	421,250
1891-1900	7,476,038	1926	49,078

The yield has been on the down grade since 1906, the return for the State for 1926 having been the second lowest since 1851. The quantities raised in the other principal gold-producing States in 1926 were 437,343 ounces in Western Australia, 9,086 ounces in Queensland, and 19,435 ounces in New South Wales. The total production of gold in the world in 1925, as shown in the United States Mint Report, was 19,059,915 ounces.

The yield of gold for the last two years in each mining district of the State, as estimated by the mining registrars, is shown in the following table. The quantities represented by the aggregate figures, which are given in gross ounces, were 141 ounces less than the total output in 1925, and exceeded that for 1926 by 5 ounces:—

DISTRICT YIELDS OF GOLD, ALLUVIAL AND QUARTZ, 1925 AND 1926.

Mining District.	1925.			1926.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Ararat and Stawell ..	3,703	60	3,763	1,492	35	1,527
Ballarat	910	1,068	1,978	712	1,474	2,186
Beechworth	6,631	10,844	17,475	3,384	15,905	19,289
Bendigo	337	17,347	17,684	367	16,415	16,782
Castlemaine	1,529	7,194	8,723	1,110	10,887	11,997
Gippsland	145	121	266	212	1,103	1,315
Maryborough	193	1,634	1,827	185	738	923
Total	13,448	38,268	51,716	7,462	46,557	54,019

Gold-mining
dividends.

The amount of the dividends declared in each of the last five years by gold-mining companies operating in each mining district of the State was as follows :—

DIVIDENDS PAID BY GOLD MINING COMPANIES IN EACH MINING DISTRICT, 1922 to 1926.

Mining District.	Amount Distributed.				
	1922.	1923.	1924.	1925.	1926.
	£	£	£	£	£
Ararat and Stawell .. ..	..	..	..	..	..
Ballarat .. ..	..	1,635	475	..	..
Beechworth	18,450	9,000	..	..	1,000
Bendigo	20,250	37,872	13,500	6,000	1,500
Castlemaine	17,883	12,459	..	..	..
Gippsland .. ..	..	..	..	..	..
Maryborough .. ..	..	..	..	..	..
Total	56,583	60,966	13,975	6,000	2,500

The average number of men employed in gold mining is estimated annually by the Mines Department. The figures for the last five years are given below :—

NUMBER OF MEN EMPLOYED IN GOLD MINING, 1922 to 1926.

Year.	Alluvial Miners.	Quartz Miners.	Total.
1922	1,048	2,262	3,310
1923	770	2,212	2,982
1924	816	1,835	2,651
1925	725	1,628	2,353
1926	550	1,417	1,967

The number of men employed in each mining district in 1926 was as follows :—Ararat and Stawell, 155 ; Ballarat, 57 ; Bendigo, 680 ; Beechworth, 470 ; Castlemaine, 360 ; Gippsland, 180 ; and Maryborough, 65.

The value of the mining plants employed in alluvial and quartz mining during each of the last five years was as shown hereunder :—

VALUE OF MACHINERY ON GOLD-FIELDS, 1922 to 1926.

Year.	Approximate Value of Machinery Employed in—		
	Alluvial Mining.	Quartz Mining.	Total.
	£	£	£
1922	135,295	508,630	643,925
1923	133,200	486,300	619,500
1924	95,777	381,050	476,827
1925	99,179	331,550	430,729
1926	81,849	301,550	383,399

Dredging and sluicing. A feature of alluvial mining in Victoria for the last twenty-five years has been the treatment in bulk of low-grade auriferous alluvial deposits and their overburden by bucket dredges and pump hydraulic sluicing plants on barges. In 1926, the number of pump hydraulic sluices at work was 4, in addition to which 11 jet elevators, 3 gravitation plants, and 1 bucket dredge were operating. Particulars relating to these dredging and sluicing plants for the last five years are as follows:—

DREDGING AND SLUICING, 1922 TO 1926.

Year.			Number of Plants.	Area Worked.	Quantity of Material Treated.	Gold Obtained.	Tin Obtained.
				acres.	cub. yds.	ozs.	tons.
1922	..	..	32	41	1,736,735	11,939	115
1923	..	..	24	27	1,294,300	9,017	77
1924	..	..	17	13	1,198,900	5,260	38
1925	..	..	19	22	1,332,600	7,184	69
1926	..	..	19	11	539,260	3,554	29

These plants employed 109 men in 1926. The yield of gold in that year per cubic yard of material was 3·2 grains. Since the inception of dredge mining 1,891,095 ounces of gold and 1,677 tons of tin have been won by this system.

Cyanidation. The quantity of tailings treated at old lode and alluvial mines by the cyanide process and the yield of gold therefrom are shown in the subjoined table for the last five years:—

CYANIDATION, 1922 TO 1926.

Year.				Number of Plants.	Quantity of Tailings Treated.	Yield of Gold.	Value of Yield.
					tons.	ozs.	£
1922	..	..	..	12	41,163	5,847	22,654
1923	..	..	..	14	18,644	3,415	13,445
1924	..	..	..	14	12,108	2,052	7,637
1925	..	..	..	14	8,344	971	3,281
1926	..	..	..	7	7,748	1,323	5,028

Records show that the total amount of tailings which have been treated by the cyanide and other processes is 16,010,631 tons, and that the gold which has been won thereby amounts to 1,283,052 ounces, which is equal to an average yield of 1 dwt. 14 grs. per ton.

A Sludge Abatement Board, appointed by the Government, is entrusted with the duty of regulating the disposal of mining sludge, and preventing the silting of streams and injury to lands by battery sand and infertile debris.

Government batteries. Batteries for testing small quantities of ore for prospectors have been erected by the Government in various mining districts. The number of these plants and their operations in the last five years were as follows :—

GOVERNMENT BATTERIES, 1922 to 1926.

Year.					Number of Batteries.	Quantity of Ore Treated.	Yield of Gold.
						tons.	ozs.
1922	..	..	..	..	34	1,286	1,424
1923	..	..	..	..	34	1,000	649
1924	..	..	..	..	33	1,006	668
1925	..	..	..	..	31	895	776
1926	..	..	..	..	31	476	618

Since 1897, the year in which the first battery was erected, 75,567 tons of ore have been crushed for 52,861 ounces of gold.

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 2,712,724 tons, valued at

£652,591, of which, 876,468 tons were obtained in 1925, and 957,935 tons in 1926. Of the total output for 1926, 219,376 tons valued at £76,908 were obtained from the State Brown Coal Mine at Morwell, and 734,004 tons valued at £110,600 from the State Mine at Yallourn.

A comprehensive statement of the activities controlled by the State Electricity Commission of Victoria will be found on page 591.

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, 1926, was 531,869 tons, valued at £585,055. The total output up to the end of 1926 was 7,451,450 tons, valued at £5,795,977. The average number of men employed at the mine throughout the year ended 31st December, 1926, was 1,741.

Victorian coal production and value. The quantity of coal, exclusive of brown coal, raised in Victoria up to the end of 1926 was 11,850,304 tons, valued at £8,628,068. The total quantity raised prior to 1892, the average annual production for different periods from 1892 to 1920, and the production for each of the years 1921 to 1926, together with 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	..	..	514,859	23 5
1922	..	..	559,284	23 9
1923	..	..	476,823	22 0
1924	..	..	518,315	22 0
1925	..	..	534,246	22 4
1926	..	..	591,001	22 3

* Total production up to date mentioned.

The quantities of coal produced in the other States in 1926 were as follows :—New South Wales, 10,885,766 tons; Queensland, 1,221,059 tons; Western Australia, 474,819 tons; and Tasmania, 90,661 tons.

The numbers of fatal and non-fatal accidents in gold and coal mines during the last five years are shown below. 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, 1922 to 1926.

Year.	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1922	3,310	..	4	1,953	..	11
1923	2,982	1	6	2,131	1	11
1924	2,651	..	2	2,289	3	17
1925	2,353	1	6	2,593	5	20
1926	1,967	5	14	2,939	2	6

As a result of gold mining accidents during the last five years 7 persons were killed and 32 were injured and rendered unfit for work for a period of at least fourteen days. These numbers were equivalent to annual rates of 0·53 and 2·41 respectively per 1,000 employed. Coal mining accidents during the same period accounted for 11 deaths and 65 injuries resulting in disablement for at least fourteen days, these being equal to yearly rates of 0·92 and 5·46 respectively per 1,000 employees.

The record of boring operations conducted by the Mines Department during the last five years is as follows:—

GOVERNMENT BORING OPERATIONS, 1922 to 1926.

Year.	Number of Machines.	Bores put down for—				Total Depth Bored.
		Gold.	Coal.	Other Minerals.	Total.	
1922	15	6	182	..	188	feet. 25,200
1923	13	4	67	1	72	19,670
1924	14	16	74	2	92	34,300
1925	13	10	38	15	63	30,000
1926	14	29	45	14	88	20,000

Note—The boring done at the State Coal Mine is not included.

Antimony. Up to the end of 1926 the quantity of antimony produced in Victoria was 104,272½ tons of concentrates valued at £612,035. The whole of it was obtained at Costerfield. No antimony was obtained in 1926, but, for the previous year, the yield was 120½ tons of concentrates valued at £5,380.

Tin. The production of tin ore in the State up to the end of 1926 was 16,924 tons, valued at £949,688. In the year 1926 the quantity produced was 29 tons, as against 69 tons in 1925, 38 tons in 1924, 78 tons in 1923, and 115 tons in 1922. Of the tin won during the last five years nearly the whole was obtained in the Beechworth district.

Gypsum. The quantity of gypsum produced in the State in 1926 was 10,217 tons, most of which was obtained at Bolton, Waitchie, and Boort. The output for the previous year was 14,518 tons. Up to the end of 1926 the quantity raised in Victoria was 101,473 tons, valued at £76,655.

Kaolin. The quantity of kaolin produced in 1926 was 3,153 tons, and in the previous year, 1,594 tons. Up to the end of 1926 the total output was 31,353 tons, valued at £40,719.

Molybdenite. The total value of molybdenite produced in the State up to the end of 1926 was £30,911. In the year 1926 the output was valued at £7,350, as against £5,545 in 1925. The whole of the output was obtained at Everton, near Beechworth.

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

QUARRIES, 1922-23 TO 1926-27.

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.	c. yds.	c. yds.	£
1923 ..	106	1,244,262	10,776	1,775	*	384,510
1924 ..	105	1,429,719	2,536	2,242	*	436,175
1925 ..	117	1,504,093	1,926	2,387	221,171	497,270
1926 ..	127	1,650,461	6,000	2,444	300,708	587,910
1927 ..	116	1,941,739	8,368	6,848	308,095	700,200

* Informatio not available.

In 1926-27 the number of persons employed in quarries was 2,516, and the wages paid amounted to £567,826. These figures include the employees and wages connected with stone-breaking and tar-paving works, most of which are carried on in conjunction with quarries and cannot be separated therefrom.

MANUFACTURING INDUSTRIES.

Industrial progress.

The earliest year for which there are statistical records of the factories of the State is 1850, at which date the number of manufacturing establishments is shown to have been 68. Subsequently fair and regular progress was made in the industry until in 1900, the year before Federation, there were 3,097 factories working. The years immediately following Federation were marked by increased industrial activity, which was well maintained in later years. During the last ten years nearly all existing lines of manufacture have shown a notable expansion, and many industries new to the State have been firmly established. Since 1917-18 the number of factories has increased by 37 per cent., the number of persons employed by 37 per cent., the amount of salaries and wages paid by 155 per cent., the value of output by 90 per cent., the value of machinery and plant and premises by 151 per cent., and the horse power of factory machinery by 178 per cent. The difference between the cost of materials used and the value of the output was equivalent to an added value of £356 4s. 7d. per person employed in 1926-27, as compared with £210 17s. 3d. in 1917-18. In 1917-18, 77 per cent. of factories used mechanical power as against 86 per cent. in 1926-27. The increase in the added value relatively to employees, the larger proportion of factories using power, and the higher aggregate power of establishments as a whole are indications of increasing industrial efficiency. The proportion of children employed in factories to total employees was 5 per cent. in 1917-18 and 5·58 per cent. in 1926-27.

Since 1917-18 the number of factories employing over 100 hands has increased by 26·5 per cent., and the number of hands employed by such factories has increased by 38·2 per cent. While factories of this size formed only 3·2 per cent. of the total number in the State in 1926-27, they employed 42·8 per cent. of the total number of hands.

The appended table summarizes the position of the industries at various stages since 1871, but, the figures for the years prior to 1911 are not strictly comparable, for the reason that they have not been compiled upon the same basis.

GROWTH IN THE MANUFACTURING INDUSTRIES.

Year.	Number of Factories.	Number of Persons employed.	Amount of Salaries and Wages paid.	Value of Plant, Machinery, Land, and Buildings.	Value of Output.
			£	£	£
1871 ..	1,740	19,468	*	4,725,125	*
1881 ..	2,488	43,209	*	8,044,296	†13,370,836
1891 ..	3,141	52,225	*	16,472,859	†22,390,251
1901 ..	3,249	66,529	*	12,298,500	§19,478,780
1911 ..	5,126	111,948	8,911,019	18,257,889	41,747,863
1912 ..	5,263	116,108	10,102,244	19,457,795	45,410,773
1913 ..	5,613	118,744	10,714,336	20,775,738	47,936,647
1914 ..	5,650	118,399	11,099,940	21,975,646	49,439,985
1915 ..	5,413	113,834	11,036,345	22,529,072	51,466,093
1916-17 ..	5,445	116,970	11,833,517	23,784,289	60,047,284
1917-18 ..	5,627	118,241	12,502,601	25,460,282	67,066,715
1918-19 ..	5,720	122,349	14,080,403	27,318,735	80,195,677
1919-20 ..	6,038	136,522	17,702,173	30,804,520	101,475,363
1920-21 ..	6,532	140,743	21,377,216	35,492,735	106,008,294
1921-22 ...	6,753	144,876	23,846,495	40,992,280	106,243,181
1922-23 ..	7,096	152,625	25,547,192	46,423,240	111,286,343
1923-24 ..	7,289	156,162	27,472,084	53,196,475	113,921,927
1924-25 ..	7,425	154,158	29,057,052	61,031,975	118,177,398
1925-26 ..	7,461	152,959	29,329,400	60,396,500	119,986,439
1926-27 ..	7,630	161,639	31,822,589	63,850,005	127,397,951

* Particulars not available.

† 1880.

‡ 1890.

§ 1900.

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.

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* 1915 (No. 2650) consolidated all Acts passed prior to that date. The general provisions of factory legislation, including "Wages Boards," are fully dealt with in Part "Social Condition" of this work.

In the year 1902 the classification of industries for statistical purposes, as shown in the next table, was adopted by the Statisticians of Australia. A factory was 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 1926-27 the number of factories in each industry, the power used, the 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:—

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1926-27.

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Victorian Year-Book, 1926-27.

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.—Treating Raw Material the product of Pastoral Pursuits, or Vegetable Products, not otherwise classed.</i>										
Boiling down	9	319	8	178	..	..	53,941	11,337	197,645	274,658
Bone milling	12	801	12	105	..	3	31,666	15,902	53,774	119,786
Tanning	44	4,203	65	2,220	..	19	570,283	41,896	1,814,634	2,760,910
Fellmongering	32	1,479	30	539	..	2	139,216	28,073	1,678,183	2,069,151
Chaffcutting and grain crushing ..	138	2,203	115	545	..	15	87,622	11,987	776,327	989,823
Other	8	63	5	249	..	2	61,861	402	145,854	237,661
Total	243	9,068	235	3,836	..	41	944,589	109,597	4,666,417	6,451,989
<i>Class II.—Oils and Fats, Animal and Vegetable.</i>										
Oil, grease, glue	13	735	10	208	..	18	61,444	15,442	290,742	429,804
Soap and candle	18	768	13	532	..	160	145,502	40,000	646,322	1,111,040
Total	31	1,503	23	740	..	178	206,946	55,442	937,064	1,540,844

Class III.—Processes relating to Stone, Clay, Glass, &c.

Bricks, tiles, pipes and pottery ..	95	8,576	65	2,508	..	148	631,362	264,432	173,889	1,475,557
Cement, including cement tiles and pipes ..	36	8,672	8	1,005	..	6	250,243	197,431	288,637	1,081,748
Glass, including bottles ..	4	1,565	6	675	..	15	173,314	60,971	107,090	507,787
Glass bevelling ..	29	124	22	296	1	4	76,409	1,314	113,034	227,428
Marble and stone dressing ..	48	713	60	418	..	8	123,922	3,886	73,286	251,255
Modelling ..	50	574	59	616	..	12	157,558	6,609	213,957	469,593
Other ..	15	534	10	174	..	1	41,013	28,248	36,241	120,793
Total ..	277	20,758	230	5,692	1	194	1,453,821	562,891	1,006,134	4,084,161

Class IV.—Working in Wood.

Cooperage ..	11	361	7	269	..	1	83,657	2,816	61,353	186,653
Saw-milling (forest) ..	207	4,358	284	2,565	..	13	597,744	1,218	115,827	999,495
Saw-milling, joinery, &c. ..	336	11,031	268	4,391	..	75	1,111,869	35,963	1,688,340	3,308,817
Boxes and Cases ..	42	1,493	37	388	2	4	111,494	5,328	215,533	381,139
Wood carving, turning ..	69	1,242	61	469	2	24	124,324	5,484	156,273	352,779
Other ..	13	189	19	218	..	37	53,493	637	75,880	150,064
Total ..	678	18,674	676	8,300	4	154	2,082,581	51,446	2,313,206	5,378,947

Class V.—Metal Works, Machinery, &c.

Agricultural implement ..	73	3,911	70	3,616	..	134	931,404	51,620	891,930	2,228,570
Engineering ..	315	7,451	358	5,838	4	133	1,551,664	82,694	1,653,951	3,948,285
Railway workshop ..	21	6,854	..	7,042	..	6	1,755,202	77,855	1,859,932	4,257,700
Ironworks and foundries ..	117	6,507	125	3,728	1	133	951,571	122,850	1,075,029	2,611,695
Sheet-iron, tin, &c. ..	118	1,149	116	1,769	..	271	414,832	15,778	663,487	1,323,515
Brass, copper smithing ..	101	1,008	112	1,374	..	71	345,704	18,048	314,329	839,517
Wireworking ..	27	640	34	357	..	22	97,116	3,184	218,638	379,818
Electrical apparatus ..	105	1,100	92	1,275	..	74	307,464	9,835	283,005	747,172
Stove, range ..	23	171	29	257	..	..	71,530	4,008	49,125	157,063
Other ..	123	2,201	107	1,376	2	37	345,010	23,233	598,179	1,199,273
Total ..	1,023	30,992	1,043	26,632	7	881	6,771,497	409,105	7,607,605	17,692,908

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1926-27—continued.

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.—Connected with Food and Drink, &c.</i>										
Bacon curing	21	1,821	28	511	..	21	151,622	20,552	1,063,199	1,425,509
Butter, cheese	182	6,456	31	1,995	..	294	552,659	143,344	6,582,332	7,813,409
Meat freezing, preserving	13	4,812	..	720	..	10	185,760	23,209	1,644,631	2,032,843
Biscuit	9	755	5	764	..	560	212,390	23,051	729,889	1,220,747
Flourmilling	44	6,073	29	1,040	..	25	267,873	50,068	5,017,009	5,789,618
Jam, fruit, sauce, &c.	58	1,860	26	1,647	2	929	504,442	35,580	1,489,407	2,427,373
Oatmeal, starch, &c.	45	2,177	17	395	3	371	135,180	18,568	934,124	1,362,310
Sugar, confectionery, &c.	136	10,830	118	2,293	19	2,019	810,001	134,736	4,779,147	6,607,207
Aerated water, cordial, &c.	107	617	103	628	8	93	175,236	8,601	331,312	696,393
Malt	21	555	10	266	..	4	75,531	18,290	491,550	725,192
Brewing	10	5,123	3	1,147	..	6	377,393	66,509	1,143,932	2,605,704
Distilling	9	508	2	146	..	6	38,849	12,132	177,079	338,102
Condiments, coffee, cocon, &c.	15	851	4	268	..	142	81,314	8,440	394,473	584,899
Tobacco, &c.	12	615	19	1,071	..	611	353,842	8,422	1,146,122	1,921,004
Other	50	4,486	41	422	..	9	122,044	45,142	197,081	521,541
Total	732	47,539	436	13,313	32	5,100	4,044,136	616,644	26,121,287	36,071,851

*Class VII.—Clothing and Textile
Fabrics, and Fibrous Material.*

Woollen mill	27	13,995	17	2,955	..	3,745	1,012,566	151,998	2,299,910	4,581,445
Clothing, tailoring, &c.	530	546	497	1,602	50	7,033	1,315,336	21,916	1,997,060	3,807,553
Dressmaking and millinery	505	630	146	313	359	8,002	1,011,496	14,984	1,910,914	3,374,749
Underclothing, shirt	178	1,035	107	473	73	6,280	825,842	15,755	2,038,513	3,377,463
Hat, cap	53	605	49	545	3	1,148	299,444	10,914	413,813	886,457
Hosiery	176	2,141	124	976	76	4,942	799,361	28,176	1,675,244	3,164,652
Oilskin, waterproof clothing	9	53	7	73	1	238	51,340	934	84,162	167,794
Boot, shoe	204	3,366	266	6,329	21	5,576	2,140,054	40,565	3,058,257	6,105,072
Boot repairing	272	364	254	259	..	18	101,738	2,373	74,663	227,636
Fur	55	94	52	189	13	365	99,188	1,552	361,740	552,188
Sail, tent, rope, twine, &c.	29	1,721	32	607	..	488	188,288	14,483	534,374	930,211
Other	49	284	43	274	5	476	127,076	6,900	212,223	416,567
Total	2,087	24,834	1,594	14,595	601	38,311	7,971,729	310,550	14,660,873	27,591,787

*Class VIII.—Books, Paper, Printing,
Engraving, &c.*

Printing	445	5,989	527	5,797	14	1,659	1,914,975	51,393	1,938,372	4,869,350
Bookbinding, &c.	37	410	33	673	1	600	225,060	5,550	286,040	643,174
Papermaking, paper bags, boxes &c.	46	2,286	32	804	3	998	321,604	59,203	573,110	1,243,336
Die sinking, engraving, &c.	20	93	25	158	..	7	40,736	1,035	16,423	78,820
Other	34	317	39	255	2	93	81,496	3,121	116,814	256,557
Total	582	9,095	656	7,687	20	3,357	2,583,871	120,302	2,930,759	7,091,237

<i>Class IX.—Musical Instruments</i>	19	376	8	508	..	16	124,610	2,269	150,304	337,548
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<i>Class X.—Arms and Explosives</i>	8	689	1	322	..	214	118,442	17,872	227,946	440,722
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FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1926-27—continued.

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Victorian Year-Book, 1926-27.

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 XI.—Vehicles and Fittings, Saddlery, Harness, &c.</i>							£	£	£	£
Coachbuilding	235	1,562	273	1,561	..	18	375,662	14,084	318,026	869,997
Motor Body Building and Repairs ..	72	962	97	1,878	..	48	496,529	10,313	636,222	1,359,157
Motor, repairs and assembling ..	599	2,237	442	3,431	..	66	760,998	31,771	83,948	1,129,738
Saddle, harness	26	35	27	159	..	40	44,456	309	61,415	122,777
Other	17	66	23	162	..	11	38,996	630	52,035	108,764
Total	949	4,862	862	7,191	..	183	1,716,581	57,107	1,151,641	3,590,428
<i>Class XII.—Shipbuilding, Fitting, &c.</i>	13	1,358	10	372	..	6	92,795	5,686	37,827	167,572
<i>Class XIII.—Furniture, Bedding, &c.</i>										
Upholstery, bedding, &c. ..	72	970	48	627	3	306	185,227	6,399	412,818	730,156
Cabinet, including billiard table ..	344	3,511	419	2,943	..	98	702,910	20,720	774,070	1,829,102
Picture frame	16	37	17	60	..	8	17,701	342	20,655	47,308
Other	64	439	57	680	3	196	171,902	4,840	321,711	593,527
Total	496	4,957	541	4,310	6	603	1,077,740	32,301	1,529,254	3,200,093

*Class XIV.—Drugs, Chemicals, and
By-products.*

Polishes, &c.	19	203	8	117	..	140	52,135	2,083	209,145	324,010
Chemicals, drugs, &c.	53	2,157	18	701	2	696	261,045	24,109	482,549	1,006,195
Fertilizers	8	2,068	..	931	..	6	246,219	43,091	1,027,516	1,759,892
Other	34	607	24	145	1	22	38,155	2,759	101,330	195,579
Total	114	5,035	50	1,894	3	864	597,554	72,042	1,820,540	3,285,676

*Class XV.—Surgical and Scientific
Appliances*

44	89	35	216	1	17	51,558	1,530	38,681	119,518
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*Class XVI.—Timepieces, Jewellery,
and Plated-ware*

117	546	123	797	1	123	214,018	7,598	225,417	547,052
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*Class XVII.—Heat, Light, and
Energy.*

Electric light	86	219,626	5	1,109	..	6	323,286	682,482	2,001	1,768,514
Gas, coke	33	2,810	..	955	..	4	264,918	127,562	915,890	1,967,485
Other	10	3,570	2	469	..	434	177,389	32,807	776,953	1,330,232
Total	129	226,006	7	2,533	..	444	765,593	842,851	1,694,844	5,066,231

*Class XVIII.—Rubber and Leather-
ware (except Saddlery and Harness)*

Fancy leather, belting, &c. ..	61	310	61	473	..	403	155,510	3,271	299,066	528,019
Rubber goods	69	8,146	57	2,759	..	743	800,029	112,999	2,300,674	4,032,609
Total	130	8,456	118	3,232	..	1,146	955,539	116,270	2,599,740	4,560,628

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1926-27—*continued.*

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Victorian Year-Book, 1926-27.

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 XIX.—Wares, not elsewhere included.</i>							£	£	£	£
Umbrella	5	12	4	62	..	153	31,027	276	75,700	129,274
Foys	6	53	4	38	..	..	8,875	229	13,839	28,733
Other Industries	7	90	2	41	..	9	9,087	440	7,857	20,752
Total	18	155	10	141	..	162	48,989	945	97,396	178,759
Grand Total	7,690	414,992	6,658	102,311	676	51,994	31,822,589	3,392,448	69,816,935	127,397,951

Increase in
value of out-
put of certain
industries,
1921-22 and
1926-27.

Most of the more important manufacturing industries in the State have shown a substantial increase in the value of output in the last five years. The output for the years 1921-22 and 1926-27 of a number of leading industries is shown in the following table, the industries being arranged in order of increase in value:—

OUTPUT OF INDUSTRIES, 1921-22 AND 1926-27.

Industry.	Value of Output.		Increase in Five Years.	
	1921-22.	1926-27.	Value.	Per cent.
	£	£	£	
Rubber goods	1,556,224	4,032,609	2,476,385	159·1
Woollen mills	2,482,761	4,581,445	2,098,684	84·5
Motor, &c.	1,127,608	2,488,890	1,361,282	120·7
Railway workshops	3,182,559	4,257,700	1,075,141	33·8
Jam, preserves, pickles, &c. ..	1,538,230	2,427,373	889,143	57·8
Knitting, hosiery	2,297,739	3,164,652	866,913	37·7
Fellmongeries	1,212,620	2,069,151	856,531	70·6
Underclothing, shirts, &c. ..	2,613,300	3,377,463	764,163	29·2
Engineering, ironworks and foundries, &c.	5,897,158	6,639,072	741,914	12·6
Butter, cheese, &c.	7,115,642	7,813,409	697,767	9·8
Furniture, cabinetmaking	1,247,508	1,829,102	581,594	46·6
Cement and cement goods	458,474	1,031,748	573,274	125·0
Bricks, tiles, pottery	999,383	1,475,557	476,174	47·6
Meat preserving	1,564,475	2,032,843	468,368	29·9
Agricultural implements	1,767,843	2,228,570	460,727	26·1
Fertilizers	1,302,288	1,759,892	457,604	35·1
Breweries	2,200,882	2,605,704	404,822	18·4
Sawmilling, joinery, boxes and cases	3,649,316	4,042,735	393,419	10·8
Electrical apparatus	364,411	747,472	383,061	105·1
Electric light and power	1,407,268	1,768,514	361,246	25·7
Upholstery, bedding	483,326	840,804	357,478	74·0
Paper, paper bags, &c.	900,379	1,243,336	342,957	38·1
Modelling, plaster sheets	136,633	469,593	332,960	243·7
Oatmeal, &c.	993,149	1,319,218	326,069	32·8
Confectionery	2,289,555	2,605,704	316,149	13·8
Boots and boot repairs	6,043,172	6,332,708	289,536	4·8
Biscuit	942,440	1,220,747	278,307	29·5
Fur	285,796	552,188	266,392	93·2
Dressmaking, millinery	3,142,365	3,374,749	232,384	7·4
Distilleries	113,645	338,102	224,457	197·5
Chemicals, drugs	791,125	1,006,195	215,070	27·2
Printing	4,694,295	4,869,350	175,055	3·7
Brass and copper	665,649	839,517	173,868	26·1

INDIVIDUAL INDUSTRIES.

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

Tanneries,
&c.

The development of the tanning and fellmongering industry during the past ten years is shown by the particulars contained in the next two tables :—

TANNERIES, ETC., 1917-18 to 1926-27.

Year.	Number of Establishments.	Horse-power of Engines.	Value of Machinery and Plant in Use.	Persons Employed.	Number of Working Proprietors	Amount of Wages Paid.
			£			£
1917-18	76	3,476	271,120	2,485	69	347,753
1918-19	81	4,035	370,765	2,984	74	455,548
1919-20	86	4,631	400,110	3,384	85	631,920
1920-21	80	4,707	436,395	2,851	87	675,152
1921-22	78	5,341	504,355	2,995	93	625,446
1922-23	79	5,530	513,815	3,052	105	652,026
1923-24	80	5,850	557,930	2,429	105	646,015
1924-25	76	5,929	567,315	2,815	99	*661,695
1925-26	76	5,975	579,445	2,938	96	*687,475
1926-27	76	5,682	564,530	2,375	95	*709,499

* Including amounts drawn by working proprietors.

The quantity of bark used in connexion with tanning operations in 1926-27 was 12,446 tons. The output of tanneries and fellmongeries for each of the last ten years was as follows :—

OUTPUT OF TANNERIES, ETC., 1917-18 to 1926-27.

Year.	Number Tanned—			Sheep Skins Stripped.	Wool Washed (weight after washing).	Value of Articles produced or Work done.
	Hides and Skins.					
	Cow and Ox.	Calf.	Sheep and other Skins.			
				number	lbs.	£
1917-18 ..	601,950	217,605	1,418,595	1,641,000	24,560,590	5,061,236
1918-19 ..	670,956	234,548	1,742,898	2,354,487	34,483,316	6,913,279
1919-20 ..	738,907	251,973	2,780,017	5,030,438	38,191,912	8,296,091
1920-21 ..	694,322	308,542	1,406,472	2,604,413	14,619,943	4,200,077
1921-22 ..	792,974	512,515	2,042,317	2,214,980	17,458,847	3,953,649
1922-23 ..	780,221	663,813	2,403,940	2,407,830	19,939,785	4,577,664
1923-24 ..	788,942	526,818	2,387,235	971,559	12,885,685	4,675,911
1924-25 ..	783,115	557,354	1,849,575	1,225,616	13,469,200	4,604,042
1925-26 ..	775,972	542,166	1,896,652	1,523,506	15,875,925	4,491,077
1926-27 ..	660,905	645,945	1,487,468	1,602,165	17,387,073	4,836,061

The value of the leather imported into Victoria from overseas countries during the year ended 30th June, 1927, was £182,660.

Particulars in regard to the soap and candle works in the State for the past ten years are given below :—

SOAP AND CANDLE WORKS, 1917-18 to 1926-27.

Year.	Number of Establishments.	Value of Machinery and Plant in Use.	Persons Employed.	Amount of Wages Paid.	Products.		Value of Output.
					Soap.*	Candles.	
		£		£	cwt.	cwt.	£
1917-18	17	130,795	769	91,604	228,310	37,290	951,114
1918-19	15	140,600	681	92,663	206,429	39,680	957,295
1919-20	16	143,310	738	103,333	243,156	40,908	1,321,112
1920-21	16	164,110	696	115,749	225,748	32,662	1,134,820
1921-22	17	174,460	742	139,519	267,858	31,613	1,096,955
1922-23	19	196,355	769	142,685	296,888	39,519	1,152,270
1923-24	17	210,270	741	147,124	289,364	34,424	937,148
1924-25	17	201,400	714	143,779†	295,672	29,415	1,176,919
1925-26	17	214,125	700	147,161†	295,930	28,048	1,185,722
1926-27	18	235,705	705	145,502†	331,728	25,359	1,111,040

* Not including soap made in small soap works not classified as factories, viz., 1,134 cwt. in 1917-18, 1,054 cwt. in 1918-19, 907 cwt. in 1919-20, 996 cwt. in 1920-21, 859 cwt. in 1921-22, 1,346 cwt. in 1922-23, 1,258 cwt. in 1923-24, 736 cwt. in 1924-25, 920 cwt. in 1925-26, and 853 cwt. in 1926-27.

† Including amounts drawn by working proprietors.

The quantity of tallow used in 1926-27 in the manufacture of soap and candles was 195,915 cwt. in factories, and 510 cwt. in minor works.

The imports from oversea countries in 1926-27 included 371,907 lbs. of soap valued at £33,160, and 52,911 lbs. of candles valued at £3,509.

Particulars relating to brickyards and potteries for the ten years 1917-18 to 1926-27 are shown in the following statement. The value of the land, plant, buildings, &c., used in connexion with such works in 1926-27 was £1,065,645 :—

BRICKS, POTTERY, PIPES, AND TILES, 1917-18 TO 1926-27.

Year.	Number of Establishments.	Persons Employed.	Amount of Wages Paid	Number of Bricks Made.*	Value of—	
					Pipes and Tiles.	Pottery.
			£		£	£
1917-18 ..	78	1,907	231,090	107,139,000	171,836	73,398
1918-19 ..	84	2,361	314,452	133,176,000	246,763	121,286
1919-20 ..	93	2,569	336,295	119,142,000	255,562	97,844
1920-21 ..	92	2,794	481,352	203,425,000	362,495	177,410
1921-22 ..	93	2,655	495,288	169,715,000	355,784	185,293
1922-23 ..	92	3,201	631,454	227,183,000	439,159	203,828
1923-24 ..	104	3,540	735,719	247,598,000	541,796	241,821
1924-25 ..	102	3,069	655,034†	201,440,000	427,522	296,551
1925-26 ..	98	2,902	621,631†	190,505,000	423,113	205,874
1926-27 ..	95	2,721	631,362†	230,914,000	493,627	158,071

* In addition, there are bricks made in small brickyards not tabulated as factories.

† Including amounts drawn by working proprietors.

The estimated value of bricks made in 1926-27 was £793,892, being an increase of £122,147 on the value of those made in the preceding year.

Detailed information in regard to the forest saw-mills of the State for the ten years 1917-18 to 1926-27 is given in the table which follows :—

FOREST SAW-MILLS, 1917-18 TO 1926-27.

Year.	Number of Mills.	Value of Machinery and Plant in Use.	Persons Employed.	Amount of Wages Paid.	Victorian Timber Sawn.	
					Quantity.	Value.
		£		£	super ft.	£
1917-18 ..	162	260,280	2,106	248,940	78,984,000	355,430
1918-19 ..	187	315,670	2,506	319,547	91,540,000	503,470
1919-20 ..	203	366,355	2,884	406,335	99,142,000	693,995
1920-21 ..	246	473,275	3,509	563,627	113,215,000	905,720
1921-22 ..	239	517,725	3,356	627,432	112,008,000	896,070
1922-23 ..	227	516,800	3,230	616,680	118,366,000	946,930
1923-24 ..	241	624,590	3,587	686,419	134,639,000	942,476
1924-25 ..	234	559,450	3,318	667,684*	114,705,000	745,582
1925-26 ..	215	642,140	2,955	579,795*	109,534,000	711,971
1926-27 ..	207	573,550	2,862	597,744*	115,813,000	914,334

* Including amounts drawn by working proprietors.

In addition to the forest saw-mills there were 471 other factories working in wood. Particulars relating to these for the year 1926-27 are given on page 571.

Firewood.

The quantity of timber sawn for firewood consumption in the year 1926-27 was 286,363 tons valued at the saw-mills at £305,166. 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.

Owing to a revision of the classification of Victorian statistics, Dairy Machinery has now been amalgamated with Agricultural Implements, and the main particulars are shown hereunder for the year 1926-27 :—

AGRICULTURAL AND DAIRY MACHINERY WORKS, 1926-27.

Year.	No. of Factories.	Persons Employed.	Wages Paid.	Value of—		
				Fuel, &c., Used.	Materials Used.	Output.
1926-27 ..	73	3,820	£ 931,404*	£ 51,620	£ 891,930	£ 2,228,570

* Including amounts drawn by working proprietors.

The stripper-harvester, which is a Victorian invention, is one of the principal implements manufactured.

In the following table particulars of bacon and ham curing establishments are given for the ten years 1917-18 to 1926-27. The value of the machinery, plant, land and buildings in connexion with these establishments was £157,710 in 1917-18 and £319,115 in 1926-27.

BACON CURING, 1917-18 to 1926-27.

Year.	Number of Establishments.	Persons Employed.	Amount of Wages Paid.	Pigs Slaughtered for Curing.	Weight of Bacon and Hams Cured.	Value of Output.
			£	number	lbs.	£
1917-18 ..	21	455	65,870	197,880	17,908,100	1,084,440
1918-19 ..	21	503	76,308	201,770	18,343,400	1,107,910
1919-20 ..	21	549	99,736	182,320	16,675,090	1,384,351
1920-21 ..	22	442	90,394	139,881	13,369,107	1,335,186
1921-22 ..	22	477	103,783	163,917	15,583,960	1,366,832
1922-23 ..	24	494	104,841	186,524	17,293,395	1,289,267
1923-24 ..	24	534	118,751	217,847	20,458,243	1,602,615
1924-25 ..	21	531	129,474*	218,158	20,431,914	1,571,357
1925-26 ..	21	546	142,515*	222,487	19,739,326	1,520,272
1926-27 ..	21	560	151,622*	230,391	19,739,524	1,425,509

* Including amounts drawn by working proprietors.

In addition, the following quantities of bacon and hams were returned as having been cured on farms:—2,738,428 lbs. in 1916-17, 3,403,776 lbs. in 1917-18, 3,859,205 lbs. in 1918-19, 2,698,919 lbs. in 1919-20, 1,755,993 lbs. in 1920-21, 1,812,838 lbs. in 1921-22, 1,975,729 lbs. in 1922-23, 2,082,731 lbs. in 1923-24, 1,561,955 lbs. in 1924-25, 1,474,599 lbs. in 1925-26, and 1,212,786 lbs. in 1926-27. The total quantity of bacon and hams cured in 1926-27 was thus 20,952,310 lbs.—a decrease of 261,615 lbs. as compared with 1925-26.

The number of butter, cheese, and kindred factories in 1926-27 was 182. Of these 148 were making butter, 27 cheese, 4 concentrated milk, 6 condensed milk, 11 powdered milk, 5 casein, and 1 milk sugar. There were also 26 creameries attached to the factories. The following table gives some indication of the value of this industry to the State:—

BUTTER AND CHEESE FACTORIES, 1917-18 to 1926-27.

Year.	Number of Factories.	Value of Machinery, Plant, Land, and Buildings.	Persons Employed.	Amount of Wages Paid.	Value of Output.
		£		£	£
1917-18	181	683,140	1,677	226,050	5,086,238
1918-19	180	786,275	1,918	273,335	6,056,342
1919-20	181	1,025,325	2,054	338,507	6,365,927
1920-21	184	1,238,745	2,127	414,420	9,194,654
1921-22	188	1,395,425	2,351	492,446	7,115,642
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

* Including amounts drawn by working proprietors.

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on page 548.

Meat freezing and preserving works numbered thirteen in 1926-27, and gave employment to 730 hands, the wages amounting to £185,760. The approximate value of machinery, plant, land and buildings in that year was £1,090,430. The output for each of the last ten years is given in the following table:—

MEAT FREEZING AND PRESERVING, 1917-18 to 1926-27.

Year.			Frozen.			
			Cattle.	Sheep.	Rabbits and Hares.	Poultry.
			qrs.	number.	number.	number.
1917-18	..	..	3,832	196,267	7,403,324	4,620
1918-19	..	..	8,640	668,971	2,352,212	2,700
1919-20	..	..	177,230	4,001,510	5,451,384	2,736
1920-21	..	..	49,372	786,086	2,189,378	9,468
1921-22	..	..	55,355	1,186,704	908,104	8,856
1922-23	..	..	17,006	2,657,515	282,624	5,284
1923-24	..	..	16,044	691,630	160,998	6,776
1924-25	..	..	25,690	1,035,799	108,338	6,386
1925-26	..	..	102,432	1,480,824	913,698	6,906
1926-27	..	..	41,890	1,346,425	806,294	1,764

Year.			Preserved.			
			Beef.	Mutton.	Rabbits and Hares.	Other Meats, &c.
			cwt.	cwt.	cwt.	cwt.
1917-18	..	..	17,810	28,530	9,530	15,110
1918-19	..	..	75,790	118,520	9,625	9,850
1919-20	..	..	104,725	60,850	7,580	1,860
1920-21	..	..	3,641	443	1	764
1921-22	..	..	8,808	4,419	29	30
1922-23	..	..	9,500	2,092	16	3,925
1923-24	..	..	8,008	564	32	1,411
1924-25	..	..	13,885	954	4	1,467
1925-26	..	..	23,202	2,084	..	4,327
1926-27	..	..	14,880		29	3,700

Imports and
exports of
meats.

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

June, 1927 :—

MEATS IMPORTED AND EXPORTED OVERSEA, 1926-27.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Frozen—				
Mutton .. ..	..	..	7,277,691 lbs.	141,998
Lamb .. ..	..	..	40,093,853 „	1,053,502
Beef	86 lbs.	10	4,015,588 „	60,949
Pork	202,955 lbs.	8,332	232,675 „	7,785
Rabbits and Hares ..	..	..	403,147 prs.	44,999
Poultry	2,292 lbs.	149	882 „	468
Game	16,553 lbs.	1,243	..	..
Potted and Concentrated	..	50,201	..	6,738
Preserved in tins ..	285,415 lbs.	13,678	725,415 lbs.	27,601
Sausage Casings.. ..	5,486 cwt.	114,779	9,872 cwt.	189,127
Not elsewhere included ..	..	796	..	6,356
Total value ..	..	189,188	..	1,539,523

The value of the machinery, plant, land and buildings used in connexion with flour mills was estimated at £517,510 in 1917-18 and at £1,046,175 in 1926-27. Particulars of the industry for the ten years 1917-18 to 1926-27 are as follows :—

FLOUR MILLS, 1917-18 to 1926-27.

Year.	Number of Mills.	Persons Employed.	Amount of Wages Paid.	Wheat Ground into Flour.	Flour Made.	Value of Total Output.
			£	bushels.	tons.	£
1917-18 ..	55	1,021	155,330	15,034,990	311,450	3,989,510
1918-19 ..	53	1,063	169,233	16,621,290	347,840	4,656,403
1919-20 ..	51	1,064	189,224	16,920,890	353,683	6,082,741
1920-21 ..	51	947	191,688	12,387,960	260,032	5,745,507
1921-22 ..	45	997	228,195	14,697,290	308,532	5,759,281
1922-23 ..	47	1,089	244,436	16,601,530	352,002	5,415,067
1923-24 ..	47	1,114	266,540	18,552,540	382,204	5,495,110
1924-25 ..	46	1,064	267,034*	17,165,253	359,597	6,218,248
1925-26 ..	45	1,039	258,112*	15,909,787	336,704	5,995,735
1926-27 ..	44	1,094	267,873*	17,052,350	360,051	5,789,618

* Including amounts drawn by working proprietors.

In addition to the flour made, the wheat ground in 1926-27 produced 7,472,640 bushels of bran and 7,415,832 bushels of pollard. Other grain operated on amounted to 31,960 bushels in 1917-18, 40,113 bushels in 1918-19, 39,235 bushels in 1919-20, 40,094 bushels in 1920-21, 65,788 bushels in 1921-22, 44,363 bushels in 1922-23, 34,283 bushels in 1923-24, 59,825 bushels in 1924-25, 47,659 bushels in 1925-26, and 32,158 bushels in 1926-27.

**Exports of
bread stuffs.**

During the year 1926-27, 2,108,965 lbs. of biscuits valued at £66,377, and 149,339 tons of flour valued at £2,123,361, were exported from Victoria to countries beyond Australia.

**Jam, pickle,
and sauce
works.**

In 1926-27 there were 58 establishments in which the manufacture of jams, pickles, and sauces was carried on, and the number of persons employed therein was 2,604, of whom 28 were working proprietors. The wages paid amounted to £504,442, and the value of machinery, plant, land and buildings was £769,680. The quantities of fruit and sugar used and the output for each of the last ten years were as shown below :—

JAM, PICKLE, AND SAUCE WORKS, 1917-18 to 1926-27.

Year.	Fruit Used.	Sugar Used.	Jams and Jellies Made.	Fruit Preserved.	Fruit Pulped.	Sauce Made.	Pickles Made.
	cwt.	cwt.	cwt.	cwt.	cwt.	pints.	pints.
1917-18..	497,650	286,860	398,500	115,580	94,810	7,064,520	1,972,320
1918-19..	496,690	314,645	495,575	133,230	91,550	4,913,050	2,137,730
1919-20..	628,721	262,585	323,452	181,562	225,522	6,546,610	1,874,240
1920-21..	465,349	171,706	231,297	61,542	178,786	6,601,330	1,239,250
1921-22..	384,214	148,886	157,712	239,656	100,317	6,600,530	1,056,430
1922-23..	450,199	177,334	206,966	221,157	114,615	8,439,440	2,106,950
1923-24..	552,262	191,216	197,850	239,077	208,688	10,696,190	2,361,250
1924-25..	537,246	190,675	220,174	282,360	151,416	7,893,760	2,057,480
1925-26..	674,793	209,648	236,345	350,363	168,906	9,305,590	2,686,500
1926-27..	792,283	246,170	300,822	335,798	110,420	7,385,438	2,615,267

Some of these establishments also candied fruit peel, the quantities being 9,330 cwt. in 1917-18, 8,449 cwt. in 1918-19, 10,466 cwt. in 1919-20, 13,306 cwt. in 1920-21, 10,743 cwt. in 1921-22, 6,831 cwt. in 1922-23, 3,820 cwt. in 1923-24, 7,263 cwt. in 1924-25, 4,973 cwt. in 1925-26 and 4,508 cwt. in 1926-27. The value of the output in 1926-27 of the whole of the establishments whose produce is shown in the above table was £2,427,373.

**Beet Sugar
Industry.**

In 1896 Parliament made available £62,000 to assist in the establishment of the beet sugar industry at Maffra, in Gippsland. On receiving a guarantee that 1,500 acres of beet would be sown by local land-holders, a company erected a

large building and plant, and operated for two seasons. Although a good quality of sugar was produced, various climatic, financial, and other difficulties compelled the company to close down the works, and the Government, as chief creditor, took control.

In 1910 a definite campaign to revive the industry was commenced, and the mill was re-opened; since that time it has operated from year to year. Estates were purchased by the Government at Boisdale and Kilmany, and land was allotted to settlers, subject to the proviso that each would grow a certain quantity of beet. The compulsory system of securing acreage was not found satisfactory, and all crops are now grown voluntarily. Recently the financial results have been sufficiently favorable to more than compensate for all losses; the by-products have been found to be of great value to the dairying industry, and the sugar has become a most important item of Gippsland's food supply.

The State Rivers and Water Supply Commission have advanced their irrigation scheme on the Macallister River, which will provide water for the district this season. Under irrigation it is anticipated that the beet supply will increase, and that the industry will expand on more favorable lines than in the past.

The following particulars summarize the results of the industry for the last ten seasons:—

Season.				Area Harvested.	Sugar Beet Harvested.	Sugar Produced.
				acres.	tons.	tons.
1917-18	..	..	..	1,200	14,487	1,660
1918-19	..	..	..	1,009	12,289	1,263
1919-20	..	..	..	1,080	13,084	1,551
1920-21	..	..	..	1,180	7,147	833
1921-22	..	..	..	1,602	16,578	1,872
1922-23	..	..	..	2,045	20,444	2,784
1923-24	..	..	..	1,937	29,512	3,499
1924-25	..	..	..	1,897	24,468	3,017
1925-26	..	..	..	1,880	21,194	2,315
1926-27	..	..	..	2,024	9,851	1,177

Last season was almost a failure owing to a drought, and the poorest season yet experienced; growers were paid 40s. a ton for their beets. Conditions appear much more favorable for the coming season, and the area under beets has been increased.

Breweries. Particulars regarding breweries for the ten years 1917-18 to 1926-27 are set forth in the next table. Machinery and plant were valued at £435,960 in 1917-18 and at £810,900 in 1926-27, whilst land and buildings were valued at £471,980 and £621,980 respectively in those years. The wages paid in 1926-27 amounted to £377,393.

BREWERIES, 1917-18 to 1926-27.

Year.	Number of Breweries.	Persons Employed.	Materials Used—			Beer and Stout Made.	Value of Output.
			Sugar.	Malt.	Hops.		
			cwt.	bushels.	lbs.	gallons.	£
1917-18	18	875	109,640	650,500	748,840	21,021,000	1,334,344
1918-19	17	940	112,080	625,770	722,590	20,963,000	1,476,335
1919-20	17	1,016	110,020	720,515	769,765	22,610,000	1,830,548
1920-21	16	1,054	104,140	753,260	736,580	22,257,000	2,098,720
1921-22	15	1,053	107,160	688,090	717,950	22,388,000	2,200,882
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

Distilleries. The number of distilleries working in 1926-27 was 9, and the persons employed numbered 154, of whom two were working proprietors. The estimated value of the machinery, plant, land and buildings was £270,210. The quantities of materials used in manufacture and of spirits distilled in each of the last ten years were as follows:—

DISTILLERIES, 1917-18 to 1926-27.

Year.	Materials Used.				Spirits Distilled.
	Wine.	Malt.	Other Grain.	Molasses.	
	gallons.	bushels.	bushels.	lbs.	proof gal.
1917-18	3,962,560	1,150,091
1918-19	397	5,604,480	1,185,629
1919-20	3,230,080	702,586
1920-21	1,422	2,682,960	572,671
1921-22	1,167,600	390,840
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

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:—5,134 gallons in 1917-18, 2,232 gallons in 1918-19, 5,141 gallons in 1919-20, 15,486 gallons in 1920-21, 23,020 gallons in 1921-22, 14,930 gallons in 1922-23, 13,792 gallons in 1923-24, 19,245 gallons in 1924-25, 14,850 gallons in 1925-26, and 11,259 gallons in 1926-27.

Tobacco factories.

The number of tobacco, cigar, and cigarette factories licensed in 1926-27 was twenty-eight, of which sixteen were too small to be classified as ordinary factories and were consequently not included in the statistical tabulation on page 272. In the year mentioned the remaining twelve gave employment to 1,701 persons who were paid £353,842 in wages, and used machinery, plant, land and buildings valued at £419,540. 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, 1917-18 to 1926-27.

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured.			
	Australian.	Imported.	Tobacco.	Snuff.	Cigars.	Cigarettes.
	lbs.	lbs.	lbs.	lbs.	number.	number.
1917-18 ..	558,278	4,598,364	5,479,191	313	27,920,180	126,883,970
1918-19 ..	405,625	5,096,176	5,842,142	1,049	27,973,908	125,372,900
1919-20 ..	573,932	5,139,098	6,164,126	426	35,232,399	143,374,400
1920-21 ..	751,137	5,290,854	6,443,480	228	35,549,722	109,686,950
1921-22 ..	535,590	5,250,641	6,345,508	232	33,893,695	152,908,600
1922-23 ..	540,322	5,628,555	6,709,030	231	32,699,019	99,771,650
1923-24 ..	471,832	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

Woollen mills.

There were twenty-seven woollen mills working in 1926-27, and the number of persons employed therein was 6,717, of whom seventeen were working proprietors. The wages paid amounted to £1,012,566, and the approximate value of the machinery, plant, land and buildings was £3,302,890. The value of the raw materials used during the year was £2,288,556, and that of the goods manufactured in the same period, £4,581,445. The quantities of wool and cotton used and of goods manufactured in each of the last ten years were as follows:—

WOOLLEN MILLS, 1917-18 to 1926-27.

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	£
1917-18	4,332,420	832,400	1,429,050	5,411,990	214,410	8,560	1,036,081
1918-19	4,614,585	513,800	1,429,200	5,047,490	191,130	19,430	1,126,119
1919-20	7,285,570	578,542	2,212,202	3,667,816	165,794	51,637	1,976,428
1920-21	7,702,055	553,282	2,509,198	4,035,298	224,745	47,179	2,397,610
1921-22	8,015,650	586,836	1,872,512	5,759,987	297,700	51,598	2,482,761
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

During the period 1917-18 to 1926-27 the value of the output of woollen mills increased by 342 per cent. Steady progress is indicated by the above table, the year 1926-27 having shown a large increase in output of all articles of manufacture.

The development which has taken place in the boot industry in recent years is exhibited in the following tables :—

BOOT FACTORIES, 1917-18 to 1926-27.

Year.	Number of Factories.	Persons Employed.	Value of Machinery, Plant, Land, and Buildings.	Wages Paid.
			£	£
1917-18	231	8,565	577,125	858,874
1918-19	238	8,961	627,770	987,203
1919-20	264	10,357	716,305	1,252,004
1920-21	304	9,212	927,310	1,208,760
1921-22	334	11,714	1,130,425	1,760,589
1922-23	371	12,434	1,338,555	1,922,345
1923-24	400	12,434	1,529,615	1,941,075
1924-25	430	12,099	1,748,815	2,054,563*
1925-26	431	12,262	1,764,685	2,088,244*
1926-27	204	12,192	1,470,440	2,140,054*

* Including amounts drawn by working proprietors.

For the year 1926-27 the boot repair factories have been excluded from this classification. To enable a comparison to be made the following figures relating to boot repair establishments are given :—

Year.	Number of Factories.	Persons Employed.	Value of Machinery Plant, Land, and Buildings.	Wages Paid.
1926-27	272	536	£414,350	£101,738

OUTPUT OF BOOT FACTORIES, 1917-18 to 1926-27.

Year.	Goods Manufactured—		Value of Materials Used.	Value of Output.
	Boots and Shoes.	Slippers.*		
	pairs.	pairs.	£	£
1917-18	6,049,510	205,614	2,093,803	3,442,302
1918-19	6,073,117	243,383	2,563,423	4,040,550
1919-20	6,774,267	552,652	3,909,570	5,996,639
1920-21	5,447,504	559,213	2,911,852	4,964,462
1921-22	7,571,231	903,992	3,109,863	6,043,172
1922-23	7,591,946	851,289	3,059,769	6,157,132
1923-24	7,063,385	1,107,257	2,879,194	5,888,699
1924-25	7,496,004	1,167,581	2,913,105	5,832,625
1925-26	7,660,638	1,724,418	2,995,490	6,045,226
1926-27	8,147,282	2,100,228	3,006,256†	6,105,072†

* Includes canvas shoes and house-boots.

† The value of materials used in boot repairing was £74,663, and the value of output, £379,620.

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 £15,517,404 in 1926-27, as compared with £7,674,705 in 1917-18. During the period 1917-18 to 1926-27 the persons employed increased by 21 per cent., the wages paid by 130 per cent., the value of materials used by 151 per cent., and the value of the output by 102 per cent. Particulars of the industry for each of the last ten years are as follows:—

DRESS (EXCLUSIVE OF BOOT) FACTORIES, 1917-18 to 1926-27.

Year.	Number of Factories.	Number of Persons Employed.			Amount of Wages Paid.	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
					£	£	£
1917-18	1,209	3,730	24,630	28,360	1,788,136	4,512,648	7,674,705
1918-19	1,210	3,776	23,505	27,281	1,915,096	5,205,460	8,599,603
1919-20	1,252	4,123	25,490	29,613	2,490,549	6,628,276	11,407,324
1920-21	1,346	4,383	25,980	30,363	2,872,171	7,804,264	12,994,011
1921-22	1,424	4,674	27,370	32,044	3,328,326	7,689,101	13,429,230
1922-23	1,526	4,951	28,595	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

* Including amounts drawn by working proprietors.

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

ELECTRIC LIGHT AND POWER WORKS, 1917-18 to 1926-27.

Year.	Number of Stations.	Horse-power of Machinery.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Supplied.	Value of Output.
			£		£	British units.	£
1917-18	75	48,526	1,889,550	1,167	183,948	79,486,000	760,117
1918-19	77	48,777	2,135,310	1,149	190,280	83,778,000	835,190
1919-20	78	49,241	2,632,665	1,215	217,995	100,838,000	953,039
1920-21	79	54,189	2,660,945	1,242	283,309	115,105,000	1,131,331
1921-22	84	57,481	3,166,750	1,350	334,805	136,021,000	1,407,268
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	205,777	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

The decrease in the number of persons and the value of machinery and plant and output in electric supply undertakings for the last two 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.

The particulars relating to the power houses at Newport under the control of the Victorian Railways Commissioners and the State Electricity Commission are included for the last four years in the figures which appear in the above table. This largely accounts for the seeming discrepancy between the quantity and value of the output for the years mentioned. The quantity of electricity generated in these power houses in 1926-27 was 241,534,000 units; the value of this has been estimated at bulk rates by the respective departments.

STATE ELECTRICITY COMMISSION ACTS 1918 AND 1920.

When it was first appointed in 1919, the operations of the State Electricity Commission of Victoria were carried on under the provisions of the *Electricity Commissioners' Act* 1918, which provided for the appointment by the Governor in Council of three Commissioners to administer the Act. By an amending Act of the 24th December, 1920, the name of the Act was changed to the *State Electricity Commission Act* 1918, and provision was made, *inter alia*, for the appointment of four Commissioners for a period of seven years, one of whom would devote the whole of his time to the Commission's works as permanent chairman. In addition to the Acts mentioned above, the Commission administers the *Electric Light and Power Act* 1915, the provisions of which give it control over all electrical undertakings in the State.

The duties of the Commission include the following:—

- (1) To inquire into and report to the Government as to the steps which should be taken to co-ordinate and concentrate all electrical undertakings in Victoria, and to secure the efficient inter-connexion of such undertakings by the adoption of the necessary standards of plant, pressure, &c.
- (2) To encourage and promote the use of electricity for industrial and manufacturing purposes, and to report to the Government on the prospects of establishing new industries in Victoria requiring large quantities of electrical energy.
- (3) To carry out investigations of coal deposits or of water power in connexion with the generation of electricity.

The Commission is vested with the following powers in relation to electrical undertakings:—

- (1) To erect and operate electrical undertakings.
- (2) To supply electricity in bulk to any corporation.
- (3) To supply electricity to any person outside any area in which there is an existing undertaking.

- (4) To carry on any business associated with an electric undertaking.
- (5) To make regulations as to precautions to be adopted in the use of electricity, and to arrange for the licensing of electric wiremen.

Authority is also given to the Commission to establish and operate State Coal Mines.

The Commission has complete control over all officers and employees required for the carrying out of the provisions of the Act.

In accordance with the instructions contained in the Act, the Commission has constructed a coal winning plant and an electric generating station in the neighbourhood of Morwell, for the purpose of utilizing the practically unlimited supplies of brown coal in that area. The scheme provides for the winning of coal on the open cut system by means of mechanical appliances, for the erection of a power station close to the site of the open cut, having an initial capacity of 50,000 kilowatts, with provision for triplication, and for the erection at Yarraville of a receiving station with the necessary switch and transforming gear. Both stations are now complete and in operation, as is also the initial installation of briquetting plant at Yallourn, which produces, approximately, 100,000 tons of brown coal briquettes annually.

The Commission has also installed at Newport a station with an initial capacity of 15,000 kilowatts. This station, which was built mainly to meet the urgent need for electricity pending the completion of the Yallourn plant, is now regarded as a peak load station.

Supply of electricity from the Commission's generating station at Yallourn is already being given to the following towns in the Gippsland district (in addition to the Commission's township of Yallourn):—Morwell, Traralgon, Moe, Trafalgar, Yarragon, Maffra, Sale, Tyers, Heyfield, Mirboo North, Drouin, Korumburra, Leongatha, Cowwarr, Boolarra, Rosedale, Bairnsdale, Stratford, Newry and Darnum. Ultimately, supply will be given to other towns throughout Gippsland.

A transmission line has been built from Geelong, stretching through the western and south-western district of Victoria to the city of Warrnambool (a distance of 117 miles), giving supply to the latter town and to the following towns *en route*:—Colac, Camperdown, Terang, Mortlake, Warrion, Beacac, Cobden, Noorat, Alvie, Allansford, Winchelsea, Cororooke, Pomborneit, Kolora, Bellerine, Moolap, Larpent, Nalangil, Ryan's Lane, Wool Wool and Birregurra.

Supply has also been given to the towns of Point Lonsdale, Queenscliff, Portarlington, Drysdale, Ocean Grove, and Barwon Heads, by another transmission line from Geelong.

The energy is generated at the Melbourne Electric Supply Company's Power House at Geelong under an agreement between that body and the Electricity Commission until such time as energy is available from the Commission's main power station at Yallourn.

The Commission is supplying energy in bulk to the Melbourne City Council, the Melbourne Electric Supply Company, the Melbourne

Harbor Trust, the municipalities of Box Hill, Brunswick, Coburg, Williamstown, Footscray, Heidelberg, Northcote, Port Melbourne, Preston, Braybrook, and Lilydale, and has built a subsidiary line, operating at 22,000 volts which encircles the eastern half of the outer metropolitan area, passing through and giving service to Ringwood, Dandenong, Frankston, and the Mornington Peninsula. It has also taken over the supply and retail distribution of energy to Dandenong, Werribee, Altona, Sunbury, Glenroy, Pascoe Vale, and Essendon—Flemington. At the 30th June, 1927, the Commission was supplying, either in retail or in bulk, over 100 towns or centres throughout Victoria.

The Commission is empowered to develop hydro-electric resources, and with this object to maintain survey parties constantly in the field for the purpose of obtaining data relative to stream flow, volume, &c.

The building of hydro-power stations at Royston, Rubicon, Rubicon Lower and Sugarloaf is proceeding. A fifth station, at Rubicon Falls, of 400 B.H.P., is complete. It supplies energy for the construction of the scheme, as well as supplying power and light to Thornton and farms in the district. A sixth station, at Snobbs Creek, is included in the scheme, but its construction is being deferred for the present. All will feed into a common sub-station about eight miles from Sugarloaf. The total capacity of hydraulic turbines to be installed in these stations is 40,250 brake horse-power. All stations will be in operation in 1928. The construction of the transmission line from Sugarloaf to Thomastown, and from Sugarloaf to Albury and Corowa (New South Wales), via Benalla and Wangaratta, is complete, and, pending completion of the hydro-electric plant, supply is given to the north-eastern portions of the State over the transmission line from Yallourn, via Yarraville and Thomastown terminal stations. This line also serves Echuca, Shepparton, Wahgunyah, Yarrawonga, Springhurst, Mooroopna, Tatura, Merrigum, Benalla, Chiltern, Tongala, Rutherglen and Kyabram.

Particulars in regard to gasworks are given below for each of the last ten years, but the figures for the last two years are not comparable with those of preceding years owing to the exclusion of all particulars relating to distribution. Prior to 1925-26 the published figures included both manufacture and distribution.

GASWORKS, 1917-18 to 1926-27.

Year.	Number of Works.	Persons Employed.	Wages Paid.	Coal Used.	Gas Made.	Coke Produced.	Value of Output.
			£	tons.	cubic feet.	tons.	£
1917-18 ..	47	2,089	375,181	318,560	4,505,847,000	200,660	1,263,030
1918-19 ..	46	2,270	420,597	353,584	4,904,351,000	220,287	1,373,603
1919-20 ..	45	2,267	472,855	331,149	4,592,305,000	206,245	1,395,320
1920-21 ..	45	2,213	576,515	339,250	4,499,088,000	216,771	1,608,999
1921-22 ..	45	2,309	609,600	383,092	5,151,380,000	239,755	1,953,936
1922-23 ..	45	2,444	639,954	402,537	5,443,993,000	260,526	1,941,808
1923-24 ..	45	2,561	699,173	410,517	5,407,962,000	259,080	2,008,571
1924-25 ..	45	2,464	668,006	406,868	5,608,313,000	226,438	2,087,358
1925-26 ..	35	933	258,764	422,783	5,801,335,000	273,773	1,433,000
1926-27 ..	33	959	264,918	442,391	5,855,817,000	283,998	1,967,485

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 396,717 in 1917-18, 355,933 in 1918-19, 343,764 in 1919-20, 360,376 in 1920-21, 600,188 in 1921-22, 248,481 in 1922-23, 223,986 in 1923-24, 175,127 in 1924-25, 114,947 in 1925-26, and 88,601 in 1926-27.

The facilities afforded in the metropolitan area have had the effect of bringing within that area the more important of the manufacturing industries. The distribution of factories by classes between the metropolis and the remainder of the State, for 1917-18 and each of the last three years, is exhibited in the following statement:—

NUMBER AND LOCATION OF FACTORIES.

Class of Industry.	Number of Factories.							
	Metropolis.				Remainder of State.			
	1917-18	1924-25.	1925-26.	1926-27.	1917-18	1924-25.	1925-26.	1926-27.
Treating raw material, product of pastoral pursuits, &c. . .	85	83	80	83	225	191	187	160
Treating oils and fats, animal, vegetable, &c. . .	16	18	20	21	10	9	10	10
Processes in stone, clay, glass, &c. . .	95	151	152	168	77	110	112	109
Working in wood . .	205	356	364	336	248	349	330	342
Metal works, machinery, &c. . .	520	707	721	807	197	216	229	216
Connected with food and drink, &c. . .	237	267	263	267	412	454	448	465
Clothing and textile fabrics, &c. . .	1,188	1,627	1,629	1,719	300	373	364	368
Books, paper, printing, &c. . .	294	380	393	410	157	176	171	172
Musical instruments, &c. . .	11	19	19	19	..	1	..	..
Arms and explosives . .	8	8	7	7	4	1	1	1
Vehicles, saddlery, harness, &c. . .	256	427	449	468	305	419	423	481
Ship and boat building and repairing . .	11	10	10	11	2	1	1	2
Furniture, upholstery and bedding . .	249	387	390	448	25	38	39	48
Drugs, chemicals, and by-products . .	64	93	89	92	39	38	28	22
Surgical and other scientific appliances . .	29	35	36	40	1	2	3	4
Jewellery, time-pieces and plated-ware . .	87	106	109	112	5	5	5	5
Heat, light, and power . .	55	102	109	26	107	120	107	103
Rubber and Leather-ware . .	41	56	56	106	..	3	2	24
Minor wares, n.e.i. . .	59	75	84	18	3	12	16	..
Total . .	3,510	4,907	4,985	5,158	2,117	2,518	2,476	2,532

Since 1917-18 the number of factories in the State has increased by 2,063, the greatest numerical increase in the classes being that

of the clothing and textile factories, of which there were 599 more in 1926-27 than in 1917-18.

The employment afforded in each class of industry is set forth in the next statement:—

AVERAGE NUMBER OF PERSONS EMPLOYED IN FACTORIES.

Class of Industry.	1917-18.	1923-24.	1924-25.	1925-26.	1926-27.
Treating raw materials, product of pastoral pursuits, &c. . .	3,632	4,276	4,077	4,209	4,112
Treating oils and fats, animal, vegetable, &c. . .	883	920	950	891	941
Processes in stone, clay, glass, &c. . .	3,921	6,661	6,181	5,975	6,117
Working in wood . . .	6,948	10,825	10,198	9,685	9,134
Metal works, machinery, &c. . .	16,183	24,978	24,464	25,663	28,563
Connected with food and drink, &c. . .	17,100	19,199	19,344	18,813	18,881
Clothing and textile fabrics, &c. . .	40,312	50,248	49,633	50,188	55,101
Books, paper, printing, &c. . .	8,940	12,098	11,703	11,374	11,720
Musical instruments, &c. . .	229	498	467	529	532
Arms and explosives . . .	1,030	423	428	471	537
Vehicles, saddlery, harness, &c. . .	4,654	7,028	6,984	7,386	8,236
Ship and boat building and repairing . . .	653	392	432	388	388
Furniture, bedding, and upholstery . . .	2,867	4,629	4,782	4,527	5,460
Drugs, chemicals, and by-products . . .	2,207	2,699	2,774	2,713	2,811
Surgical and other scientific appliances . . .	149	195	236	230	269
Jewellery, time-pieces, and plated-ware . . .	1,028	1,110	1,069	1,097	1,044
Heat, light, and power . . .	4,146	5,879	6,311	4,186	2,984
Rubber and Leatherware, n.e.i. . .	750	1,071	940	919	4,496
Minor wares, n.e.i. . .	2,609	3,033	3,185	3,715	313
Total . . .	118,241	156,162	154,158	152,959	161,639

The total increase in the number of hands employed during the period covered by the above table was 43,398, which represented an advance of about 36 per cent. The greatest development had taken place in clothing factories, vehicles, &c., and metal works, which showed increases of 14,789, 3,582, and 12,380 respectively in the number of persons employed in 1926-27 as compared with the number in 1917-18. The apparent increase in rubber and leatherware is due to an alteration in classification by which rubber goods have been transferred from minor wares.

Size of factories. An examination of the figures relating to the number of factories in 1917-18 and in 1926-27 shows that percentage increases were more pronounced in the smallest sized factories and in those employing from 51 to 100 and from 21 to 50 hands. In the case of persons employed, the largest percentage increases were in the groups under 4 hands, 51 to 100 hands, and over 100 hands respectively. Particulars of factories of different sizes in 1917-18 and 1926-27 are given in the next two tables:—

FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

Size of Factory.	Number of Factories.			Average Number of Persons Employed.		
	1917-18.	1926-27.	Increase.	1917-18.	1926-27.	Increase.
Under 4 hands..	1,213	2,051	% 69·08	2,738	4,315	% 57·59
4 " ..	615	811	31·87	2,460	3,244	31·87
5 to 10 " ..	1,810	2,215	22·37	12,472	15,465	23·99
11 to 20 " ..	881	1,125	27·69	12,804	16,479	28·70
21 to 50 " ..	669	900	34·52	21,166	28,774	35·94
51 to 100 " ..	243	340	39·92	16,559	24,177	46·00
Over 100 " ..	196	248	26·53	50,042	69,185	38·25
Total ..	5,627	7,690	36·66	118,241	161,639	36·70

PROPORTION OF FACTORIES OF DIFFERENT SIZES.

Size of Factory.	Percentage to Total.			
	Factories.		Persons Employed.	
	1917-18.	1926-27.	1917-18.	1926-27.
Under 4 hands	21·56	26·7	2·32	2·7
4 "	10·93	10·6	2·08	2·0
5 to 10 "	32·17	28·8	10·55	9·6
11 to 20 "	15·65	14·6	10·83	10·2
21 to 50 "	11·89	11·7	17·90	17·8
51 to 100 "	4·32	4·4	14·00	14·9
Over 100 "	3·48	3·2	42·32	42·8
Total	100·00	100·00	100·00	100·00

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.	1921-22.	1922-23.	1923-24.	1924-25	1925-26.	1926-27.
Working proprietors ..	6,904	7,296	7,500	7,255	7,254	7,334
Managers, overseers ..	4,454	4,673	4,929	5,043	5,213	5,580
Accountants, clerks ..	6,307	6,582	6,966	6,827	6,034	6,519
Engine-drivers, firemen	2,156	2,106	2,197	2,142	2,065	2,036
Workers in factory or works ..	119,598	126,791	129,617	128,706	128,948	137,025
Outworkers ..	1,476	1,228	870	728	736	592
Carters, messengers ..	3,115	3,316	3,378	2,766	2,394	2,065
Others ..	866	633	705	691	315	488
Total ..	144,876	152,625	156,162	154,158	152,959	161,639

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 1917-18 to 1926-27, 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.
1917-18 ..	76,654	1,142	41,587	562	118,241	838
1918-19 ..	81,357	1,188	40,992	550	122,349	855
1919-20 ..	92,101	1,243	44,421	588	136,522	913
1920-21 ..	96,379	1,277	44,364	580	140,743	926
1921-22 ..	97,789	1,279	47,087	599	144,876	934
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

Males formed 64·8 per cent. in 1917-18 and 67·4 per cent. in 1926-27 of the total persons employed. The increase during the period 1917-18 to 1926-27 in the number of males employed was 32,315, or 42·2 per cent., and in the number of females employed, 11,083, or 26·7 per cent.

Of the total females in factories 80·3 per cent. are engaged in the textile and clothing industries, and 10·6 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, 1926-27.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Oatmeal, &c.	412	374	90·77
Biscuit	769	560	72·82
Jam, pickle, and sauce	1,673	931	55·64
Confectionery	1,927	1,985	103·01
Tobacco, &c.	1,090	611	56·05
Woolen mills	2,972	3,745	126·00
Clothing, tailoring, &c.	2,099	7,083	337·44
Dressmaking, millinery	459	8,361	1,821·57
Underclothing, shirts, ties, &c.	580	6,353	1,095·34
Hats, caps, &c.	594	1,151	193·77
Hosiery	1,100	5,018	456·18
Waterproof clothing	80	239	298·75
Fur	241	378	156·84
Boots and shoes	6,595	5,597	84·86
Printing, &c.	6,324	1,673	26·45
Bookbinding, &c.	706	601	85·12
Paper making, Paper bag, &c.	836	1,001	119·73
Sail, tent, rope, twine	639	488	76·36
Chemicals	719	698	97·08
Ammunition	323	214	66·25
Upholstery, bedding, &c.	734	427	58·17
Match	177	433	244·63
Fancy leather	422	384	90·99
Rubber goods	2,816	743	26·38
All other factories	74,682	3,622	4·85
Total	108,969	52,670	48·33

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 4·46 and 7·77 per cent. respectively in 1926-27, as against 4·45 and 5·97 per cent. in 1917-18. The number of children

employed in factories and their proportions to the total employees are given in the subjoined table for the years 1917-18 to 1926-27:—

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.
1917-18 ..	3,195	2,447	5,642	4.45	5.97	5.00
1918-19 ..	3,137	2,389	5,526	4.15	5.90	4.73
1919-20 ..	3,721	2,872	6,593	4.04	6.47	4.83
1920-21 ..	3,715	2,798	6,513	4.11	6.39	4.86
1921-22 ..	3,780	3,120	6,900	4.13	6.71	5.00
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

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 1917-18 to 1926-27:—

MACHINERY IN FACTORIES.

Year.	Number of Factories equipped with Machinery.		Value of Machinery and Plant.	Horse-power of Engines.
			£	
1917-18	4,371	12,612,797	149,095	
1918-19	4,470	13,645,220	153,408	
1919-20	4,737	15,846,935	166,803	
1920-21	5,161	18,179,385	182,143	
1921-22	5,473	21,182,110	191,881	
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	

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 first portion, usually under the power which is principally used. The second portion shows the total horse-power of engines used.

POWER USED IN FACTORIES, 1917-18 TO 1926-27.

Year.	Number of Factories using—					
	Steam.	Gas.	Electricity.	Oil.	Water, Wind, or Horses.	Manual Labour.
1917-18 ..	896	784	2,365	285	41	1,256
1918-19 ..	875	782	2,481	297	35	1,250
1919-20 ..	910	761	2,712	315	29	1,301
1920-21 ..	941	705	3,128	360	27	1,371
1921-22 ..	935	666	3,474	364	34	1,280
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

Year.	Actual Horse-power of Engines.				
	Steam.	Gas.	Electricity.	Oil.	Total.
1917-18 ..	89,561	19,045	38,246	2,243	149,095
1918-19 ..	91,245	18,929	40,791	2,443	153,408
1919-20 ..	95,747	19,183	48,814	3,059	166,803
1920-21 ..	103,048	19,331	56,602	3,162	182,143
1921-22 ..	106,882	19,327	62,663	3,009	191,881
1922-23 ..	112,547	18,968	81,679	3,233	216,427
1923-24 ..	195,744	18,394	95,340	5,083	314,561
1924-25 ..	233,290	17,869	117,525	5,380	374,064
1925-26 ..	235,872	15,422	107,812	8,212	367,318
1926-27 ..	268,061	13,548	123,359	10,024	414,992

Although steam is the principal motive power, and was used to supply 65 per cent. of the total mechanical power employed in factories in 1926-27, a remarkable development is shown in the use of electricity, which in 1917-18 was used by 2,365, and in 1926-27 by 5,141 factories, the actual horse-power increasing from 38,246 to 123,359 in the same period.

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.	
	£	£	£	£	£	£	£
1917-18	..	..	1,462,220	190,707	8,679,530	2,170,144	12,502,601
1918-19	..	..	1,625,584	208,524	9,906,082	2,340,213	14,080,403
1919-20	..	..	1,967,959	270,875	12,515,207	2,948,132	17,702,173
1920-21	..	..	2,384,372	310,024	15,284,545	3,898,275	21,377,216
1921-22	..	..	2,563,407	357,691	16,933,984	3,991,353	23,846,495
1922-23	..	..	2,761,045	394,366	18,038,101	4,353,680	25,547,192
1923-24	..	..	3,003,855	436,425	19,577,822	4,458,982	27,472,084
1924-25	1,538,868	74,043	3,055,257	443,676	19,460,304	4,484,904	29,057,052
1925-26	1,590,771	80,876	2,996,929	448,387	19,547,974	4,664,463	29,329,400
1926-27	1,837,094	95,988	3,268,208	495,735	20,931,037	5,194,577	31,822,539
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
1917-18	..	..	231 4 4	99 15 11	132 8 6	55 10 1	110 15 4
1918-19	..	..	244 5 4	101 7 5	141 19 8	60 19 0	120 9 5
1919-20	..	..	264 8 1	118 6 9	157 16 8	70 17 5	135 10 5
1920-21	..	..	298 19 7	124 15 2	185 12 4	82 5 11	159 8 4
1921-22	..	..	316 18 11	133 16 4	202 19 11	91 2 11	172 16 9
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	186 16 4*
1925-26	240 18 4	124 4 8	363 7 11	149 9 3	218 0 4	104 2 6	189 16 5*
1926-27	275 18 6	141 18 5	369 19 2	151 16 8	223 18 1	106 12 0	193 14 1*

* These figures are based on numbers of persons employed and the wages, etc., paid to all persons employed, excluding working proprietors.

The particulars appearing in the above table reveal continued increases from year to year in the average earnings of all groups. In the average wage of all employees, the largest increase was from the year 1919-20 to 1920-21. The figures for the year 1926-27 show an advance of £3 17s. 8d. in the average wage paid per employee.

The average wage for 1926-27 (£193 14s. 1d.) 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 1926-27 are given in the subjoined statement:—

FACTORY COSTS AND OUTPUT, 1926-27.

Class of Industry.	Cost of—			Value of Output.
	Raw Materials Used.	Fuel, Light, and Power Used.	Salaries and Wages Paid.	
	£	£	£	£
Treating raw material, product of pastoral pursuits, &c. . .	4,666,417	109,597	944,589	6,451,989
Treating oils and fats, animal, vegetable, &c. . .	937,064	55,442	206,946	1,540,844
Processes in stone, clay, glass, &c. . .	1,006,134	562,891	1,453,821	4,084,161
Working in wood . . .	2,313,206	51,446	2,082,581	5,378,947
Metal works, machinery, &c. . .	7,607,605	409,105	6,771,497	17,692,908
Connected with food and drink, &c. . .	26,121,287	616,644	4,044,136	36,071,851
Clothing and textile fabrics, &c. . .	14,660,873	310,550	7,971,729	27,591,787
Books, paper, printing, &c. . .	2,930,759	120,302	2,583,871	7,091,237
Musical instruments, &c. . .	150,304	2,269	124,610	337,548
Arms and explosives . . .	227,946	17,872	118,442	440,722
Vehicles, saddlery, harness, &c. . .	1,151,641	57,107	1,716,581	3,590,428
Ship and boat building and repairing . . .	37,827	5,686	92,795	167,572
Furniture, upholstery, and bedding . . .	1,529,254	32,301	1,077,740	3,200,093
Drugs, chemicals, and by-products . . .	1,820,540	72,042	597,554	3,285,676
Surgical and other scientific instruments . . .	38,681	1,530	51,558	119,518
Jewellery, time-pieces, and plated-ware . . .	225,417	7,598	214,018	547,052
Heat, light, and power . . .	1,694,844	842,851	765,593	5,066,231
Rubber and leatherware, n.e.i. . .	2,599,740	116,270	955,539	4,560,628
Minor wares, n.e.i. . .	97,396	945	48,989	178,759
Total . . .	69,816,935	3,392,448	31,822,589	127,397,951

The difference between the sum of the first three 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, 1926-27.

Class of Industry.	Percentage of Costs, &c., to Total Value of Production.			
	Materials.	Fuel, Light, &c.	Wages.	All other Expenditure, Interest, and Profit.
	%	%	%	%
Treating raw material, product of pastoral pursuits, &c. ..	72·3	1·7	14·7	11·3
Treating oils and fats, animal, vegetable, &c. ..	60·8	3·6	13·4	22·2
Processes in stone, clay, glass, &c. ..	24·6	13·8	35·6	26·0
Working in wood ..	43·0	1·0	38·7	17·3
Metal works, machinery, &c. ..	43·0	2·3	38·3	16·4
Connected with food and drink, &c. ..	72·4	1·7	11·2	14·7
Clothing and textile fabrics, &c. ..	53·1	1·1	28·9	16·9
Books, paper, printing, &c. ..	41·3	1·7	36·4	20·6
Musical instruments, &c. ..	44·5	0·7	36·9	17·9
Arms and explosives ..	51·7	4·0	26·9	17·4
Vehicles, saddlery, harness, &c. ..	32·1	1·6	47·8	18·5
Ship and boat building and repairing	22·6	3·4	55·4	18·6
Furniture, upholstery, and bedding ..	47·8	1·0	33·7	17·5
Drugs, chemicals, and by-products ..	55·4	2·2	18·2	24·2
Surgical and other scientific instruments ..	32·4	1·3	43·1	23·2
Jewellery, time-pieces, and plated-ware ..	41·2	1·4	39·1	18·3
Heat, light, and power ..	33·4	16·7	15·1	34·8
Rubber and Leatherware, n.e.i. ..	57·0	2·5	21·0	19·5
Minor wares, n.e.i. ..	54·5	·5	27·4	17·6
Total ..	54·8	2·7	25·0	17·5

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 brickworks, &c., the sum paid in wages represents 36 per cent. and the cost of raw materials 25 per cent. of the value of the finished article, whilst in the industries connected with food and drink the expenditure on wages amounts to 11 per cent. and that on raw materials to 72 per cent. of the value of the output.

Cost of
production,
1917-18 to
1926-27.

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 1917-18 to 1926-27 :—

**COST OF PRODUCTION AND VALUE OF OUTPUT OF
FACTORIES, 1917-18 to 1926-27.**

Year.	Cost of Production.				Total Value of Output.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	All other Expenditure, Interest, and Profit.	
	£	£	£	£	£
1917-18 ..	42,133,636	1,248,186	12,502,601	11,182,292	67,066,715
1918-19 ..	52,098,737	1,457,124	14,080,403	12,559,413	80,195,677
1919-20 ..	65,563,104	1,723,220	17,702,173	16,486,866	101,475,363
1920-21 ..	65,401,425	2,184,096	21,377,216	17,045,557	106,008,294
1921-22 ..	60,352,561	2,329,760	23,846,495	19,714,365	106,243,181
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

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

**PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES,
1917-18 to 1926-27.**

Year.	Proportion of Outlay to Output.				Total.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Other Expenditure, Interest, and Profit.	
	%	%	%	%	%
1917-18 ..	62·8	1·9	18·6	16·7	100·0
1918-19 ..	65·0	1·8	17·5	15·7	100·0
1919-20 ..	64·6	1·7	17·4	16·3	100·0
1920-21 ..	61·7	2·0	20·2	16·1	100·0
1921-22 ..	56·8	2·2	22·4	18·6	100·0
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

The apparent decrease for 1924-25, 1925-26, and 1926-27 in the percentage available for profit and miscellaneous expenses, as shown in the last table, is due to the fact that the amount of salaries and wages includes for those years the sums drawn regularly by working

proprietors amounting respectively to £1,612,911, £1,671,647, and £1,933,032.

The ratio of salaries and wages to the value of the output of factories was 24·2 per cent. on the average of the last five years, as against 19·5 per cent. in the period 1917-18 to 1921-22. The cost of materials was 55·4 per cent. of the value of output in the period 1922-23 to 1926-27, as compared with 61·9 per cent. in the years 1917-18 to 1921-22. The proportionate outlay on fuel, light, and power was 1·9 per cent. in the former and 2·5 per cent. in the latter period. The balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £17 17s. 11d. in every £100 of the total output value in the period 1922-23 to 1926-27, as compared with £16 4s. 0d. 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 1926-27:—

MACHINERY, PLANT, LAND AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1926-27.

Class of Industry.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
Treating raw material, product of pastoral pursuits, &c.	728,080	917,570
Treating oils and fats, animal, vegetable, &c.	309,425	243,765
Processes in stone, clay, glass, &c.	1,378,705	1,198,425
Working in wood	1,242,460	1,144,400
Metal works, machinery, &c.	3,805,465	4,352,135
Connected with food and drink, &c.	5,864,050	5,851,870
Clothing and textile fabrics, &c.	4,445,195	6,934,000
Books, paper, printing, &c.	2,793,080	2,678,165
Musical instruments, &c.	42,115	171,670
Arms and explosives	280,970	437,340
Vehicles, saddlery, harness, &c.	666,950	2,417,105
Ship and boat building and repairing	103,635	172,870
Furniture, upholstery, and bedding	286,025	1,117,775
Drugs, chemicals, and by-products	826,100	710,055
Surgical and other scientific instruments	21,695	79,050
Jewellery, time-pieces, and plated-ware	63,245	257,615
Heat, light, and power	7,856,720	2,746,220
Rubber and Leatherware, n.e.i.	839,460	777,960
Minor wares, n.e.i.	26,075	61,665
Total	31,580,350	32,269,655

The capital invested in plant, buildings, &c., used in connexion with three classes of industries—food and drink; clothing and textile fabrics; and heat, light and power—amounted, in the year under review, to £33,698,055, 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 1917-18 to 1926-27 :—

**MACHINERY, PLANT, LAND AND BUILDINGS USED IN
MANUFACTURING INDUSTRIES, 1917-18 to 1926-27.**

Year.						Value of Machinery and Plant.	Value of Land and Buildings.
						£	£
1917-18	..	..	..	..	..	12,612,797	12,847,485
1918-19	..	..	..	..	..	13,645,220	13,673,515
1919-20	..	..	..	..	..	15,846,935	14,957,585
1920-21	..	..	..	..	..	18,179,385	17,313,350
1921-22	..	..	..	..	..	21,182,110	19,810,170
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	..	..	..	..	..	31,580,350	32,269,655

It will be seen from these figures that the values of machinery and plant and land and buildings increased by 151 per cent. between 1917-18 and 1926-27.

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.

The large increase shown in the number of accidents since 1919 is mainly attributable to an amendment of the law, which made compulsory the reporting of accidents. Previously, only those of a serious nature were reported.

ACCIDENTS IN FACTORIES, 1917 to 1926.

Year.						Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1917	..	..				97,561	442	·453
1918	..	..				104,242	459	·440
1919	..	..				116,369	362	·311
1920	..	..				116,846	862	·737
1921	..	..				117,633	830	·705
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

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, bread, and printing are carried on. The estimated value of the output for 1926-27 was £58,837, and of the materials used, £46,036. The articles produced are used principally by Government Departments. The work carried on by the latter is the manufacture of brooms, brushware, wickerware, and coir mats and matting, and gives employment to 144 persons (124 males and 20 females). The value of the work turned out for the period under review was £30,219.

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, 1922-23 TO 1926-27.

Produce.	Value in—				
	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
<i>Cultivation.</i>	£	£	£	£	£
Wheat	8,031,875	8,189,069	11,993,546	6,665,150	9,546,812
Oats	1,416,355	1,455,331	934,538	684,320	653,291
Barley, malting ..	298,792	195,545	258,263	202,206	192,349
" other ..	137,445	66,665	95,743	87,960	103,390
Maize	205,314	253,276	137,948	172,825	152,055
Other Cereals ..	75,553	71,173	53,227	58,525	58,483
Grass and Clover					
Seed	3,537	3,880	3,886	2,749	2,350
Potatoes	1,040,662	701,229	682,878	1,309,470	671,673
Onions	139,888	215,444	209,803	267,793	110,839
Other Root Crops ..	11,800	15,032	12,340	18,297	15,161
Hay	6,327,338	5,229,162	3,639,496	3,497,253	4,719,925
Straw	76,644	66,677	66,920	63,988	47,970
Green Forage* ..	512,255	536,855	497,655	539,365	436,205
Tobacco	35,600	41,880	49,120	47,160	57,700
Grapes, not made into wine, raisins, &c.	71,793	45,589	45,372	77,333	74,889
Raisins, ordinary ..	132,308	27,420	57,867	78,452	99,080
" sultanas ..	555,059	122,775	733,919	676,965	1,195,183
Currents	171,642	57,027	110,099	93,972	132,536
Wine	171,740	217,713	153,986	177,371	254,184
Hops	23,195	29,772	53,000	54,193	16,074
Other Crops	81,447	104,066	78,848	125,788	109,022
Fruit grown for sale in orchards and gardens	1,172,325	1,193,689	1,091,508	1,247,723	970,831
Fruit in private orchards and gar- dens	10,670	10,505	9,945	12,070	9,570
Market Gardens ..	493,780	810,600	731,000	830,450	887,550
Less Deductions ..	..	..	-3,535,135	-3,283,560	-4,822,130
Total	21,197,026	19,660,374	18,165,772	13,702,818	15,744,992

* Exclusive of area under sown grasses.

VALUE OF VICTORIAN PRODUCTION, 1922-23 TO 1926-27—continued.

Produce.	Value in—				
	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
	£	£	£	£	£
<i>Dairying and Pastoral.</i>					
Milk consumed in natural state ..	1,995,280	2,130,245	1,784,590	2,333,000	2,326,800
Butter made ..	6,660,600	6,491,310	6,618,240	6,182,120	6,233,400
Cheese made ..	168,180	253,795	204,890	227,660	270,620
Cream made (not for butter) ..	127,530	177,090	190,540	184,350	154,880
Condensed, Concentrated, and Powdered Milk ..	1,434,720	1,509,400	1,582,915	1,437,660	1,498,060
Cattle ..	3,384,270	1,413,310	3,538,240	3,707,000	2,330,830
Pigs ..	1,280,040	1,507,600	1,588,620	1,720,740	1,343,750
Sheep (without wool) ..	3,752,260	2,600,450	4,390,380	3,316,660	2,585,770
Wool ..	6,380,600	7,695,000	11,440,240	7,082,820	7,376,683
Less Deductions ..	..	..	-1,723,178	-1,771,800	-2,340,426
Total ..	25,178,480	23,778,300	29,615,977	24,420,210	22,280,367
<i>Mining.</i>					
Gold ..	453,962	405,245	285,316	200,958	208,778
Coal ..	695,430	563,239	610,671	762,521	846,697
Stone from Quarries (including limestone) ..	468,468	518,064	530,820	666,765	700,200
Other Metals and Minerals ..	48,021	45,829	41,848	37,284	124,567
Total ..	1,665,881	1,532,427	1,468,655	1,667,528	1,880,242
<i>Forest Produce.</i>					
Timber (Forest Saw-mills only) ..	946,930	942,480	745,580	711,970	863,493
Firewood (estimated) ..	927,860	1,033,700	1,053,870	1,071,000	888,400
Bark for Tanning ..	136,830	130,660	132,935	129,490	136,906
Total ..	2,011,620	2,106,840	1,932,385	1,912,460	1,888,799
<i>Miscellaneous.</i>					
Honey and Beeswax ..	40,122	45,559	78,981	41,694	47,282
Poultry production (estimated) ..	4,315,810	4,587,560	4,443,200	4,515,400	4,819,500
Rabbits and Hares ..	266,478	310,930	403,680	697,665	508,340
Fish ..	160,151	161,905	164,296	187,851	167,461
Total ..	4,782,561	5,105,954	5,090,157	5,442,610	5,542,583
Total Value of Primary Products ..	54,835,568	52,183,895	56,272,946	47,145,626	47,336,983
Manufacturing—Added Value* ..	46,355,804	49,141,526	45,271,348	46,006,461	51,005,430
Grand Total ..	101,191,372	101,325,421	101,544,294	93,152,087	98,342,413

* 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.

The figures for the last three years in the above table under the headings "Cultivation" and "Dairying and Pastoral" are not strictly comparable with those of previous years owing to certain deductions

(in addition to freight and handling charges) having been made consisting chiefly of cost of bags, cases, seed, manure, spraying material, and produce used in the production of crops in the former, and of hay, bran and pollard, green fodder, and root crops used as fodder in the case of the latter.

Similarly the basis for the calculation of added value in manufacturing has been altered since the year 1923-24. Added value is now obtained by deducting from the total value of output the cost of materials used, fuel and light, tools replaced, repairs to plant, &c., whereas prior to 1924-25 the value of materials used was the only deduction. This explains the apparent decrease under this head for 1924-25.

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,
1922-23 to 1926-27.

Produce.	Value of Produce per head in—				
	1922-23.	1923-24.	1924-25.	1925-26.	1926-27.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cultivation ..	13 6 7	12 1 11	10 19 3	8 2 9	9 4 0
Dairying and Pastoral	15 16 8	14 12 7	17 17 5	14 10 0	13 0 4
Mining ..	1 0 11	0 18 10	0 17 9	0 19 10	1 1 11
Forest ..	1 5 4	1 5 11	1 3 4	1 2 8	1 2 1
Miscellaneous ..	3 0 2	3 2 10	3 1 5	3 4 8	3 4 9
Total Primary Production	34 9 8	32 2 1	33 19 2	27 19 11	27 13 1
Manufactures ..	29 3 0	30 4 8	27 6 5	27 6 5	29 15 11
Grand Total	63 12 8	62 6 9	61 5 7	55 6 4	57 9 0