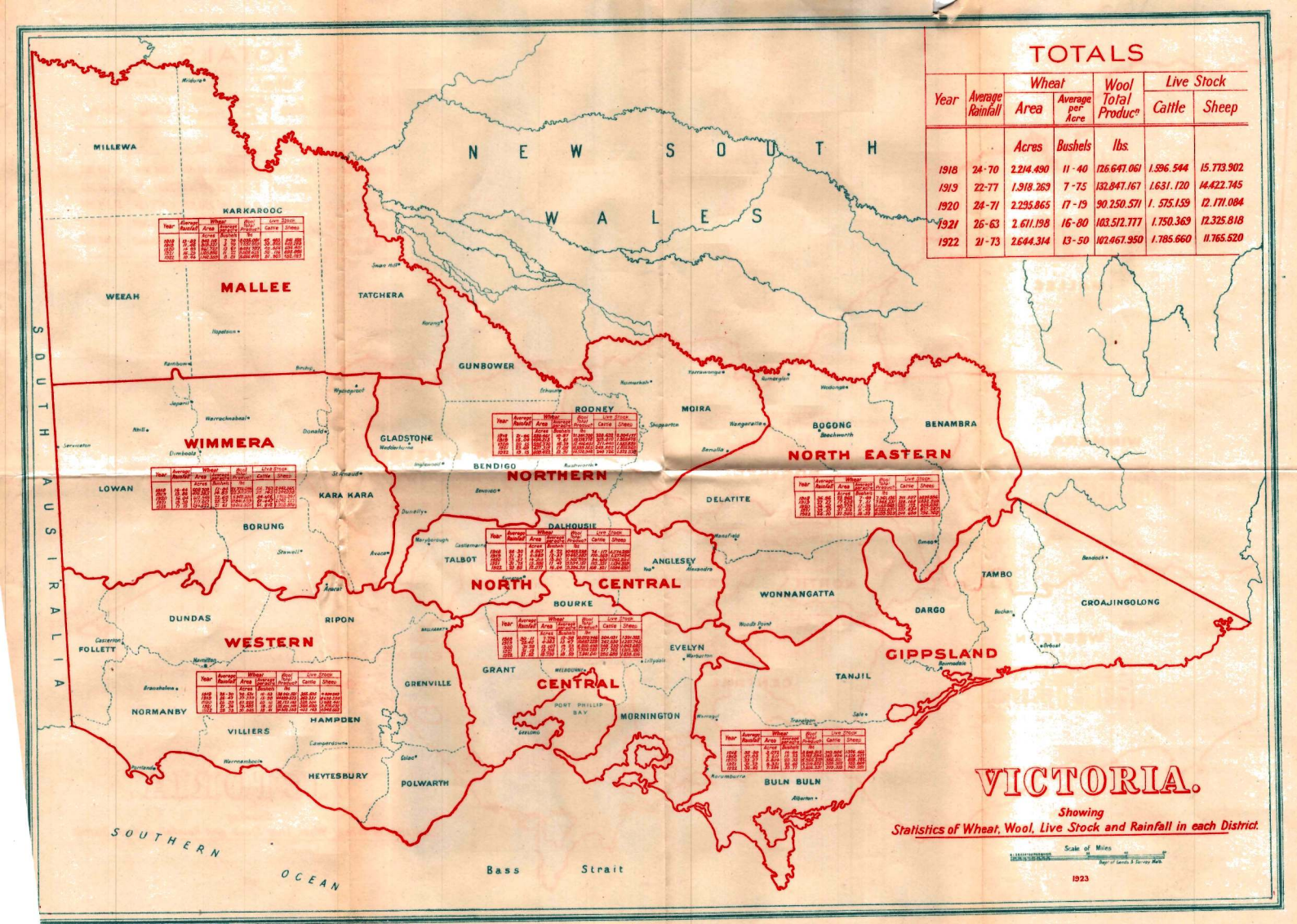
TOTALS
Year | Average Rainfall | Wheat: Area | Wheat: Average per Acre | Wool Total Produce | Live Stock: Cattle | Live Stock: Sheep
Acres | Bushels | lbs.
1918 | 24-70 | 2.214.490 | 11-40 | 126.641.061 | 1.596.544 | 15.713.902
1919 | 22-77 | 1.918.269 | 7-75 | 132.847.167 | 1.631.120 | 14.422.745
1920 | 24-71 | 2.295.865 | 17-19 | 90.250.571 | 1.575.159 | 12.171.084
1921 | 26-63 | 2.611.198 | 16-80 | 103.512.777 | 1.750.369 | 12.325.818
1922 | 21-73 | 2.644.314 | 13-50 | 102.467.950 | 1.785.660 | 11.765.520
NEW SOUTH WALES
SOUTH AUSTRALIA
MILLEWA
KARKAROOC
MALLEE
WEEAH
TATCHERA
GUNBOWER
RODNEY
MOIRA
BOGONG
BENAMBRA
NORTH EASTERN
WIMMERA
GLADSTONE
BENDIGO
NORTHERN
LOWAN
KARA KARA
BORUNG
DELATITE
DALHOUSIE
TALBOT
ANGLESEY
NORTH CENTRAL
BOURKE
WONNANGATTA
TAMBO
CROAJINGOLONG
DARGO
DUNDAS
RIPON
WESTERN
FOLLETT
EVELYN
GIPPSLAND
GRANT
CENTRAL
TANJIL
GRENVILLE
NORMANBY
HAMPDEN
VILLIERS
PORT PHILLIP BAY
MORNINGTON
HEYTESBURY
POLWARTH
BULN BULN
SOUTHERN OCEAN
Bass Strait
VICTORIA.
Showing
Statistics of Wheat, Wool, Live Stock and Rainfall in each District.
Scale of Miles
1923

PRODUCTION.

LAND SETTLEMENT, ETC.

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

	Acres.
Lands alienated in fee simple	25,009,594
Lands in process of alienation	8,456,871
Crown lands	22,779,295
Total	56,245,760

The Crown lands comprise—

Permanent forests (under Forests Act)	3,382,485
Timber reserves (under Forests Act)	734,555
State forests and Timber reserves (under Land Act)	329,600
Water reserves	315,546
Reserves for Agricultural Colleges, &c.	85,590
Reserves in the Mallee	397,881
Other reserves	301,917
Roads	1,767,170
Water frontages, beds of rivers, lakes, &c.; unsold land in cities, towns, and boroughs	2,143,017
Land in occupation under—	
Perpetual leases	121,191
Other leases and licences	93,672
Temporary grazing licences	9,053,128
Unoccupied	4,053,543
Total	22,779,295

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 1912. 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, 1913 TO 1922.

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.	£
1913	4,205	171,449	153,051	164,065
1914	3,710	166,026	129,525	145,003
1915	3,287	129,232	117,257	113,167
1916	2,061	140,341	89,203	80,238
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

* 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 1922 the amount realized by the sale of Crown lands was £34,171,544, which represents an average of £1 0s. 8d. 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, 1922.

Location.	Classification.					Total.
	Agricultural and Grazing.				Auriferous.	
	First.	Second.	Third.	Unclassed.		
County.	Acres.	Acres.	Acres.	Acres.	Acres.	Acres.
Buln Buln	3,127	35,108	85,054	..	..	123,289
Croajingolong	2,500	5,316	583,910	837,400	13,850	1,442,976
Dargo	..	..	105,630	431,900	72,000	609,530
Tambo	..	..	218,860	398,850	900	618,610
Tanjil	..	..	110,430	361,650	67,000	539,080
Wonnangatta	..	39	160,673	957,398	..	1,118,110
Bogong	1,712	14,369	217,234	231,724	97,861	562,900
Benambra	..	403	300,459	328,714	..	629,576
Delatite	610	19,173	224,207	230,050	61,336	535,376
Moira	546	409	11,116	..	..	12,071
Anglesey	..	4,157	98,308	..	4,608	107,073
Bourke	..	162	..	..	..	162
Dalhousie	..	814	3,261	..	5,731	9,806
Evelyn	..	19,715	391	..	1,788	21,894
Mornington	..	5,947	39,315	..	..	45,262
Bendigo	80	636	3,534	..	4,613	8,863
Rodney	..	351	..	..	2,420	2,771
Borung	..	642	60,243	423	2,438	63,746
Gladstone	256	1,195	2,351	..	18,054	21,856
Lowan	..	813	273,932	11,343	..	286,088
Kara Kara	24	144	3,947	..	5,672	9,787
Talbot	96	500	278	..	35,849	36,723
Tatchera	..	70	..	..	..	70
Heytesbury	..	1,546	168,765	..	..	170,311
Polwarth	11,386	15,971	28,518	..	..	55,875
Grant	155	..	26,242	..	15,476	41,873
Grenville	99	321	13,264	..	..	13,684
Ripon	..	381	24,880	..	835	26,096
Normanby	..	307	143,872	11,285	..	155,464
Dundas	..	40	87,149	16,724	..	103,913
Villiers	..	..	2,258	..	..	2,258
Follett	..	1,183	201,720	45,009	..	247,912
Totals	20,591	129,712	3,199,801	3,862,470	410,431	7,623,005
Throughout the State	Swamp or reclaimed lands					2,028
" "	Lands which may be sold by auction					7,538
The north-western portion of the State	Mallee lands (such as are suitable to be eventually classed 1st, 2nd, or 3rd class for selection)					5,474,100
Total area remaining for disposal						13,106,671

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, 1922, are as follows :—

Number of Licences	6,276
Area (acres)	9,053,128
Annual Rental	£29,016

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 1922 there were submitted 458 applications to have brought under the

Act land amounting to 11,252 acres in extent, and to £603,536 in value; whilst the land actually brought under the Act during the year by application was 27,796 acres valued at £772,671. Up to the end of 1922 there had been brought under the Act 3,085,187 acres valued at £62,891,335.

Assurance Fund.

When application is made to have land brought under the Transfer of Land Act, a contribution to the assurance fund of ½d. 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 1922-23 comprised contributions £2,447, interest on stock £2,845, and interest on £75,073—advanced under *The Protection of Public Buildings Act* 1885—£3,003. During the year £30 was paid out of the fund in settlement of claims and £5,927 as interest on securities under the *Special Funds Act* 1920, No. 3067. The balance at the credit of the assurance fund on 30th June, 1923, was £163,012. The amount paid up to 30th June, 1923, as compensation and for judgments recovered, including costs, was £7,953.

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 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. The value of the land must not exceed the maximum allowed under the Act. The agreement with full details and an application on the proper form must be filled in and 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 terms of which are briefly stated herein, but are more particularly described 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 36½ 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 46½ 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. 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) which, together with the allotment applied for, exceeds such value. 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; and, 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.

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 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 three 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.

Wire netting advances.

Advances of wire netting may also be made under the Closer Settlement Acts to owners of land—

(*a*) if such land is held as above mentioned; or
(*b*) if such land immediately adjoins any unoccupied Crown land or is not included in any municipality.

The wire netting supplied is No. 17 gauge, 1¼-in. mesh, 42 inches wide, and is supplied in rolls of not less than 100 yards. Each advance is limited to a quantity sufficient for 6 miles of vermin-proof fencing, and the price of the wire netting is deemed to be the amount of the advance, which is repayable by a cash payment or on terms over a period not exceeding ten years, with interest at 4 per cent. per annum.

Estates purchased.

Apart from the estates purchased for discharged soldiers' settlement (*vide* page 439) the following is a complete statement of all estates acquired by the Closer Settlement Board for the purpose of closer settlement at 30th June 1923, including

those purchased by the State Rivers and Water Supply Commission, *i.e.*, estates in irrigable areas :—

CLOSER SETTLEMENT ESTATES AT 30TH JUNE, 1923.

Estates.	Area.	Estates.		No. of Lessees.			Areas Unallotted.
		Purchase Money, including Discount on Stock or Debentures	Total Cost to Date.	Farm Allotments.	Workmen's Home Allotments.	Agricultural Labourers' Allotments.	
Dry Areas.	acres.	£	£				acres.
Farms—							
Allambee ..	5,025	31,794	35,107	24	..	..	1,083
Allendale ..	1,108	9,728	9,750	7	..	..	..
Balure	183	1,463	1,494	..	..	10	..
Bamawm ..	168	1,391	1,391	..	..	..	..
Bellarine ..	204	5,457	7,009	6	..	..	65
Belmont ..	113	3,161	5,766	..	..	17	..
Boisdale ..	2,521	72,174	74,763	42	..	..	..
Bona Vista ..	2,060	28,832	33,208	23	..	4	..
Cohuna ..	223	2,215	2,238	2	..	..	..
Colbinabbin ..	19,163	110,198	114,754	87	..	..	..
Condah ..	157	1,725	1,725	..	..	..	..
Cornelia Creek ..	29,567	121,034	125,444	86	..	1	..
Cremona ..	1,292	20,140	21,923	1	..	1	..
Daylesford ..	70	2,957	5,312	14	..	..	..
Deepdene ..	2,964	35,742	36,711	13	..	..	..
Doogalook ..	4,640	29,002	29,753	16	..	..	..
Dunrobin ..	18,814	119,779	123,372	56	..	23	..
Dura	331	3,200	3,258	7	..	..	..
Englefield ..	11,242	33,302	33,534	1	..	..	10,166
Ercildoune ..	1,190	12,199	12,211	7	..	..	..
Eumeralla ..	10,034	57,570	60,012	34	..	6	..
Eurack	5,109	53,640	57,216	45	..	..	..
Exford	8,005	64,039	67,584	43	..	6	..
Glenaladale ..	2,110	28,787	29,464	16	..	..	..
Glendenning and Melville Forest..	43,800	153,479	153,748	5	..	..	39,132
Greenvale ..	304	7,298	7,335	4	..	..	..
Heart	3,793	56,322	58,567	38	..	..	..
Highton ..	424	11,032	15,467	18	..	..	..
Hogan's ..	444	6,197	6,345	9	..	..	..
Hurstwood ..	6,493	31,311	31,498	14	..	..	..
Inverary ..	1,258	7,548	7,647	26	..	..	..
Keayang ..	1,497	14,966	16,389	12	..	..	..
Kenilworth ..	18,440	55,321	56,286	29	..	12	..
Kilmany Park ..	8,746	106,080	108,496	70	..	..	..
Kongbool ..	32,018	111,148	111,228	1	..	..	31,084
Konongwootong ..	10,180	104,363	106,657	62	..	15	..
Koyuga ..	790	3,914	3,914	2	..	..	..
Laidlaw's ..	1,047	7,325	7,331	*	..	..	1,047
Lara	8,332	45,825	47,766	32	..	7	..
Leslie Manor ..	18,005	121,085	121,203	23	..	..	7,334
Mackey ..	1,078	20,626	20,635	..	..	..	..
Marathon and Willow-grove ..	14,782	58,752	60,550	26	..	..	..
Maribyrnong ..	1,112	10,842	11,068	12	..	2	..
Meadowbank ..	313	9,085	9,608	4	..	..	..
Memsie	10,028	57,159	57,525	45	..	..	..
Moralla ..	17,199	60,197	63,036	26	..	..	..
Mordialloc ..	460	7,850	13,303	31	..	..	..
Morven ..	8,029	39,533	39,944	20	..	..	..
Mount Widderin ..	8,332	48,634	49,878	22	..	..	..
Moyhu	2,417	19,581	20,337	11	..	..	..
Nanneella ..	738	7,767	7,842	6	..	13	..
Nathalia ..	30	362	388	..	..	5	..
Nerrin Nerrin ..	7,740	67,915	69,242	28	..	1	..
Numurkah ..	2,363	18,901	19,004	12	..	1	..

* Estate not yet subdivided.

CLOSER SETTLEMENT ESTATES AT 30TH JUNE, 1923—*continued*.

Estates.	Area.	Estates.		No. of Lessees.			Areas Unallotted
		Purchase Money including Discount on Stock or Debentures	Total Cost to Date.	Farm Allotments.	Workmen's Home Allotments.	Agricultural Labourers' Allotments.	
Dry Areas—*continued*.	acres.	£	£				acres.
Farms—*continued*.							
Oaklands ..	8,050	26,309	26,749	10	..	..	..
Overnewton ..	11,485	71,492	73,330	67	..	..	..
Pannoo ..	15,101	98,455	100,609	42	..	..	..
Pirron Yalloak ..	1,059	23,796	25,108	21	..	..	..
Restdown ..	17,893	60,391	61,409	52	..	..	..
Richmond Vale ..	1,539	11,000	11,137	10	..	1	..
Section 20 ..	46,559	304,488	307,000	207	..	2	3,50
Shepparton (Ascot Park) ..	488	3,671	3,671	..	..	..	..
Springs	398	2,290	2,318	8	..	..	..
Springvale ..	3,396	25,895	26,318	22	..	..	..
Staughton Vale ..	9,847	66,466	68,023	41	..	..	..
Strathkellar ..	10,228	74,150	76,458	56	..	6	..
Tandarra ..	4,559	21,083	21,240	19	..	..	..
Thomastown ..	581	11,230	15,783	26	..	1	..
Walmer ..	13,770	44,751	46,827	41	..	2	..
Wando Vale ..	10,446	63,985	66,840	67	..	..	..
Wangaratta ..	794	9,659	15,530	29	..	..	..
Warragul ..	98	2,060	3,295	7	..	1	..
Waubra	47	1,042	1,164	10	..	3	..
Wein Wein Gurk	3,022	8,684	8,964	13	..	..	..
Werneth ..	6,589	31,043	31,653	21	..	..	..
Werribee ..	15,218	148,802	163,777	35	..	..	..
Whitfield ..	4,247	36,096	38,366	34	..	1	..
Willows	380	5,131	5,165	3	..	..	..
Wootong Vale ..	11,560	57,474	57,474	..	..	..	11,56
Wyuna	23,024	120,876	124,681	113	..	10	1
Land purchased for Discharged Soldiers, but granted to civilians under Closer Settlement Acts	25,956	254,474	254,474	123	..	..	..
Land disposed of under Discharged Soldiers' Settlement Acts ..	..	..	..	119	..	..	..
	602,819	3,704,740	3,832,599	2,314	..	151	104,9
Crown Lands (Farms)—							
Inverloch ..	220	692	693	1	..	..	..
Leongatha ..	53	1,325	1,325	3	..	..	..
Mortlake ..	2,350	10,945	10,945	10	..	17	..
Newtown ..	157	1,955	3,496	4	..	..	..
	2,780	14,917	16,459	18	..	17	..
Workmen's Homes—							
Brunswick ..	91	2,792	3,349	..	56	..	..
Cadman's ..	18	844	1,502	..	42	..	..
Dal Campbell ..	45	2,358	3,433	..	63	..	..
Footscray ..	31	2,494	3,794	..	85	..	..
Glenhuntly ..	74	7,040	12,049	..	158	..	..
Pender's Grove ..	233	23,337	33,243	..	259	..	..
Phœnix ..	23	968	2,285	..	47	..	..
Tooronga ..	101	17,675	27,601	..	210	..	..
Thornbury ..	11	5,625	7,086	..	47	..	..
	627	63,133	94,342	..	967	..	..

Closer Settlement Estates at 30th June, 1923—*continued.*

Estates.	Area.	Estates.		No. of Lessees.			Areas Unallotted.
		Purchase Money, including Discount on Stock or Debentures	Total Cost to Date.	Farm Allotments.	Workmen's Home Allotments.	Agricultural Labourers' Allotments.	
Dry Areas—*continued.*	acres.	£	£				acres.
Crown Lands (Workmen's Homes)—							
Dowling Forest ..	225	1,350	1,376	..	15	..	..
Geelong ..	3	300	2,347	..	9	..	2
Maddingley ..	13	1,300	1,300	..	13	..	..
Warrnambool ..	46	1,188	1,188	..	25	..	..
Werribee Police Paddock ..	57	1,680	1,701	..	16	..	..
	344	5,818	7,912	..	78	..	2
Irrigable Areas.							
Farms—							
Bamawm ..	13,362	122,944	133,978	141	..	11	..
Berrys'	343	3,426	3,428	10	..	..	..
Cohuna ..	11,543	114,856	120,072	102	..	6	811
Cornelia Creek ..	2,507	16,501	19,569	7	..	..	194
Dingee	470	4,160	4,617	5	..	7	19
Dennis' ..	1,362	17,026	17,038	*	..	..	..
Echuca	3,235	29,142	31,789	26	..	..	..
Koondrook ..	3,423	23,202	23,964	32	..	..	..
Koyuga ..	4,173	36,228	40,590	36	..	14	.. 6
Kyabram ..	3,049	36,091	38,558	17	..	7	209
Nanneella ..	8,565	78,654	84,080	86	..	2	30
Nyah	21	85	570	1	..	..	..
Section 20 ..	850	10,078	10,122	9	..	..	..
Shepparton ..	9,242	136,839	153,306	190	..	40	..
Stanhope ..	20,889	228,630	233,256	67	..	12	1,217
Swan Hill ..	6,878	71,717	82,461	119	..	1	..
Tongala ..	15,228	172,395	190,545	158	..	21	146
Werribee ..	7,996	153,871	167,370	102	..	21	434
Land purchased for Discharged Soldiers, but granted to civilians under Closer Settlement Acts	3,357	55,150	55,150	79	..	..	..
Land disposed of under Discharged Soldiers Settlement Acts ..	..	..	..	441	..	..	..
Purchases for Immigration ..	14,339	197,512	197,707	3†	..	..	441
	130,832	1,508,507	1,608,170	1,631	..	142	3,507
Crown Lands—							
Swan Hill No. 3 ..	480	1,920	1,997	‡	..	..	..
Grand Total ..	737,882	5,299,035	5,561,479	3,963	1,045	310	108,025

* Estate not yet subdivided.

† Partly subdivided.

‡ Included in Swan Hill Estate.

Note.—The total cost to date of estates comprises the following items :—Purchase money, expenses prior to disposal, public works, and interest capitalized.

Up to 30th June, 1923, the Board had acquired 122 properties, with a total area of 737,882 acres, of which 108,502 acres were then available for allotment. Of the estates acquired for purposes of immigration (14,339 acres) only an area of 556 acres had been made available for closer settlement at 30th June, 1923. Portions of estates, amounting in the aggregate to 42,165 acres, have been sold by public competition and for public reserves without any restrictions, and are not under conditional purchase lease.

Up to the end of June, 1923, 560 allotments, containing 47,020 acres, had been sold to discharged soldiers and transferred to the Discharged Soldiers Settlement Act.

Extent of Closer Settlement.

The extent of the settlement effected by the Board at 30th June in each of the years 1919 to 1923 is summarized in the next statement.

CLOSER SETTLEMENT HOLDINGS, 1919 TO 1923.

—		At 30th June—				
		1919.	1920.	1921.	1922.	1923.*
In occupation—						
Number of Holdings	..	4,477	4,921	5,019	5,076	5,318
Area	acres	508,463	547,087	560,450	570,531	577,026
Resident Population	..	17,616	19,392	19,973	20,304	21,272
Area unallotted ..	acres	28,689	21,069	10,979	7,922	108,502

* Including 560 soldiers' holdings with an area of 47,020 acres.

The sum of £4,794,906 had been repaid to the Closer Settlement Fund up to 30th June, 1923. Of that amount £2,212,704 had been transferred to revenue to meet interest due to stockholders, £80,000 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 £2,263,023 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, 1923, being £139,178. The balance of unredeemed stock is now £4,392,753, on which the interest payable amounts to £168,857 per annum. Up to

the 30th June, 1923, 13,265 applications for advances aggregating £1,225,946 had been approved, and that amount had been advanced to effect improvements, or upon improvements already effected by lessees.

Discharged Soldiers Settlement.

By Acts 2916 of 1917, 2988 of 1918, and 3039 of 1919 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 Suppy District within the meaning of the *Water Act.*1915, are managed by the State Rivers and Water Supply Commission.

Up to the 31st October, 1923, the Closer Settlement Board and the State Rivers and Water Supply Commission had specially purchased for the settlement of soldiers 1,737,139 acres at a cost of £13,135,134. The number of soldiers settled up to that date was as follows :—

On land specially purchased by the Closer Settlement Board	5,962
On land specially purchased by the State Rivers and Water Supply Commission	1,395
On Closer Settlement old estates—Dry areas	119
On Closer Settlement old estates—Irrigable areas ..	565
On Crown Lands—Ordinary and Mallee Areas	1,230
On Crown Lands—Merbein and Nyah Irrigation Areas ..	186
Soldiers receiving assistance from the Closer Settlement Board, on share farming, leasing agreements and free-hold land	840
Total	10,297

In addition to the above there were available or in process of being made available 36 allotments, of which 13 were on land specially purchased by the Closer Settlement Board, and 23 on Crown land.

Up to the end of October, 1923, the amount of assistance rendered by the Board to soldier settlers by way of advances was £5,990,973.

WATERWORKS.

Victorian Waterworks.

All Victorian waterworks are controlled by official bodies, either State or local. The following table 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, 1922.

Controlling Bodies.	Purposes of Supply.	Storage Capacity of Reservoirs.	Capital Expenditure and Advances by State.
		Gallons.	£
State Rivers and Water Supply Commission—			
Coliban System ..	Domestic and Mining	10,855,000,000	1,283,572
Broken River Works ..	Stock and Domestic	..	14,853
		Acre feet.	
Goulburn-Waranga ..	Irrigation, &c. ..	330,000	1,672,787
North-west (Kerang) Lakes	Stock and Domestic	88,500	17,676
Kow Swamp Works ..	Irrigation, &c. ..	40,860	187,453
Loddon River Works ..	,, ,, ..	14,000	167,636
Sugarloaf Reservoir (under construction) ..	,, ,, ..	300,000	728,327
Glenmaggie Reservoir ..	,, ,, ..	150,000	100,012
		Cubic feet.	
Lake Lonsdale Reservoir	Stock and Domestic	1,981,000,000	49,054
Lower Wimmera Compensation Works ..	,, ,,	125,000,000	8,558
Long Lake Pumping Works	,, ,,	166,000,000	27,346
		Acre feet.	
Bacchus Marsh and Werribee Scheme ..	Irrigation, &c. ..	31,850	166,262
Irrigation and Water Supply Districts (20)	,, ,, ..	..	2,069,349
Waterworks Districts (23)	Stock and Domestic	..	1,866,190
First Mildura Irrigation and Water Supply Trust ..	Irrigation	..	116,353
		Gallons.	
Waterworks Trusts (98) ..	Stock and Domestic	1,180,000,000	1,256,973
Municipal Corporations (29)	,, ,,	3,110,000,000	785,602
Abolished Irrigation and Water Supply Trusts (8)	Irrigation	..	32,724
Miscellaneous Expenditure	.. .. ..	..	173,220
Melbourne and Metropolitan Board of Works ..	Domestic	6,460,000,000	5,390,920
Geelong Waterworks and Sewerage Trust ..	,, ...	2,703,967,000	626,914
Total ..	.. .. ..	..	16,741,781

Of the expenditure given in the case of the Melbourne waterworks, £3,189,934 represents money borrowed by the State, £2,251,752 of which has been redeemed—£800,000 out of consolidated revenue, and £1,451,752 by payments from the Melbourne and Metropolitan Board of

Works, to which body the waterworks were transferred in 1891. The loan liability to the State of the Melbourne and Metropolitan Board of Works on 30th June, 1922, was £938,182. Further particulars relating to this Board will be found on page 216, 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., £155,577, and the capital expenditure by the Trust since acquiring the works, viz., £206,337.

Expenditure and Advances for Waterworks.

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.

CAPITAL EXPENDITURE AND LOANS FOR WATERWORKS.

—	Expenditure and Advances by State.	Interest Capitalized.	Free State Grants.	Capital Written Off.	Payments towards Redemption.	Amount standing at Debit, 30th June, 1922.
	£	£	£	£	£	£
State Works	4,423,535	..	2,798*	..	..	4,423,535
Irrigation and Water Supply Districts (20)	2,069,349	..	15,406	575,152	19,120	1,475,077
First Mildura Irrigation and Water Supply Trust ..	116,353	..	..	..	6,093	110,260
Waterworks Districts (23) ..	1,866,190	..	46,349	175,055	41,336	1,649,799
Waterworks Trusts (98) ..	1,219,559	6,871	37,414	125,861	164,457	936,112
Geelong Waterworks and Sewerage Trust	455,812	..	..	..	300,235	155,577
Municipal Corporations (20)	776,059	43,633	..	165,870	144,464	509,358
" " (9)	9,543	346	..	..	9,889	..
Melbourne and Metropolitan Waterworks System ..	3,189,934	..	..	..	2,251,752	938,182
Abolished Trusts (8) ..	31,710	..	243	31,680	30	..
Flood Protection Districts ..	168,381	..	..	..	..	168,381
Miscellaneous	173,220	..	..	..	..	173,220
Total	14,499,645	50,850	102,210	1,073,618	2,937,376	10,539,501

* Originally grants to Waterworks Trusts, the works on which spent having been taken over by the State.

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 £1,653,404. Interest outstanding at 30th June, 1922, amounted to £20,961, viz., £8,029 against the First Mildura Trust, £11,342 against Waterworks Trusts, and £1,590 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 past Five Years.
	Acres.	Acres.
Supplied from the Goulburn—		
Shepparton	..	14,451
Rodney	32,356	51,712
Stanhope	2,000	6,237
Tongala	3,000	11,452
Rochester	500	24,666
Echuca North (one year) ..	..	2,856
Dingee	..	2,462
Tragowel Plains	20,000	32,359
Supplied from the Murray—		
Cohuna	12,000	16,717
Gannawarra	7,825	19,703
Koondrook	5,029	16,533
Swan Hill	5,410	11,561
Nyah	569	2,266
Merbein	202	7,128
Supplied from the Werribee—		
Bacchus Marsh	31	2,599
Werribee	..	4,457
Total	88,922	227,159

The area under irrigated culture in the whole State, in 1922–23, for all kinds of crop, was 350,727 acres, being an increase of 62,820 acres on the area irrigated in the previous year, and 44,765 acres above the average of the previous four 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.	1918–19.	1919–20.	1920–21.	1921–22.	1922–23.
	acres.	acres.	acres.	acres.	acres.	acres.
Cereals	23,715	44,765	76,810	26,546	25,039	60,304
Lucerne	24,124	64,131	71,364	72,338	82,226	92,679
Sorghum and other annual fodders ..	8,094	19,083	32,955	25,963	28,112	35,591
Pastures	50,541	88,986	117,263	100,424	88,195	88,787
Vineyards and orchards	17,524	38,260	43,586	50,281	55,601	61,061
Fallow	4,988	5,575	8,502	3,465	4,867	8,850
Miscellaneous ..	785	3,559	2,768	3,517	3,867	3,455
	129,771	264,359	353,248	282,534	287,907	350,727
Details not available (private diversions)	8,000	17,800	18,000	From 1st July, 1920, included in detail areas above		
Total ..	137,771	282,159	371,248	282,534	287,907	350,727

Of the total area irrigated in 1922–23—350,727 acres—the percentages devoted to different purposes were as follows :—Pastures, 25 ; cereals, 17 ; lucerne, 27 ; vineyards, orchards, and gardens, 18 ; sorghum and other annual fodder crops, 10 ; fallow, 2 ; and miscellaneous, 1.

Closer Settlement in Irrigation Districts.

The Commission after having met the requirements of the remaining soldier applicants has again made irrigation lands available under closer settlement conditions. The number of applicants for irrigable blocks whose applications were granted in 1922–23 was 312 ; of these 103 were discharged soldiers and 209 civilians.

In the districts supplied by the Goulburn Irrigation System 4,100 acres were made available as follows:—1,860 acres at Tongala, which were subdivided into 31 holdings, and 2,240 acres at Shepparton, and in Rodney district, Stanhope district and Echuca North, which provided holdings for 23 settlers. In the districts served by the River Murray schemes, 3,400 acres were subdivided—1,200 acres at Swan Hill into 38 allotments, and 510 acres at Koondrook which yielded 17 blocks. The balance for the year is represented by two further subdivisions of the irrigable portion of the Red Cliffs Estate, which contributed 79 holdings. The five subdivisions of the Red Cliffs Estate settlement, which have been made up to the present, have provided 701 allotments. These, with the exception of 35 blocks, have been allotted to soldiers.

Since the commencement of the repatriation of Victoria's soldiers, the Commission has found irrigable closer settlement holdings for a total of 2,145 duly qualified soldier settlers. Some of the latter whose health was impaired by the war, and others for various reasons, have transferred their blocks. Notwithstanding this, there are 610 settled in the Goulburn districts, while in the Murray areas and Southern districts there are 1,260 of whom 666 are at Red Cliffs.

The Commission has also anticipated the demand for irrigation blocks by oversea land seekers under the new immigration policy recently adopted by the State. Over 40 properties in various districts embracing 17,500 acres have been acquired for subdivision, which, added to an area held in reserve, makes a total of 34,500 acres.

In addition to the provision made for new settlers in the established irrigation districts of the north, considerable areas of fertile lands have been acquired in Gippsland, which, when served by the irrigation works now in progress, will provide holdings suitable for the cultivation of sugar beet and the growing of lucerne.

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 portions of these estates which have been subdivided are already supporting twenty times as many families as were

living on them previously. 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 Estate.	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	14,100	11,200	27	25	337	32	326	301
East Goulburn	9,000	..	..	..	..	..	..	..
Rodney	900	900	3	1	10	88	6	5
Stanhope	21,500	21,500	7	13	315	63	295	282
Kyabram	3,000	3,000	7	10	56	53	55	45
Tongala	18,300	18,100	37	34	294	59	283	249
Koyuga	4,200	4,200	Pt. 1	..	52	77	52	52
Cornelia Creek	2,500	2,500			14	176	14	14
Nanneella	9,000	9,000	17	7	105	83	105	98
Echuca	3,600	3,600	8	4	30	116	29	25
Bamawm	13,400	13,400	28	21	179	71	179	158
Dingee	500	500	3	1	15	30	13	12
Calivil	3,300	..	..	..	..	..	..	..
Cohuna	12,000	12,000	29	10	134	86	127	117
Koondrook	7,600	3,900	7	4	51	74	41	37
Swan Hill	12,500	12,500	34	16	295	40	289	273
Nyah	3,800	3,800	8	1	208	17	207	206
Merbein	8,300	8,300	..	..	384	21	384	384
Red Cliffs	33,000	17,700	1	3	701	16½	694	691
Bacchus Marsh	70	70	1	..	2	34	2	2
Werribee	10,000	10,000	Pt. 1	11	238	38	232	221
Maffra	7,700	4,900	7	4	107	41	69	65
	198,270	161,070	226	165	3,527	42	3,402	3,237
Properties under Section 20, *Closer Settlement Act* 1915, outside above Estates	18,710	..	..	..	..	..	204	..
	216,980							

Progress of Irrigated Closer Settled Districts.

During the past year the development of the holdings in the irrigated areas has been steadily continued, and a considerable increase in the value of the stock, implements, and permanent improvements owned by the settlers has been reported. In Red Cliffs, the largest soldier settlement in the State, a number of blocks will this year reach a producing stage, though they have been less than three years under cultivation. At Merbein, Nyah, Woorinen, Swan Hill, Kerang, Shepparton, and other irrigation centres small fruit and citrus orchards are coming into full bearing. In the districts of Cohuna, Rochester, Stanhope, Tongala, and Swan Hill, where the settlers favour dairying, pig-raising, and sheep-fattening, good progress has been made, and the returns from pig-raising have been particularly satisfactory. The quality of the dairy herds has much improved—many of the cattle now being prize-takers at various shows.

Much progress in irrigation is anticipated in the Kerang and Koondrook districts owing to the increased water supplies provided by the new Torrumbarry Weir, and to railway facilities guaranteed by the new border Railway to Gonn Crossing. Settlers at Bacchus Marsh and Werribee have obtained good returns from the growing of lucerne, which is becoming more recognized as stock and poultry feed.

At Kyabram centre a large co-operative fruit cannery was erected last year, while the cannery at Shepparton, one of the most important centres for large fruit growing under irrigation, was again used to its full capacity during the last fruit season. The output of these two canneries last season represented 50 per cent. of the total Victorian pack.

A gratifying feature of the development of the various irrigation districts is the establishment by settlers and others of factories to treat their products. In Werribee a Milk Products factory has been established; in Rochester, Stanhope, Tatura, and Tongala new or enlarged butter factories have been provided. Sales of lands in new townships in irrigation districts have been most successful, showing unmistakably the confidence of business men in the future of these districts.

Water Supply Construction Works.

The construction of storage works by the State Rivers and Water Supply Commission was continued during the year. Satisfactory progress was made with the construction of Sugarloaf Reservoir on the Upper Goulburn River, and a volume of some 40,000 acre-feet of water is already held in store. The enlargement of Waranga Reservoir has been completed and has increased the full capacity of this storage to 333,400 acre-feet.

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 work of the embankment at Taylor's Lake has now advanced sufficiently to enable this storage to be filled to practically its maximun capacity—30,000 acre-feet. Considerable progress has been made with the construction of the valve tower and outlet structures of Pine Lake Reservoir, and a start will be made with the earthwork of the storage in 1923–24. The embankment will be built in two stages, the first of which will enable 34,000 acre-feet of water to be impounded. The ultimate holding capacity of this storage will be 62,000 acre-feet. The new main channel connecting the Wimmera River with Taylor's Lake and Pine Lake Storage is completed and in operation. Its capacity is 1,200 acre-feet per day.

The storage provision for the Wimmera–Mallee Supply Scheme now reaches 148,000 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 210,000 acre-feet. The water is distributed throughout a total area of about 11,000 square miles by main and distributary channels aggregating over 4,500 miles in length (exclusive of an approximately equal length of farmers' connecting branches). This system also supplies water to 29 towns.

Total Storages in State. In 1902 the total capacity of storages in the State was 172,000 acre-feet. The present capacity is about 792,000 acre-feet, and, when the Sugarloaf, Wimmera, and Maffra Storages are completed, the total capacity will exceed 1,264,000 acre-feet. The Hume Reservoir, which is in course of construction, will also contain fully 1,100,000 acre-feet, half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria.

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 94 successful bores in this area with an average depth of 460 feet, and 176 tanks with a total storage capacity of 160,440,000 gallons.

Millewa Water Supply. A scheme has been prepared for the supply of water to an area of about 1,000,000 acres in the extreme north-western portion of the State, which will be opened up by the 55 miles of railway from Red Cliffs that is projected for the service of that territory. The scheme will comprise two main lifts, of about 125 feet and 150 feet, the first being from Lake Cullulleraine—a depression on the edge of the river flats about 5 miles from the River Murray. Nineteen miles of main channels have already been constructed, and distributary channels are in progress which will serve 136 Mallee blocks recently allotted to settlers. The works will be constructed in successive stages to meet the requirements of the gradually extending settlement.

Mornington Peninsula Scheme. The important scheme of reticulated supply to the Naval Base, the inland towns of Berwick, Beaconsfield, Dandenong, Somerville, and Bittern, and the bayside towns of Mornington, Frankston, Seaford, Carrum, Chelsea, Edithvale, and Aspendale, is in full working order. The reservoirs at Beaconsfield, Frankston, South Frankston, Mornington,

and Bittern were kept fully supplied during the past year. Besides carrying out large extensions of mains in all existing districts, the work of reticulating the townships of Bittern, Somerville, and Berwick (lower level) was completed and these townships are now receiving the benefits of reticulated supplies.

A reinforced concrete service basin of 250,000 gallons capacity has been constructed on the race-course hill at Cranbourne, and another, of a similar capacity, at Berwick.

The new storage of 36,000,000 gallons capacity, on Heywood's Hill, 2 miles north of Dandenong, was filled and kept fully supplied throughout the year, thus providing an ample supply of water at adequate pressures for all parts of Dandenong. The work of connecting this storage with the Beaconsfield Reservoir by means of a large main supply race with syphons of ample size is now well advanced.

Maffra District Irrigation Scheme.

Good progress was made during the year with the construction of the cyclopean concrete dam on the Macallister River, some 31,000 cubic yards of concrete having been placed in position. It is expected that all outlet pipes will be in position during the coming year, enabling all necessary volumes to be diverted for the summer of 1924–25. These will be used for irrigating the greater portion of the Boisdale flats and portion of the Newry flats—the areas for the service of which the scheme was originally launched, though it was subsequently enlarged to provide for a much greater area of very suitable adjacent lands.

The design for the dam now being carried out provides for water being raised to a maximum height of 100 feet above the foundations. The storage thus created will have a capacity of over 150,000 acre-feet. This, with the large unregulated flow of the river, which can be drawn on during the first portion of an irrigation season, will give ample water for the irrigation of some 80,000 acres of very suitable land in this important district.

Red Cliffs Irrigation District.

Practically the whole of the area of 14,700 acres subdivided has now been cleared, including almost the whole of the 12,500 acres allotted in the five subdivisions. The first, second, and portion of the third subdivisions have been planted, and were supplied with water for irrigation during the year. The main and re-lift pumping plants are practically complete. The settlement now has 104 miles of channels, which involved 620,000 cubic yards of excavation, and of which $5\frac{1}{2}$ miles are lined with cement. In Red Cliffs township 192 blocks have been sold at prices ranging up to £15 per foot. The township is being reticulated, and consumers are now making their connexions.

Kooweerup and Cardinia Flood Protection Scheme.

In addition to works of water supply, 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 have reached the stage that enables the landholders affected to realize the full benefits of the scheme, and flood protection charges have been levied accordingly.

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 considerably in excess of the estimate. The four contracting Governments have agreed to share equally in the total cost of the works. The total expenditure incurred up to 31st December, 1923, on the portion of the scheme completed and in course of construction was £2,333,000.

The site of the Hume Reservoir, which has been designed to provide for a capacity of 1,100,000 acre-feet, is a little below the junction of the rivers Murray and Mitta Mitta. 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 of the work considerable progress has been made in connexion with the excavations for foundations for the concrete structure, and with the construction of the concrete wing walls. The construction of the concrete core wall, which will form the centre of the earthen embankment on the Victorian side of the river, is proceeding steadily. The Torumbarry Weir and Lock (near Echuca) has been completed and brought into operation.

The site for a Lock-Weir—No. 11 from the river mouth—has been selected about half a mile downstream from Mildura. This work will form a lock pool for about 40 miles upstream from its site; and, besides

reducing the suction lift at the Mildura and Red Cliffs Pumping Stations, will form a local storage of great value in time of extreme low flow in the river. The work, which is actually in hand, is expected to take between two and three years to complete.

The question of providing for the use of the Hume Reservoir for the generation of electricity having been raised by the Electricity Commission for Victoria, it was agreed between the contracting Governments that their representatives on the River Murray Commission should act as their representatives on a Conference respecting the use of the waters of the Hume Reservoir for the purpose named. At the request of the Government of Victoria this Conference also investigated a suggestion that the capacity of the Hume Reservoir should be considerably increased above the 1,100,000 acre-feet which had previously been regarded as the volume provided for in the Agreement.

The Report of the Conference, in which are included the recommendations set out below, has been submitted to the four contracting Governments, and now awaits consideration by a conference of Ministers representing those Governments.

Recommendations :—

1. That provision be made for outlet works at the Hume Reservoir suitable for the purpose of hydro-electric generation in addition to the purposes set out in the River Murray Agreement, at an estimated additional cost of £40,000, and that the cost of such works be borne by the interested parties.
2. That the Hume Dam be carried to a height sufficient at present for a reservoir of a capacity of 1,100,000 acre-feet only, but that the work be constructed in such a manner as will permit of the dam being raised later to provide for a capacity of 2,000,000 acre-feet.
3. That the question of the benefits to be derived by each State from any increased storage provided, and the proportion of the additional cost of same which is to be borne by each party to the River Murray Agreement, be a matter for discussion and agreement by a Conference of responsible Ministers at an early date.
4. That the Governments concerned concur in the River Murray Commission at once approving of the expenditure during the next six months of a sum of approximately £20,000 in connexion with foundation work included in the estimate of cost of widening the base of the dam to permit of subsequently increasing the capacity of the reservoir ; this matter to be treated as one of special urgency, as the work is being delayed pending decision as to the width of the base of the dam.

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.
94	232	Feet. 43,600	Feet. 47,000

Mildura Irrigation Settlement.

The Mildura Irrigation Settlement, on the Murray River, 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 1922.*

1891	April (Census)	2,321	1921	April (Census)	..	13,183
1901	March (Census)	3,325	1922	December ..	..	13,760
1911	April (Census)	6,119				

* 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 1912 was £731,780. In 1922 in the same area it had risen to £3,145,140. The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1922, were as follows :—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION TRUST, 1921–22.

Receipts.	£	*Payments.*	£
Horticultural Rates ..	43,375	Wages and Salaries ..	14,752
Special Waterings, &c. ..	6,214	Firewood	17,748
Miscellaneous	5,538	Interest, Sinking Fund and Depreciation	7,626
		Miscellaneous	9,005
Total	55,127	Total	49,131

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, and 44,150 acres in 1921–22.

METEOROLOGY.

Meteorological Records.

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 1920, 1921, and 1922, and the average yearly amount of rainfall deduced from all available records to December, 1922, 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, 1922.
	1920.	1921.	1922.	
	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	25.80	24.77	24.42	25.63
Fitzroy, Eumeralla, and Merri Rivers	25.97	28.89	27.06	28.23
Hopkins River and Mt. Emu Creek..	24.11	23.63	23.27	25.01
Mt. Elephant and Lake Corangamite	22.19	24.56	23.43	24.59
Cape Otway Forest	45.87	39.56	43.74	41.60
Moorabool and Barwon Rivers ..	20.46	25.61	23.17	24.15
Werribee and Saltwater Rivers ..	24.36	25.21	21.61	23.67
Yarra River and Dandenong Creek ..	37.97	34.77	35.37	33.79
Koo-wee-rup Swamp	35.80	34.47	37.29	35.99
South Gippsland	36.51	35.97	38.52	38.93
Latrobe and Thomson Rivers ..	35.47	33.18	35.94	36.24
Macallister and Avon Rivers ..	21.80	19.45	24.18	23.84
Mitchell River	27.06	22.54	25.09	26.84
Tambo and Nicholson Rivers ..	30.28	23.36	25.62	27.73
Snowy River	40.09	27.69	28.64	34·88
Murray River	16.43	20.66	11.66	16.71
Mitta Mitta and Kiewa Rivers ..	36.50	39.71	26.54	35.15
Ovens River	35.73	42.62	25.05	33.55
Goulburn River	27.07	30.69	21.25	26.84
Campaspe River	26.21	28.07	16.05	23.03
Loddon River	22.24	24.53	14.21	20.21
Avoca River	17.51	20.74	13.26	17.16
Avon and Richardson Rivers ..	15.87	18.80	15.30	15.93
Eastern Wimmera	23.43	23.47	21.11	21.33
Western Wimmera	21.46	19.97	20.28	19.92
Mallee	15.03	14.96	9.09	12.65
Weighted Averages ..	25.43	25.35	21.35	24.33

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 12.65 inches per annum, as compared with 24.33 inches for the whole State.

The actual areas of the State, in square miles, subject to different degrees of rainfall are as shown in the following statement :—

DISTRIBUTION OF AVERAGE RAINFALL.

Rainfall.	Area.
Inches.	Square Miles.
Under 15	19,912
15 to 20	12,626
20 to 25	14,070
25 to 30	15,247
30 to 40	14,029
40 to 50	7,055
50 to 60	3,348
Over 60	1,597

The rainfall recorded for each quarter of 1922 and the quarterly averages up to 1922 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	190	355	641	746	892	899	719	563
Fitzroy, Eumeralla, and Merri Rivers	288	432	761	828	955	945	702	618
Hopkins River and Mt. Emu Creek	224	430	586	702	846	797	671	572
Mt. Elephant and Lake Corangamite	210	436	628	696	733	754	772	573
Cape Otway Forest	497	644	1,226	1,235	1,486	1,378	1,165	703
Moorabool and Barwon Rivers	194	464	677	659	692	700	754	592
Werribee and Saltwater Rivers	346	518	560	606	688	650	567	593
Yarra River and Dandenong Creek	699	638	748	875	1,178	924	912	892
Koo-wee-rup Swamp	634	680	859	1,000	1,254	1,007	982	912
South Gippsland	819	779	883	1,091	1,126	1,126	1,024	897
Latrobe and Thomson Rivers	725	705	825	922	986	1,024	1,058	973
Macallister and Avon Rivers	456	617	605	528	735	594	622	645
Mitchell River	616	677	451	628	757	691	685	688
Tambo and Nicholson Rivers	749	710	427	666	742	675	644	722
Snowy River	742	827	467	902	1,017	907	638	852
Murray River	133	312	308	489	467	487	258	383
Mitta Mitta and Kiewa Rivers	490	637	620	966	1,088	1,103	456	809
Ovens River	295	537	627	984	1,141	1,106	442	728
Goulburn River	256	457	507	784	864	844	498	599
Campaspe River	212	415	462	684	577	726	354	478
Loddon River	116	349	469	607	493	620	343	445
Avoca River	142	277	405	525	478	547	301	367
Avon and Richardson Rivers	120	249	492	482	584	523	334	339
Eastern Wimmera	136	302	670	644	804	720	501	467
Western Wimmera	163	250	622	613	682	701	561	428
Mallee	63	233	347	354	304	393	195	285
The whole State	295	441	557	684	748	745	535	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	29·972	29·924	30·081	30·078
Monthly range of pressure of air—Inches	0·887	0·768	0·815	0·979
Mean temperature of air in shade—°Fahr.	57·6	66·6	59·4	50·0
Mean daily range of temperature of air in shade—°Fahr.	18·7	21·1	17·4	14·0
Mean relative humidity. Saturation=100	66	60	70	76
Mean rainfall in inches	7·33	5·91	6·62	5·79
Mean number of days of rain	38	23	33	42
Mean amount of spontaneous evaporation in inches	10·20	17·25	7·79	3·63.
Mean daily amount of cloudiness—Scale 0 to 10	6·0	5·2	6·0	6·4
Mean number of days of fog	1	1	5	11

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1922 and for the past 67 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 1922.	Average for 67 Years.	Extremes between which the Yearly Average Values have oscillated in 67 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches)..	29·971	30·013	30·106	29·945
Highest ,, ,, ,, ..	30·551	30·605	30·762	30·488
Lowest ,, ,, ,, ..	29·220	29·258	29·495	28·942
Range (inches)	1·331	1·347	1·719	1·104
Mean temperature of air in shade (°Fahr.)	58·7	58·4	59·9	57·3
Mean daily maximum .. (°Fahr.)	67·6	67·3	69·0	66·0
Mean daily minimum .. ,,	49·7	49·5	51·2	47·2
Absolute maximum .. ,,	104·5	105·2	111·2	96·6
Absolute minimum .. ,,	32·1	30·8	34·0	27·0
Mean daily range .. ,,	17·9	17·8	20·4	15·0
Absolute annual range .. ,,	72·4	74·4	82·6	66·0
Solar Radiation (mean maxima) ,,	113·4	117·9	127·6	106·0
Terrestrial Radiation (mean minima) .. .. (°Fahr.)	43·9	45·6	46·8	39·5
Rainfall (in inches)	25·02	25·65	38·04	15·61
Number of wet days	151	136	171	102
Year's amount of free evaporation (in inches)	40·87	38·87	45·66	31·59
Percentage of humidity (saturation =100)	65	68	76	62
Cloudiness (scale 10 = overcast, 0 = clear)	5·8	5·9	6·4	4·8
Number of days of fog	30	18	39	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.

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. For many years the Department carried out research work on a large number of experimental plots in private farms throughout the State, but in 1912 the great majority of these plots were discontinued, and a commencement was made towards a policy of concentration in experimental investigation. In furtherance of this policy a Central Research Farm has been established at Werribee, and it is there that the initiative with regard to all experimental and research work is undertaken. The State farms at Rutherglen and Longerenong are used as district experimental stations for the North-East and the Wimmera respectively. The problems investigated on these farms are fully described in the 1915–16 issue of this work.

Agricultural Colleges. An Act for the establishment of Agricultural Colleges was passed in 1884, and 14,460 acres, comprising 5,957 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. An additional area of 800 acres has been purchased for cultivation purposes at Dookie. 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 £35 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. 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 1923 the students enrolled numbered 162.

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, 1922.

Particulars.	Central Research Farm, Werribee.	Rutherglen Farm, &c.	Dookie Agricultural College.	Longerenong Agricultural College.	School of Primary Agriculture, &c.
	No.	No.	No.	No.	No.
Professional Staff	1	2	12	7	4
Hands employed	48	36	50	15	10
Students	12	14	115	60	162
	£	£	£	£	£
Value of plant and machinery	3,208	2,365	6,000	2,714	150
Value of produce for year	12,000	5,600	5,000	7,600	1,200
Receipts—					
Government Grant	11,920	8 550	2,239	1,000	2,000
Fees	...	...	3,086	1,518	109
Sale of produce, &c.	10,440	4,233	5,636	5,901	1,143
Other	617	174	..	..	25
Total receipts	22,977	12,957	10,955*	8,419	3,277
Expenditure—					
Salaries—					
Professional Staff	372	709	3,270	1,783	1,116
General Staff	6,511	6,213	4,502	1,797	1,073
Buildings and maintenance	1,789	1,236	11,879	4,673	278
Other	6,596	2,004	..	..	448
Total expenditure	15,268	10,162	19,651	8,253	2,915

* Excluding grant received from the Council of Agricultural Education.

GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1922—*continued.*

Particulars.	Central Research Farm, Werribee.	Rutherglen Farm, &c.	Dookie Agricultural College.	Longerenong Agricultural College.	School of Primary Agriculture, &c.
	acres.	acres.	acres.	acres.	acres.
Area under—					
Cereals for Grain	545	200	450	503	..
Hay	240	200	200	108	..
Fruit trees, &c.	..	1½	10	20	14
Vines	..	130	20	8	½
Green fodder	350	11	70	97	..
Other crops	100	47	..	..	½
Total area under crop ..	1,235	589½	750	736	14½
Area of land in fallow	750	200	400	504	..
Area under artificially sown grasses ..	80	33	..	4	9
Area resting	100	230	500	375	½
Total area of arable land ..	2,165	1,052½	1,650	1,619	24½
Balance of area	44	260½	4,263	767	8½
Total area of farm	2,209	1,313	5,913	2,386	33
	No.	No.	No.	No.	No.
Live Stock—					
Horses	116	43	100	47	1
Dairy cows	64	19	45	24	8
All other cattle	97	19	130	59	15
Sheep	1,200	680	1,700	870	..
Pigs	..	80	120	72	..

Inspection of Orchards, Nurseries, &c. The orchards, nurseries, and gardens of the State are systematically inspected by the officers of the Vegetation Diseases Branch of the Department of Agriculture. Nurseries are inspected every six months, and certified to by the departmental supervisor if clean and free from disease. Old, worn-out, and infected orchards are destroyed.

There has been considerable alteration in the departmental policy with respect to experimental orchards. The small and comparatively valueless demonstration orchards are being replaced by larger areas on which experimental and demonstration works have been concentrated.

Experiments are carried out in the treatment of diseases; lectures and demonstrations are given on the various phases of horticulture; 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 some 4,162,000 acres are set aside as timber and climatic 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 :—

(*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 wollybutt, 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 some twenty, all species of the eucalyptus family. In addition, there are about forty 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, French Island, Port Campbell, Bright, Castlemaine, Harcourt, Scarsdale, and Mount Disappointment. In addition to providing trees for the plantations, the nurseries supply considerable numbers of plants at low rates to State schools, public bodies and private applicants. This has proved of great benefit to the community by fostering an interest in tree planting generally, and especially by encouraging farmers to plant in order to afford protection to their homesteads and to provide shade and shelter for their flocks and herds.

The revenue derived from forest sources during the financial year 1922–23 was £163,076, and the expenditure was £138,716. It is estimated that the quantity of timber produced in the rough in 1922–23 was 129,700,000 super feet. In addition, 375,862 tons measurement of fuel timber was produced.

A Forest School for training cadets is maintained at Creswick, and the Commission also controls 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.

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 :—

EXPENDITURE AND REVENUE CONNECTED WITH AGRICULTURE, ETC., 1918–19 TO 1922–23.

——	1918–19.	1919–20.	1920–21.	1921–22.	1922–23.
Expenditure.	£	£	£	£	£
Department of Agriculture ..	25,365	28,278	33,282	34,610	35,063
Grants to Agricultural and Horticultural Societies, &c. ..	675	675	975	675	675
Development of Export Trade ..	49,550	93,971	58,785	61,151	60,316
Viticultural Education and Inspection of Vineyards ..	4,600	5,000	6,112	6,881	6,334
Maffra Beet Sugar Factory ..	38,870	46,805	42,159	59,791	75,291
Advances to Settlers for losses by bush fires, floods, &c. ..	5,752	1,755	2,008	91	7,300
Technical Agricultural Education, &c. ..	23,138	23,095	28,518	26,136	26,123
Publishing Agricultural Reports	200	250	249	227	329
Rabbit and Vermin Extermination	39,460	36,672	36,158	40,766	47,410
Stock and Dairy Branch	23,327	28,396	35,731	42,442	43,887
Labour Colonies	375	..	..	..	..
State Forests and Nurseries ..	64,192	86,142	145,790	154,023	157,347
Miscellaneous	8,451	3,172	2,999	2,428	3,104
Total	283,955	354,211	392,766	429,221	463,179
Revenue.					
Department of Agriculture ..	91,430	181,753	100,715	72,505	78,017
State Forests	67,526	96,889	138,679	154,611	163,038

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 1922–23 was £2,444,495—£1,959,231 having been expended on discharged soldiers' land settlement, £461,533 on closer settlement, and £23,731 on wire netting.

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. It is only in comparatively recent years that the Mallee has been devoted to agriculture and that a new, fertile, and important district has been added to the wheat area of the State. The addition of this district is due to the fact that good and payable wheat returns are obtainable with a rainfall which was at one time considered to be wholly inadequate, to the extension of railway lines, and to the great improvements in agricultural machinery. Its growing importance is indicated by figures for recent periods, which show that, of the wheat produced in the State, the proportion obtained from the Mallee was 26 per cent. in 1922–23, as against slightly less than 5 per cent. in 1891–2. The area under cultivation in the Mallee last season was 2,198,855 acres.

The area cultivated in the State in 1922–23 was 7,049,429 acres, as against an annual average of 5,928,170 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. The value of butter and cheese exported to oversea countries increased from £1,252,277 in 1900 to £3,213,760 in 1922–23, while the value of oversea exports of meats increased from £502,285 to £2,622,957 in the same period.

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 past 68 years :—

ACREAGE CULTIVATED ANNUALLY, 1855 TO 1923.

Period ended March.	Annual Average.		
	Crop.	Fallow.	Total Cultivation.
	Acres.	Acres.	Acres.
1855–65	325,676	12,146	337,822
1865–75	624,377	57,274	681,651
1875–85	1,306,920	137,536	1,444,456
1885–95	2,109,326	364,282	2,473,608
1895–1905	3,022,914	524,197	3,547,111
1905–15	3,756,211	1,276,148	5,032,359
1915–16	5,711,265	1,358,343	7,069,608
1916–17	4,851,335	1,899,559	6,750,894
1917–18	4,110,225	1,672,729	5,782,954
1918–19	3,942,899	1,548,121	5,491,020
1919–20	4,000,815	1,357,536	5,358,351
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

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 ten-year periods from 1855 to 1915 and the acreage for each of the last eight seasons are given in the next table :—

ANNUAL ACREAGE OF FIVE PRINCIPAL CROPS, 1855 TO 1923.

Period ended 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
1915–16 ..	3,679,971	353,932	61,400	56,910	1,330,455
1916–17 ..	3,125,692	441,598	93,015	73,618	897,186
1917–18 ..	2,690,216	293,214	84,931	66,966	748,808
1918–19 ..	2,214,490	342,867	100,198	51,620	984,479
1919–20 ..	1,918,269	559,547	85,323	53,918	1,116,998
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

Production of Principal Crops.

The average annual production of the five principal crops for decennial periods, from 1855 to 1915, and the production for each of the last eight seasons were as follows :—

ANNUAL PRODUCTION OF PRINCIPAL CROPS, 1855 TO 1923.

Period ended 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
1915–16 ..	58,521,706	9,328,894	1,734,511	173,821	2,342,094
1916–17 ..	51,162,438	8,289,289	1,799,784	187,992	1,232,721
1917–18 ..	37,737,552	6,141,287	1,970,650	182,195	949,545
1918–19 ..	25,239,871	5,274,984	2,028,635	137,533	1,113,861
1919–20 ..	14,858,380	6,603,067	1,528,654	145,888	1,242,489
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

Prineipal 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, 1922–23.

District.	Percentage in each District of Area under—					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.
Central	0·41	4·24	32·32	51·80	18·70	32·80
North-Central	0·46	2·76	3·75	19·42	6·28	2·68
Western	3·43	10·06	16·29	13·41	13·94	5·57
Wimmera	27·78	21·16	11·68	0·28	16·42	1·98
Mallee	43·20	35·03	9·40	0·00	15·06	12·40
Northern	23·01	23·41	14·54	0·10	18·40	16·61
North-Eastern	1·44	2·42	0·67	1·69	5·29	7·74
Gippsland	0·27	0·92	11·35	13·30	5·91	20·22

NOTE.—For counties contained in each District, see table on page 468.

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, 1922–23.

District.	Percentage of Total Area of all Crops under					
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.
Central	2.49	4·84	7·71	7·42	54·72	22·82
North-Central	9·38	10·55	2·99	9·31	61·53	6·24
Western	25·39	13·84	4·68	2·31	49·11	4·67
Wimmera	69·04	9·79	1·13	0·02	19·46	0·56
Mallee	73·62	11·12	0·62	0·00	12·24	2·40
Northern	59·61	11·29	1·46	0·61	22·75	4·88
North-Eastern	26·82	8·42	0·49	0·73	47·14	16·40
Gippsland	4·35	2·71	6·98	4·92	44·67	36·37
Total for Victoria ..	54·38	10·13	2·11	1·27	25·94	6·17

NOTE.—For counties contained in each District, see table on page 468.

Principal crops compared with population.

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

AREA AND PRODUCTION OF FIVE PRINCIPAL CROPS PER HEAD OF POPULATION, 1918–19 TO 1922–23.

Year ended March—	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	Area per Head of Population.				
	Acres.	Acres.	Acres.	Acres.	Acres.
1919	1·56	·24	·07	·04	·69
1920	1·29	·38	·06	·04	·75
1921	1·52	·29	·06	·04	·88
1922	1·70	·21	·07	·04	·75
1923	1·67	·31	·07	·04	·80
	Produce per Head of Population.				
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1919	17·76	3·71	1·43	·10	·78
1920	10·02	4·46	1·03	·10	·84
1921	26·16	7·23	1·65	·11	1·32
1922	28·54	3·96	1·52	·11	1·01
1923	22·61	5·13	1·55	·09	1·05

Except in the three seasons 1895–6, 1902–3, and 1914–15, the wheat produced during each year since 1870 has been more than sufficient to supply home consumption.

Values of five principal crops.

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

VALUES OF FIVE PRINCIPAL CROPS.

Year.	Annual Value of—				
	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	£	£	£	£	£
1918–19	5,994,469	1,175,882	461,056	1,079,496	4,622,523
1919–20	5,726,667	1,848,903	477,573	1,328,640	8,304,475
1920–21	14,307,377	1,295,229	447,352	586,458	5,259,863
1921–22	10,509,945	931,346	401,600	555,111	4,413,091
1922–23	8,031,875	1,416,355	436,235	1,040,662	6,327,338
	£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*	£ *s. d.*
Value per acre 1918–19	2 14 2	3 8 7	4 12 0	20 18 3	4 13 11
„ „ 1919–20	2 19 7	3 6 1	5 11 11	24 12 10	7 8 8
„ „ 1920–21	6 4 8	2 18 5	4 15 3	9 7 1	3 18 11
„ „ 1921–22	4 0 6	2 18 5	4 0 3	8 13 9	3 16 2
„ „ 1922–23	3 0 9	2 17 6	4 4 11	16 17 1	5 0 4

The value of the five principal crops was £17,252,465 in 1922–23, as against £16,811,093 in the previous year, £21,896,279 in 1920–21, £17,686,258 in 1919–20, and £13,333,426 in 1918–19.

Wheat production.

On the experience of the past five seasons the area under wheat for grain represented 54 per cent. of the total under all crops. The acreage, the total production, and the yield

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

WHEAT PRODUCTION, 1860 TO 1923.

Season ended 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

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 past thirteen seasons was 12·79 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, 213,219 acres of wheat were cut for hay last season, so that the total area sown under wheat in 1922–23 was 2,857,533 acres.

The production of wheat in the other Australian States in 1922–23 was as follows :—New South Wales, 28,594,000 bushels; South Australia, 28,784,767 bushels; Western Australia, 13,857,432 bushels; Queensland, 1,877,836 bushels; and Tasmania, 450,000 bushels. The total production for the Commonwealth was 109,261,255 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 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 in different counties for each of the past 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.		
	1921.	1922.	1923.	1921.	1922.	1923.	1921.	1922.	1923.
	Acres.	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bush.	Bush.	Bush.
Central—									
Bourke ..	3,881	3,212	3,598	82,061	58,403	69,281	21·14	18·18	19·26
Grant ..	8,728	9,759	6,628	162,414	170,429	120,755	18·61	17·46	18·22
Mornington ..	320	277	396	4,500	3,591	7,429	14·06	12·96	18·76
Evelyn ..	178	68	108	3,033	999	1,959	17·04	14·69	18·14
North-Central—									
Anglesey ..	908	963	768	14,656	12,422	12,486	16·14	12·90	16·26
Dalhousie ..	2,284	1,936	2,224	36,487	29,305	39,904	15·98	15·14	17·94
Talbot ..	11,123	12,657	9,085	219,375	230,027	148,533	19·72	18·17	16·35
Western—									
Grenville ..	10,218	14,433	12,473	189,796	225,576	186,168	18·57	15·62	14·93
Polwarth ..	92	48	78	1,409	683	1,025	15·32	14·23	13·14
Heytesbury	8	3	4	206	90	46	25·75	30·00	11·50
Hampden ..	8,175	10,262	14,367	182,773	176,714	263,621	22·36	17·22	18·35
Ripon ..	30,883	45,863	55,351	671,503	900,393	1,085,819	21·74	19·63	19·62
Villiers ..	1,709	2,075	2,097	30,894	32,066	32,907	18·08	15·45	15·69
Normanby ..	1,008	1,413	1,225	18,741	20,116	21,254	18·59	14·24	17·35
Dundas ..	4,823	4,889	4,730	54,413	68,023	73,606	11·28	13·91	15·56
Follett ..	309	503	540	5,269	7,946	8,357	17·05	15·80	15·48
Wimmera—									
Lowan ..	144,897	175,753	186,281	3,034,396	3,784,022	3,942,804	20·94	21·53	21·17
Borung ..	358,865	399,993	402,825	8,537,731	11,218,679	9,151,897	23·79	28·05	22·72
Kara Kara	113,783	141,267	145,521	2,417,404	3,115,212	2,783,428	21·25	22·05	19·12
Mallee—									
Millewa ..	2,200	2,980	2,435	30,851	18,849	7,884	14·02	6·33	3·24
Weeah ..	201,682	196,845	197,049	2,880,518	1,749,843	1,725,094	14.28	8·89	8·75
Karkarooc	463,758	558,420	572,498	6,223,977	6,077,599	4,661,460	13·42	10·88	8·14
Tatchera ..	294,080	347,611	370,377	4,013,077	4,563,124	2,743,941	13·65	13·13	7·41
Northern—									
Gunbower ..	28,383	34,585	35,891	433,345	545,183	384,385	15·27	15·76	10·71
Gladstone ..	96,200	118,395	115,209	1,800,765	2,208,515	1,689,102	18·72	18·65	14·66
Bendigo ..	105,988	128,715	121,520	1,543,657	2,219,737	1,529,560	14·56	17·25	12·59
Rodney ..	86,521	89,237	80,871	1,366,042	1,407,542	1,104,218	15·79	15·77	13·65
Moira ..	268,278	266,383	254,931	4,683,835	4,483,925	3,145,685	17·46	16·83	12·34
North-Eastern—									
Delatite ..	8,007	6,793	8,129	145,092	83,112	136,692	18·12	12·23	16·82
Bogong ..	32,471	30,306	29,646	556,550	341,831	441,893	17·14	11·28	14·91
Benambra ..	301	217	205	5,933	3,808	3,570	19·71	17·55	17·41
Wonnangatta	..	..	..	..	..	..	..	..	..
Gippsland—									
Croajingolong	63	63	51	1,297	1,108	752	20·59	17·59	14·75
Tambo ..	163	95	43	2,606	1,174	767	15·99	12·36	17·84
Dargo ..	121	95	167	1,976	1,583	3,672	16·33	16·66	21·99
Tanjil ..	4,797	4,507	6,121	99,378	95,366	150,295	20·72	21·16	24·55
Buln Buln ..	660	571	872	12,665	10,601	16,971	19·19	18·56	19·46
Total ..	2,295,865	2,611,198	2,644,314	39,468,625	43,867,596	35,697,220	17·19	16·80	13·50

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, 1913–14 TO 1922–23.

District and County.	Average Yield of Wheat per Acre (in Bushels) during Year ended March.									
	1914.	1915.	1916.	1917.	1918.	1919.	1920.	1921.	1922.	1923.
Western District—										
Ripon	15·50	5·03	21·58	13·33	13·27	10·06	16·26	21·74	19·63	19·62
Wimmera District—										
Lowan	16·24	1·84	16·78	17·93	16·52	15·78	13·47	20·94	21·53	21·17
Borung	18·16	·95	19·27	22·49	22·62	20·01	15·76	23·79	28·05	22·72
Kara Kara ..	17·23	1·09	19·36	19·66	17·68	14·39	14·10	21·25	22·05	19·12
Mallee District—										
Weeah	4·89	·18	12·26	14·56	10·21	6·38	3·43	14·28	8·89	8·75
Karkarooc ..	5·44	·35	10·62	14·78	10·94	7·15	3·29	13·42	10·88	8·14
Tatchera ..	8·66	·37	10·09	15·80	12·30	9·44	4.60	13·65	13·13	7·41
Northern District—										
Gunbower ..	12·26	·23	15·33	15·89	14·23	8·74	8.96	15·27	15·76	10·71
Gladstone ..	17·38	1·52	17·94	19·10	14·17	11·52	12·08	18·72	18·65	14·66
Bendigo ..	15·60	·72	19·18	17·11	13·85	11·33	9.30	14·56	17·25	12·59
Rodney ..	14·75	1·05	20·15	14·69	12·67	10·80	6·85	15·79	15·77	13·65
Moira	16·14	1·74	17·88	14·44	11·38	10·70	4·79	17·46	16·83	12·34

Wheat standard. 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 61·1 lbs. on the average of the past 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 1912–13 :—

F.A.Q. WHEAT STANDARD, 1914 TO 1923.

Season ended March.	Weight of Bushel (f.a.q.).	Season ended March.	Weight of Bushel (f.a.q.).
	lbs.		lbs.
1914	62½	1919	62½
1915	62	1920	62
1916	61	1921	60½
1917	60½	1922	60
1918	60	1923	60¼

Stocks of wheat and flour. A table giving the estimated stocks of wheat and flour on hand in the State on 30th June in each year from 1913 to 1922 inclusive appears on page 464 of the *Year Book* for 1921–22.

Oats. In 1922–23 the area harvested for oats in Victoria was 492,356 acres, from which a yield of 8,093,459 bushels was obtained, giving an average of 16·44 bushels to the acre. The following statement shows the harvest results for this crop for each of the past eight seasons and for ten-year periods prior thereto back to 1865 :—

OATS GROWN, 1865 TO 1923.

Period ended 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
1916	353,932	9,328,894	26·36
1917	441,598	8,289,289	18·77
1918	293,214	6,141,287	20·94
1919	342,867	5,274,984	15·38
1920	559,547	6,603,067	11·80
1921	443,636	10,907,191	24·59
1922	318,681	6,082,258	19·09
1923	492,356	8,093,459	16·44

In addition to the area for grain shown for last season there were 1,021,216 acres of oats cut for hay, so that the total area sown with oats in 1922–23 was 1,513,572 acres. During 1922–23 there were exported from Victoria to oversea countries 26,980 bushels of oats and 54,260 lbs. of oatmeal.

Barley. The area under barley in 1922–23 was 102,773 acres, of which 64,648 were under malting, and 38,125 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, 1918–19 TO 1922–23.

Year ended March.	Area under Crop.		Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1919 ..	52,222	47,976	1,081,256	947,379	20·70	19·75	20·25
1920 ..	50,049	35,274	917,274	611,380	18·33	17·33	17·92
1921 ..	50,297	43,657	1,306,210	1,189,552	25·97	27·25	26·56
1922 ..	47,686	52,441	1,103,039	1,233,207	23·13	23·52	23·33
1923 ..	64,648	38,125	1,525,744	916,297	23·60	24·03	23·76

During 1922–23, 1,548,163 bushels of barley were used locally in the production of 1,536,955 bushels of malt.

Potatoes. The area planted with potatoes in 1922–23 was 61,741 acres, and the production was 148,354 tons, which represented a yield of 2·40 tons per acre, as compared with 2·72 tons in the previous season and 2·74 tons in 1920–21. The following table shows the potato returns for the past thirty-three years :—

POTATO PRODUCTION, 1890 TO 1923.

Period ended 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

The estimated value of the potatoes produced last season was £1,040,662, as against £555,111 in the preceding year, £586,458 in 1920–21, and £1,328,640 in the year 1919–20.

Hay. In 1923 the production of hay amounted to 1,665,089 tons, as against 1,548,453 tons in the previous year and 1,984,854 tons in 1921. The quantity of straw returned for the season 1922–23 was 51,096 tons as against 48,119 tons for the previous year. The hay returns for decennial periods from 1890 to 1920, and each of the last three seasons, are shown in the following table :—

HAY PRODUCTION, 1890 TO 1923.

Period ended 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

The estimated value of the hay crop was £6,327,338 for 1923, as compared with £4,413,091 for 1922 and £5,259,863 for 1921. Of the total hay produced in 1923, 1,369,928 tons were oaten, 247,168 tons were wheaten, and 47,993 tons were made from lucerne and other crops, and the yields per acre were 1·34, 1·16, and 1·78 tons respectively.

Prices of agricultural produce 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, 1914 TO 1923.

Year.	Average Price in February and March.							
	Wheat.	Oats.	Barley.		Hay.	Potatoes.		
			Malting.	Other.		Early Crop.	Main Crop (after March).	
	Per bushel.	Per bushel.	Per bushel.	Per bushel.	Per ton.	Per ton.	Per ton.	
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	
1914 ..	3 3	1 9	3 1½	2 0¼	38 0	81 0	62 0	
1915 ..	7 0¾	4 11¼	5 8¾	4 10¼	147 0	80 0	85 0	
1916 ..	3 9	2 0¼	3 11½	2 10	35 0	201 0	106 0	
1917 ..	4 0	2 0	3 11¼	2 10	33 0	114 0	53 0	
1918 ..	4 0	3 1¾	4 2¾	3 4¼	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 7¾	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	

Other Crops. The area under other than principal crops and the production since March, 1920, are shown in the subjoined table :—

OTHER THAN PRINCIPAL CROPS, 1920–21 TO 1922–23.

Crop.	Area.	Production.	Area.	Production.	Area.	Production.
	1920–21.		1921–22.		1922–23.	
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Maize	24,149	1,065,880	23,227	951,960	25,846	879,915
Rye	1,717	21,359	1,320	14,442	1,291	15,718
Peas	6,654	125,547	8,659	166,474	11,149	214,544
		Tons.		Tons.		Tons.
Mangel-wurzel ..	524	6,742	560	7,768	684	8,120
Beet, Carrots, Parsnips and Turnips	410	2,289	401	2,134	433	1,878
Onions ..	8,000	42,985	6,158	31,586	6,954	44,409
Green Forage ..	79,524	..	89,410	..	102,451	..
		Bushels.		Bushels.		Bushels.
Grass and Clover Seeds ..	1,872	11,555	1,800	12,226	1,468	7,859
		Cwt.		Cwt.		Cwt.
Hops ..	93	1,199	104	1,812	194	2,071
Tobacco ..	95	908	604	3,735	890	†
Vines—Grapes	29,255	1,072,767	33,175	1,314,839	38,892	1,879,964
Flax	1,350	938 fibre 3,658 seed 99 tow 662 tons of straw	1,640	440 fibre 4,187 seed 20 tow 960 tons of straw	590	435 fibre 1,725 seed 25 tow ..
Gardens and Orchards ..	87,768	..	89,491	..	86,014	..
Minor Crops ..	6,709	..	7,145*	..	8,992*	..
Land in Fallow	1,935,747	..	2,052,964	..	2,186,881	..
Artificial Grasses	1,051,299	..	1,032,104	..	957,454	..

* For details see page 482. † Not available.

Maize. The area under maize for grain in 1922-23 was 25,846 acres, and the production was 879,915 bushels, which represented a yield of 34·04 bushels per acre, as compared with 40·99 bushels in the preceding season and 44·14 bushels in 1920-21. Of the total production for last season 86 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 past three seasons and for periods prior thereto back to 1890 :—

MAIZE PRODUCTION, 1890 TO 1923.

Period ended 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

On the average of the past five seasons the yield per acre was 37·6 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 1922-23 was 1,291 acres, from which 15,718 bushels of grain were obtained. The production was 14,442 bushels in the previous season, and 21,359 bushels in 1920-21. Rye was grown principally in the counties of Grant, Delatite, Ripon, and Talbot last season. The area under this crop in the four counties mentioned was about 68 per cent. of the total for the whole State.

Peas. The area under peas in 1922-23 was 11,149 acres, and the return 214,544 bushels, the former being 2,490 acres more and the latter 48,070 bushels more than in 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 were Grant 71,975 bushels, Bourke 25,931 bushels, Tanjil 23,650 bushels, Buln Buln 17,422 bushels, and Mornington 16,242 bushels. The production of peas in the five counties mentioned was equal to 72 per cent. of the total for the whole State.

Mangel-wurzel. In 1922–23 there were 684 acres under mangel-wurzel, as against 560 in the previous season, 524 in 1920–21, 547 in 1919–20, 581 in 1918–19, and 690 in 1917–18. The production last year was 8,120 tons, as compared with an annual average of 7,708 tons for the preceding five-year period. Mangolds are grown principally in the counties of Villiers, Tanjil, Grenville, Mornington, Grant, and Buln Buln. The production during last season in the counties mentioned represented 84 per cent. of the total for the State.

Beet, carrots, parsnips, and turnips. The cultivation of beet, carrots, parsnips, and turnips, exclusive of those grown in market gardens, showed an increase in area as compared with the previous season. In 1922–23 the extent of land sown was 433 acres, as against 401 in the preceding year, 410 in 1920–21, 460 in 1919–20, 407 in 1918–19, and 500 in 1917–18. The produce for last year was 1,878 tons, as compared with 2,134 tons in the previous season, and 2,289 tons in 1920–21.

Onions. Onions are grown in nearly every county south of the Dividing Range. The returns for last season show that in Grenville the yield was 11,294 tons from 1,545 acres; in Villiers, 7,389 tons from 971 acres; in Polwarth, 6,942 tons from 898 acres; in Buln Buln, 5,439 tons from 1,052 acres; in Bourke, 4,729 tons from 753 acres; in Grant, 4,287 tons from 920 acres; and in Mornington, 3,358 tons from 642 acres. The following is a statement showing the area and yield for each of the last five years :—

ONION CULTIVATION, 1918–19 TO 1922–23.

Year.	Area.	Produce.
	Acres.	Tons.
1918–19	5,512	24,211
1919–20	6,863	27,032
1920–21	8,000	42,985
1921–22	6,158	31,586
1922–23	6,954	44,409

The value of onions grown was £139,888 in 1922–23, as compared with £150,033 in the previous season, £131,104 in 1920–21, and £274,375 in 1919–20.

Green forage. The area devoted to green forage in 1922–23 was 102,451 acres, as compared with 89,410 in the previous season, 79,524 in 1920–21, 89,802 in 1919–20, 73,641 in 1918–19, and 55,903 in 1917–18.

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 past five seasons are given in the next table.

ENSILAGE RETURNS, 1918–19 TO 1922–23.

Year ended March.	Number of Farms on which made.	Number of Silos (Pits and Stacks).	Materials used.
			Tons.
1919	95	157	8,249
1920	74	117	6,072
1921	99	175	9,702
1922	107	141	5,873
1923	103	138	5,674

Grass and clover seed. The area harvested for grass and clover seed last season was 1,468 acres, as compared with 1,800 in the previous year, 1,872 in 1920–21, 1,235 in 1919–20, 2,152 in 1918–19, and 2,312 in 1917–18. The production in 1922–23 was 7,859 bushels, as against 12,226 in the previous year, 11,555 in 1920–21, 8,625 in 1919–20, 15,443 in 1918–19, and 22,059 in 1917–18.

Hops. The hop-growing industry attained its maximum development in 1883–4, when 1,758 acres yielded 15,717 cwt. In 1922–23 the return from 194 acres was 2,071 cwt. Delatite, Bogong, Bourke, Polwarth, and Buln Buln were the only counties in which hops were grown last season.

Flax. The area sown to flax in 1922–23 was 590 acres, as compared with 1,640 acres in the previous season, and 1,350 acres in 1920–21. The Commonwealth Flax Committee purchased the whole of the flax grown in the last two seasons. For the 1921–22 crop there was a Government guarantee of £5 per ton for unthreshed flax of standard quality delivered at the nearest mill. This guarantee

was increased to £6 per ton for the 1922–23 crop. The values of the fibre, linseed, and tow obtained from the last two flax crops were estimated at £8,760 and £8,630 respectively. Particulars of the crop for each of the last five years are given in the following statement :—

FLAX, 1918–19 TO 1922–23.

Year.	Area under Crop.	Seed Produced.	Fibre Produced.	Tow Produced.	Straw awaiting Treatment.
	Acres.	Cwt.	Cwt.	Cwt.	Tons.
1918–19	1,420	5,200	1,800	2,000	..
1919–20	1,611	4,970	1,053	394	1,653
1920–21	1,350	3,658	938	99	662
1921–22	1,640	4,187	440	20	960
1922–23	590	1,725	435	25	..

NOTE.—In addition to the above, 85 acres of New Zealand flax were harvested in 1921–22.

In 1922–23 imports into Victoria from countries outside Australia included linseed to the value of £1,678, linseed oil worth £79,460, and fibre worth £147,470.

Tobacco.

Tobacco production reached its maximum in 1880–1, when 17,333 cwt. of dry leaf was produced. The subsequent sixteen years were marked by great variations in area and produce, and since 1896–7 the industry has become comparatively unimportant. The area devoted to this product last year was 890 acres, of which 464 were in Delatite, and 390 in Bogong. Particulars relating to the cultivation of tobacco for each of the last five years are as follows :—

CULTIVATION OF TOBACCO, 1918–19 TO 1922–23.

Year.	Area.	Produce.
	Acres.	Cwt. (dry).
1918–19	167	1,825
1919–20	406	2,669
1920–21	95	908
1921–22	604	3,735
1922–23	890	†

† 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 1,503,740 cwt. of grapes; Swan Hill, 152,409 cwt.; Rutherglen, 78,236 cwt.; Rodney, 29,555 cwt.; Stawell, 13,642 cwt.; Chiltern, 12,855 cwt.; and Shepparton, 12,635 cwt. At Mildura the crop is principally dried for raisins and currants. The results of five years' operations are given below :—

VINE PRODUCTION, 1919 TO 1923.

Year ended June.	Number of Growers.	Area.	Produce.			
			Grapes gathered.	Wine made.	Raisins made.	Currants made.
		Acres.	Cwt.	Gallons.	Cwt.	Cwt.
1919 ..	1,826	26,072	1,019,379	1,349,309	135,060	68,234
1920 ..	1,919	27,441	1,324,437	1,634,680	211,307	55,661
1921 ..	2,066	29,255	1,072,767	2,222,305	116,887	62,919
1922 ..	2,422	33,175	1,314,839	1,335,066	190,451	75,042
1923 ..	2,775	38,892	1,879,964	1,717,490	285,520	98,081

Of the total quantity of grapes gathered in 1923, 272,462 cwt. was used for making wine, 1,541,418 cwt. for raisins and currants, and 66,084 cwt. for table consumption and export. Of the 285,520 cwt. of raisins made, 217,670 cwt. were sultanas of which all but 25,418 cwt. were from Mildura.

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 20,000 cwt.; consequently, about 265,000 cwt. of the production in 1923 was available for interstate or oversea export. A year's consumption of currants is about 30,000 cwt., which would enable approximately 68,000 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 7,758 in 1922–23, as against 8,286 in the previous season, 7,705 in 1920–21, 7,719 in 1919–20, and 7,620 in 1918–19. The area under orchards in each of those years was 83,880, 86,959, 84,718, 83,574, and 82,151 acres respectively. The orchards are distributed fairly evenly over the whole State. The counties having

the largest areas last season were as follows:—Evelyn, 14,350 acres; Mornington, 14,275 acres; Bourke, 13,947 acres; Rodney, 10,302 acres; Moira, 6,960 acres; and Talbot, 3,621 acres.

The following table contains a statement of the number of bearing and non-bearing fruit trees and plants for the seasons 1919-20 and 1922–23:—

RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS WHERE FRUIT WAS GROWN FOR SALE, 1919-20 AND 1922-23.

Fruit.	Number of Trees, Plants, &c.					
	1919–20.			1922–23.		
	Not Bearing.	Bearing.	Total.	Not Bearing.	Bearing.	Total.
Apples ..	1,006,728	2,016,972	3,023,700	854,643	2,302,089	3,156,732
Pears ..	416,608	660,913	1,077,521	360,403	729,775	1,090,178
Quinces ..	53,639	76,377	130,016	33,041	72,316	105,357
Plums ..	184,909	369,784	554,693	153,020	368,355	521,375
Cherries ..	45,742	196,110	241,852	33,802	182,093	215,895
Peaches ..	332,001	750,834	1,082,835	341,485	778,650	1,120,135
Apricots ..	121,995	331,627	453,622	130,114	349,242	479,356
Nectarines ..	3,023	15,698	18,721	1,645	15,295	16,940
Oranges ..	147,105	240,297	387,402	224,117	279,146	503,263
Lemons ..	72,994	82,472	155,466	96,207	100,544	196,751
Loquats ..	1,778	4,202	5,980	1,138	3,337	4,475
Medlars ..	86	106	192	27	55	82
Figs ..	14,663	29,667	44,330	7,069	29,149	36,218
Guavas ..	61	134	195	92	182	274
Pomegranates	39	89	128	243	107	350
Persimmons ..	319	403	722	427	384	811
Total Large Fruits ..	2,401,690	4,775,685	7,177,375	2,237,473	5,210,719	7,448,192
Raspberries ..	..	316,498	316,498	..	308,647	308,647
Loganberries ..	..	158,431	158,431	..	139,084	139,084
Strawberries ..	..	2,148,044	2,148,044	..	2,432,038	2,432,038
Gooseberries ..	..	323,037	323,037	29,418	185,922	215,340
Mulberries ..	326	1,133	1,459	355	901	1,256
Olives ..	310	2,372	2,682	208	1,577	1,785
Currants (Red, White, and Black) ..	9,033	27,707	36,740	6,939	29,779	36,718
Passion-fruit ..	19,902	26,969	46,871	27,133	41,148	68,281
Almonds ..	9,423	20,378	29,801	9,792	21,987	31,779
Walnuts ..	7,812	4,819	12,631	7,019	5,223	12,242
Filberts ..	288	804	1,092	246	628	874
Chestnuts ..	269	380	649	262	692	954
Total Nuts ..	17,792	26,381	44,173	17,319	28,530	45,849

The area of orchards growing fruit for sale in 1922-23—83,880 acres—showed a reduction of 3,079 acres as compared with the previous year. Details of the produce from such orchards in the past five years are as follows :—

ORCHARDS GROWING FRUIT FOR SALE, 1918-19 TO 1922-23.

Year ended March.	Number of Fruit-growers.	Area of Gardens and Orchards.	Large Fruits Gathered.			
			Apples.	Pears.	Quinces.	Plums.
		Acres.	Bushels.	Bushels.	Bushels.	Bushels.
1919 ..	7,620	82,151	807,573	756,688	65,885	220,546
1920 ..	7,719	83,574	2,227,317	723,857	96,115	274,329
1921 ..	7,705	84,718	1,451,069	759,148	63,194	297,055
1922 ..	8,286	86,959	1,768,800	681,024	76,946	207,432
1923 ..	7,758	83,880	2,089,017	666,631	63,837	258,117

	Large Fruits Gathered—*continued*.						
	Cherries.	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Other.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1919 ..	109,298	569,639	127,131	100,553	80,521	18,492	23,097
1920 ..	89,604	960,773	301,009	137,184	74,427	19,255	44,225
1921 ..	81,619	728,272	251,996	169,335	87,867	23,386	33,024
1922 ..	66,969	905,477	208,215	237,949	103,127	22,359	43,897
1923 ..	92,407	966,952	290,876	259,330	109,347	15,313	32,246

ORCHARDS GROWING FRUIT FOR SALE, 1918–19 TO 1922–23—*continued.*

Year ended March.	SMALL FRUITS GATHERED.					NUTS GATHERED.			
	Raspberries.	Strawberries.	Gooseberries.	Currants, Red, Black, & White.	Other	Almonds.	Walnuts.	Filberts.	Chestnuts.
	Cwt.	Cwt.	Cwt.	Cwt.	Cwt.	lbs.	lbs.	lbs.	lbs.
1919 ..	3,272	2,317	3,723	305	3,876	84,313	36,976	1,098	12,164
1920 ...	3,844	2,724	6,958	439	4,010	75,438	51,448	1,610	12,712
1921 ..	3,105	3,024	6,388	399	6,239	32,519	16,557	374	12,947
1922 ..	3,112	2,784	5,543	378	4,940	72,006	33,452	1,504	13,104
1923 ..	2,682	3,321	5,243	401	5,236	74,588	43,064	1,031	10,713

The following return shows the average produce per bearing tree for the seasons 1913–14, 1916–17, 1919–20, and 1922–23:—

PRODUCE OF FRUIT TREES.

Fruit Trees.	AVERAGE PER BEARING TREE.			
	1913–14.	1916–17.	1919–20.	1922–23.
	Bushels	Bushels.	Bushels.	Bushels.
Apples ..	1·03	·34	1·10	·91
Pears ..	1·07	1·14	1·10	·91
Quinces ..	1·03	1·11	1·26	·88
Plums ..	·83	·65	·74	·70
Cherries ..	·80	·17	·46	·51
Peaches ..	1·02	1·35	1·28	1·24
Apricots ..	1·21	·78	·91	·83
Nectarines ..	1·18	1·41	1·53	·96
Oranges ..	1·16	·59	·57	·93
Lemons ..	1·49	1·11	·90	1·09
Loquats ..	·24	·29	·52	·34
Medlars ..	·29	·07	·28	·20
Figs ..	·85	·87	·65	·53
Passion Vines	·75	·44	·65	·39
Guavas ..	·02	·42	·24	·13
Pomegranates	·54	·32	·31	·17
Persimmons ..	·68	·82	·69	·61
	lbs.	lbs.	lbs.	lbs.
Almonds ..	4·87	2·51	3·70	3·39
Walnuts ..	5·35	1·34	10·68	8·25
Filberts ..	·56	3·60	2·00	1·64
Chestnuts ..	18·94	26·66	33·45	15·48

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 1922–23:—Melons, 2,370 cwt.; rhubarb, 7,234 dozen bundles; and tomatoes, 122,241 bushels. There were also 2,134

acres laid down in gardens growing fruit for private use; the value of the produce from these was estimated at about £10,670.

Value of fruit sold.

According to prices received by growers the value of fruit which reaches market was estimated to be £868,000 in 1918–19, £1,248,500 in 1919–20, £1,029,700 in 1920–21, £1,184,100 in 1921–22, and £1,172,300 in 1922–23. 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.

Market gardens.

The area under market gardens for the year 1922–23 was 14,108 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 £35 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 £493,780. 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.

Dried fruit (exclusive of Raisins and Currants).

The quantity of dried fruit (weight after drying) was first collected in 1895–6, when 179,460 lbs. were returned. During 1922–23 the quantity produced was 1,435,528 lbs., which was the largest amount ever recorded. The production of the various kinds of dried fruit, with the exception of raisins and currants the particulars of which appear on page 477, is shown in the following statement for each of the last five seasons :—

DRIED FRUIT, 1918–19 TO 1922–23.

Year ended June.	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Pears.	Total.*
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1919 ..	3,229	131,684	73,638	45,002	36,866	28,654	319,073
1920 ..	52,759	211,714	226,498	69,125	46,711	139,634	746,441
1921 ..	72,530	388,729	451,525	338,617	30,811	118,857	1,410,080
1922 ..	10,689	298,068	232,003	221,297	32,578	149,600	948,649
1923 ..	5,354	376,491	454,899	518,196	29,632	36,915	1,435,528

* Including nectarines, of which there were 9,011 lbs. in 1921, 4,414 lbs. in 1922, and 14,041 lbs. in 1923.

The large increase in the returns for 1922–23, as compared with the previous year, is accounted for by the very much larger quantities of peaches and apricots dried.

Minor crops. 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, 1921-22 AND 1922-23.

Crop.	1921-22.		1922-23.	
	Area.	Produce.	Area.	Produce.
	Acres.		Acres.	
Beans	764	16,105 bushels	1,138	24,008 bushels
Chicory	615	468 tons (dry)	739	640 tons (dry)
Flowers	278	..	263	..
Garlic	21	51 tons	17	68 tons
Herbs	9	..	25	..
Flax—New Zealand ..	85	*	..	..
		1 cwt. seed		
Millet—Broom ..	801	3,105 cwt. fibre	1,304	4,200 cwt. fibre
		2,003 cwt. seed		3,200 cwt. seed
„ Japanese ..	153	680 cwt. seed	756	4,660 cwt. seed
Nurseries	1,064	..	996	..
Pumpkins	1,514	8,445 tons	1,549	4,551 tons
Seeds—Agricultural and Garden ..	145	..	47	..
Sugar Beet	1,600	16,577 tons clean beet, producing 1,872 tons marketable sugar.	2,045	20,444 tons clean beet, producing 2,784 tons marketable sugar
Sunflowers	96	503 cwt.	113	739 cwt.
Total	7,145	..	8,992	..

* Awaiting treatment.

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, and each of the last eight years was as follows :—

LAND IN FALLOW.

Year ended March.	Acres.	Year ended March.	Acres.
1901	602,870	1919	1,548,121
1906	1,049,915	1920	1,357,536
1911	1,434,177	1921	1,935,747
1916	1,358,343	1922	2,052,964
1917	1,899,559	1923	2,186,881
1918	1,672,729		

Nearly all of the fallowed area is devoted to wheat production. Of the 2,186,881 acres in fallow last season 748,497 were in the Wimmera, 647,167 in the Mallee, and 550,310 in the Northern District. The total for these three districts represented, therefore, 89 per cent. of the land fallowed in the State.

Manure used.

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 40,037, as compared with 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, and 1911, and each of the last seven years:—

MANURE USED FOR FERTILIZATION, 1901 TO 1922.

Year.	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
1917	30,109	3,336,418	167,114	106,119
1918	32,589	3,222,822	162,165	104,993
1919	32,114	3,249,768	164,491	115,627
1920	36,073	3,576,940	156,978	135,205
1921	37,835	3,848,184	161,683	150,012
1922	40,037	4,148,780	173,343	172,897

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 1922, 85 per cent. During 1922-23 the quantity of fertilizers imported into Victoria from oversea countries was 96,443 tons valued at £288,600. This included 48,215 tons of rock phosphates valued at £105,573, and 40,552 tons of guano valued at £91,860, all 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, 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. 1918 TO 1922.

Year.	Males.	Females.	Total.
1918	95,584	52,548	148,132
1919	98,308	54,318	152,626
1920	100,236	51,014	151,250
1921	106,369	53,059	159,428
1922	107,872	48,978	156,850

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 ; but females partly engaged in outdoor duties in connexion with the holdings are included therein. 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 1922–23. The information has been furnished by the occupiers of holdings.

WAGES, AGRICULTURAL AND PASTORAL, 1922–23.

Occupations.	Range.	Prevailing Rate.
Ploughmen	30s. to 72s. per week ..	50s. per week
Farm labourers	30s. to 60s. per week ..	40s. per week
Threshing machine hands ..	12d. to 18d. per hour ..	15d. per hour
Harvest hands	10s. to 15s. per day ..	12s. per day
Milkers	25s. to 60s. per week ..	37s. 6d. per week
Maize pickers (without rations)	7d. to 12d. per bag ..	8d. per bag
Married couples	50s. to 70s. per week ..	60s. per week
Female servants	15s. to 30s. per week ..	25s. per week
Men cooks	40s. to 60s. per week ..	50s. per week
Stockmen	£78 to £182 per annum ..	£120 per annum
Shearers, hand*	30s. to 40s. per 100 sheep	35s. per 100 sheep
„ machine*	30s. to 40s. per 100 sheep	35s. per 100 sheep
Gardeners, market	30s. to 60s. per week ..	45s. per week
„ orchard	30s. to 60s. per week ..	40s. per week
Vineyard hands	30s. to 70s. per week ..	45s. per week

* It is believed that in the case of some of the highest rates rations are not found.

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 1923.

LIVE STOCK IN VICTORIA, 1861 TO 1923.

Year.	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
1923	494,947	794,898	990,762	11,765,520	294,962
	Per Head of Population.				
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
1923	·31	·50	·62	7·35	·18
	Per Square Mile.				
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
1923	5·63	9·04	11·27	133·88	3·36

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 carrying capacity of the land at different periods may be instituted. Calculations made on this basis show that each square mile carried an equivalent of 312 sheep in 1923, as compared with 302 in 1921, 306 in 1911, and 237 in 1881—an increase of 32 per cent. in the carrying capacity of the land in 42 years.

Size of holdings in 1913 and 1919.

Information relating to land occupied and cultivation and live stock thereon has been collected at various dates, the last collection having been in March, 1919. The land privately owned was summarized according to different-sized holdings, and in the instances where Crown lands were held in conjunction therewith these were, regardless of size, scheduled with the holdings to which they were attached.

Particulars of the size of holdings and cultivation thereon are given in the following table for the years 1913 and 1919:—

SIZE OF HOLDINGS AND CULTIVATION THEREON.

Size of Holdings. (In acres.)	Year.	Privately-owned Land. Number of Holdings.	Privately-owned Land. Area Occupied.	Crown Land held in conjunction with that privately owned.	Total Area Occupied.	Area under— Cultivation.	Area under— 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
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
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
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
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
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
5,000 ,, 10,000	1913	287	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
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
Total ..	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

The number of holdings of over 10,000 acres was 152 in 1919, as compared with 151 in 1913, 175 in 1910, and 195 in 1906, and the aggregate areas comprised therein in the years mentioned were 2,638,307 acres, 2,652,966 acres, 3,298,227 acres, and 4,134,067 acres respectively. The reduction in the period of thirteen years between March, 1906, and March, 1919, was equivalent to 22 per cent. in the number and 36 per cent. in the acreage of such estates. In all other holdings of the sizes mentioned in the above table there were increases in both numbers and acreage in the thirteen years referred to.

Size of holdings and how they were utilized, 1913 and 1919.

To illustrate the uses to which the land was applied in 1913 and 1919, various percentages relating to holdings of different sizes 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 AND 1919.

Size of Holdings of Private Land. (In Acres.)	Year.	Percentage in each Division to Total of—				Live Stock Grazed reduced to equivalent in Sheep.	
		Area Occupied.	Area under Cultivation.	Area used for Pasture, &c.	Equivalent in Sheep Grazed.	Total.	Per Acre used for Grazing, &c.
1 and under 100	1913	3·57	4·33	3·43	7·08	1,766,873	1·69
	1919	3·46	4·47	3·29	6·50	1,909,552	1·82
100 „ 321	1913	13·94	15·44	13·66	17·67	4,410,283	1·06
	1919	12·91	14·91	12·57	17·40	5,107,256	1·28
321 „ 641	1913	18·45	25·12	17·21	17·14	4,278,079	·82
	1919	19·53	27·53	18·17	17·48	5,132,920	·89
641 „ 1,000	1913	15·02	18·95	14·29	12·15	3,031,015	·70
	1919	15·03	20·43	14·11	12·37	3,630,165	·81
1,000 „ 2,500	1913	23·80	27·27	23·15	20·34	5,076,868	·72
	1919	25·76	25·47	25·81	22·28	6,539,378	·80
2,500 „ 5,000	1913	10·76	6·22	11·61	9·22	2,300,276	·65
	1919	9·51	5·00	10·28	8·84	2,594,808	·79
5,000 „ 10,000	1913	6·00	1·98	6·75	6·95	1,735,240	·84
	1919	6·38	1·53	7·20	6·85	2,011,066	·88
10,000 and upwards	1913	8·46	·69	9·90	9·45	2,358,478	·78
	1919	7·42	·66	8·57	8·28	2,431,720	·89
Total	1913	100·00	100·00	100·00	100·00	24,957,112	·82
	1919	100·00	100·00	100·00	100·00	29,356,865	·92

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 92 sheep in 1919, as compared with 82 in 1913 and 78 in 1910. The carrying capacity of holdings of all sizes increased during the nine-year period 1910–19.

Particulars of the number of holdings of different sizes and of the cultivation and live stock thereon in March, 1919, are given in greater detail than in the above tables in the *Year-Book* for 1919–20, pages 510 and 511.

Land occupied in different districts.

The following tables show the land in occupation in March, 1923, in districts, and the uses to which the land was applied :—

LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1923.

(Areas of 1 acre and upwards.)

District.	Number of Occupiers.	Acres Occupied.				
		For Agricultural Purposes.	For Pasture.		Other Purposes and Unproductive.	Total.
			Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
Central ..	18,562	516,401	151,261	2,037,619	134,831	2,840,112
North-Central	5,923	148,533	45,538	1,862,300	63,662	2,120,033
Western ..	13,130	456,799	191,782	5,765,924	361,957	6,776,462
Wimmera ..	6,813	1,812,505	1,185	4,081,482	96,682	5,991,854
Mallee ..	7,959	2,198,855	7,593	2,692,720	526,614	5,425,782
Northern ..	12,949	1,570,959	75,271	3,625,570	50,029	5,321,829
North-Eastern	5,706	172,456	5,306	3,853,865	297,930	4,329,557
Gippsland ..	9,481	172,921	479,518	3,764,204	717,980	5,134,623
Total ..	80,523	7,049,429	957,454	27,683,684	2,249,685	37,940,252
	Percentage of Total Occupied in each District.					
Central ..	..	18·18	5·33	71·74	4·75	100·00
North-Central	..	7·01	2·15	87·84	3·00	100·00
Western ..	..	6·74	2·83	85·09	5·34	100·00
Wimmera ..	..	30·25	0·02	68·12	1·61	100·00
Mallee ..	..	40·53	0·14	49·63	9·70	100·00
Northern ..	..	29·52	1·41	68·13	0·94	100·00
North-Eastern	..	3·99	0·12	89·01	6·88	100·00
Gippsland ..	..	3·36	9·33	73·33	13·98	100·00
Total ..	..	18·58	2·52	72·97	5·93	100·00
	Percentage in each District of Total in State.					
Central ..	23·05	7·32	15·80	7·36	5·99	7·49
North-Central	7·36	2·11	4·76	6·73	2·83	5·59
Western ..	16·31	6·48	20·03	20·83	16·09	17·86
Wimmera ..	8·46	25·71	0·13	14·74	4·30	15·79
Mallee ..	9·88	31·19	0·79	9·73	23·41	14·30
Northern ..	16·08	22·30	7·86	13·09	2·22	14·03
North-Eastern	7·09	2·44	0·55	13·92	13·24	11·41
Gippsland ..	11·77	2·45	50·08	13·60	31·92	13·53
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 Northern, Wimmera, and Mallee districts. Of the occupied land, about 30 per cent. in the Northern, 41 per cent. in the Mallee, and 30 per cent. in the Wimmera district are devoted to agriculture, and these divisions supply 79 per cent. of the cultivation in Victoria. In the North-Central, Western, and North-Eastern districts the land occupied is largely devoted to grazing; and in Gippsland considerable attention is given to the cultivation of grasses, 50 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, 1923.

AREA OCCUPIED AND STOCK THEREON, 1923.

District.	Area Occupied for—		Number of—		
	Agriculture.	Pasture.	Horses.	Cattle.	Sheep.
	acres.	acres.			
Central	516,401	2,188,880	101,950	295,688	1,038,616
North-Central ..	148,533	1,907,838	23,432	108,521	1,084,650
Western	456,799	5,957,706	65,014	403,143	4,048,662
Wimmera ..	1,812,505	4,082,667	69,657	61,612	1,928,590
Mallee	2,198,855	2,700,314	66,546	51,903	552,023
Northern	1,570,959	3,700,841	93,454	240,726	1,572,938
North-Eastern ..	172,456	3,859,171	32,184	244,688	796,760
Gippsland ..	172,921	4,243,722	42,710	379,379	743,281
Total ..	7,049,429	28,641,139	494,947	1,785,660	11,765,520

The area occupied does not include 2,249,685 acres which are mostly in an unproductive state. Compared with 1922, cattle increased by 2 per cent., and sheep decreased by 4½ per cent., while the number of horses remained practically unaltered.

Live stock in Victoria, 1919 to 1923.

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, 1919, are given on page 511 of the *Year-Book* for 1919–20, and page 498 of this volume.

LIVE STOCK IN VICTORIA, 1919 TO 1923.

Live Stock.	1919.	1920.	1921.	1922.	1923.
Horses (including foals)	523,788	513,500	487,503	496,124	494,947
Cattle—					
Dairy Cows ..	592,079	623,652	620,005	719,473	794,898
Other (including calves) ..	1,004,465	1,007,468	955,154	1,030,896	990,762
Sheep	15,773,902	14,422,745	12,171,084	12,325,818	11,765,520
Pigs	267,819	186,810	175,275	230,770	294,962

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 1921-22 and 1922-23 for live stock. The information has been extracted from the Melbourne *Stock and Station Journal* :—

PRICES IN MELBOURNE OF LIVE STOCK, 1921-22 AND 1922-23.

Stock.	Prices in 1921-22.									Prices in 1922-23.								
	Average.			Range.						Average.			Range.					
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.		£	s.	d.	
Horses.																		
Extra heavy draught	31	18	0	30	0	0	to	34	2	6	33	7	6	30	0	0	to	40	0	0
Medium draught ..	23	0	0	20	0	0	to	30	0	0	25	19	0	25	0	0	to	27	0	0
Delivery cart ..	16	7	0	14	0	0	to	24	0	0	20	6	0	18	0	0	to	22	0	0
Saddle and harness	5	6	0	5	0	0	to	6	10	0	5	4	0	4	10	0	to	6	0	0
Ponies	8	18	0	8	0	0	to	10	5	0	8	7	0	7	15	0	to	9	0	0
Order cart ..	10	15	0	10	0	0	to	12	5	0	10	15	0	10	0	0	to	12	0	0
Fat Cattle.																		
Bullocks—																		
Extra prime ..	13	10	0	11	1	0	to	17	7	0	17	14	0	14	9	0	to	27	15	0
Prime	11	14	0	9	12	0	to	15	5	0	15	3	0	12	16	0	to	23	15	0
Good	9	19	0	8	3	0	to	13	0	0	12	8	0	10	7	0	to	18	12	6
Good light and handy weights	8	2	0	6	5	0	to	10	17	0	10	4	0	8	2	6	to	14	2	0
Second ..	6	5	0	4	14	0	to	8	2	0	7	2	0	5	11	0	to	10	11	0
Cows—																		
Best	8	7	0	6	14	0	to	11	1	0	10	10	0	8	2	0	to	17	17	0
Others	5	2	0	3	17	0	to	7	7	0	5	16	0	4	12	6	to	9	5	0
Dairy Cattle.																		
Best milkers ..	19	2	0	16	5	0	to	24	1	0	11	2	6	8	12	0	to	14	0	0
Springers, best ..	11	4	0	8	7	0	to	17	18	0	10	10	0	8	8	0	to	14	5	0
Fat Sheep.																		
Wethers (cross)—																		
Extra prime ..	1	4	3	0	17	3	to	1	14	4	1	16	6	1	7	5	to	2	19	6
Prime	1	1	3	0	15	10	to	1	9	11	1	12	3	1	4	3	to	2	13	1
Good	0	18	6	0	14	6	to	1	5	6	1	7	8	1	1	1	to	2	5	10
Ewes (cross)—																		
Extra prime ..	0	19	5	0	14	4	to	1	8	0	1	7	1	0	19	1	to	2	7	9
Prime	0	16	8	0	11	7	to	1	4	3	1	3	2	0	16	1	to	2	2	3
Good	0	14	1	0	9	10	to	0	19	9	0	18	11	0	13	0	to	1	15	4
Wethers (merino)—																		
Extra prime ..	1	2	4	0	15	7	to	1	14	6	1	14	3	1	3	6	to	2	18	8
Prime	1	0	4	0	14	6	to	1	11	3	1	10	2	1	1	7	to	2	10	0
Good	0	17	2	0	11	9	to	1	5	8	1	5	3	0	17	7	to	2	2	6
Ewes (merino) best	0	16	8	0	11	3	to	1	3	0	1	2	3	0	14	2	to	2	1	1
Fat Lambs.																		
Extra prime ..	1	2	6	0	15	9	to	1	10	8	1	9	9	1	4	9	to	2	6	6
Prime	0	19	6	0	13	11	to	1	6	6	1	5	4	1	2	0	to	1	18	7
Good	0	16	3	0	11	10	to	1	1	0	1	0	6	0	17	0	to	1	13	0
Second	0	12	6	0	9	5	to	0	14	7	0	14	10	0	12	0	to	1	4	1
Pigs.																		
Back Fatters—																		
Extra heavy prime	12	5	0	10	5	0	to	14	6	0	9	4	0	8	0	0	to	10	5	0
Extra prime and weighty ..	9	6	0	6	11	0	to	11	9	0	6	0	0	5	0	0	to	6	16	0
Baconers—																		
Extra prime ..	5	18	0	4	9	0	to	7	16	0	4	13	0	4	3	0	to	5	12	0
Prime	5	4	0	3	19	0	to	6	18	0	4	1	0	3	12	0	to	4	16	0
Porkers	3	4	0	2	10	0	to	4	9	0	2	7	0	2	1	0	to	2	13	0

Stock Slaughtered. 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, 1918 TO 1922.

Year.	Number Slaughtered.		
	Sheep and Lambs.	Cattle.	Pigs.
1918	3,581,460	223,340	377,390
1919	6,324,490	362,475	329,190
1920	4,244,798	374,545	240,557
1921	4,005,587	331,707	239,638
1922	5,863,195	424,199	308,172

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

PURPOSES FOR WHICH STOCK WERE SLAUGHTERED, 1918 TO 1922.

Year.	For Butcher and Private Use.*			For Export.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1918	2,773,298	195,328	174,689	248,825	3,520	615
1919	3,136,059	281,636	126,509	2,854,059	44,437	1,000
1920	1,835,419	353,429	82,315	2,385,966	14,912	5,465
1921	2,794,790	310,428	55,521	1,186,704	16,694	7,335
1922	3,184,411	413,650	107,022	2,657,515	4,251	..

Year.	For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1918	553,090	23,580	201,900	6,247	912	186
1919	283,966	32,580	201,480	50,406	3,822	201
1920	2,067	1,133	152,556	21,346	5,071	221
1921	20,622	2,740	176,451	3,471	1,845	331
1922	9,763	2,955	200,901	11,506	3,343	249

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

Of the 5,863,195 sheep and lambs slaughtered in Victoria in 1922, 2,657,515 or 45 per cent. were frozen, as compared with

651,914, or 23 per cent., in 1906. In 1922–23 the oversea exports included 94,104,264 lbs. of mutton and lamb, valued at £2,373,628.

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 past ten 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, which occurred in 1921 following the termination of the Imperial Government contracts, the season 1922–23 opened early, with improved prices, which caused activity among exporters and a large export—both of mutton and lamb.

FROZEN MUTTON AND LAMB EXPORTED.

Year.	Number of Carcasses Exported.		
	Mutton.	Lamb.	Total.
1913	948,162	1,159,018	2,107,180
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	66,730	129,537	196,267
1918–19	401,382	267,588	668,970
1919–20	2,468,090	1,533,410	4,001,500
1920–21	288,190	497,896	786,086
1921–22	314,564	872,140	1,186,704
1922–23	989,456	1,668,059	2,657,515

Dairying.

The dairying industry is one of the principal sources of the wealth of the community. The value of dairy produce in 1923 was £10,381,310, as compared with £9,512,980 in the previous year, £11,816,670 in 1921, £9,262,710 in 1920, and £8,521,590 in 1919. 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, 1918–19 TO 1922–23.

Year ended March.	Number of Cow-keepers.	Number of Dairy Cows.	Butter made.*	Cheese made.*
			lbs.	lbs.
1919	58,766	592,079	66,240,403	6,055,964
1920	56,659	623,652	60,218,945	7,735,023
1921	58,117	620,005	64,938,458	3,636,571
1922	60,882	719,473	82,981,570	5,675,909
1923	62,424	794,898	84,355,939	3,754,958

* Year ended 30th June.

Butter and cheese made on farms.

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

BUTTER AND CHEESE MADE ON FARMS.

Year ended June.	Butter.	Cheese.
	lbs.	lbs.
1919	5,116,733	1,031,514
1920	4,743,906	937,030
1921	5,086,723	492,952
1922	5,480,421	316,249
1923	5,582,469	418,873

Butter and cheese made in factories.

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

BUTTER, CHEESE, ETC., MADE IN FACTORIES, 1918–19 TO 1922–23.

Year ended June.	Butter made.	Cream sold.	Cheese made.	Concentrated, Condensed, and Powdered Milk made.
	lbs.	gallons.	lbs.	lbs.
1919	61,123,670	77,830	5,024,450	45,251,710
1920	55,475,039	147,736	6,797,993	44,219,389
1921	59,851,735	153,124	3,143,619	42,643,871
1922	77,501,149	160,490	5,359,660	48,354,210
1923	78,773,470	213,170	3,336,085	38,314,261

NOTE.—In addition, 2,639,240 lbs. of casein and 410,155 lbs. of milk sugar were made in 1922–23.

The quantities of milk, in gallons, received at factories and creameries were 157,814,940 in 1918–19, 147,455,930 in 1919–20, 154,042,550 in 1920–21, 193,507,110 in 1921–22, and 196,171,380 in 1922–23.

Exports of butter and cheese.

In 1922–23 there were exported from Victoria to countries outside Australia 41,653,344 lbs. of butter, valued at £3,190,805, all of which, except 323,122 lbs., was Australian produce. The quantity sent to the United Kingdom was 35,115,042 lbs., valued at £2,586,722. The quantity of cheese exported to oversea countries was 548,364 lbs., and the value thereof, £22,955.

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 1922–23 and earlier seasons was as follows :—

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION.

District.	Wool Clip, 1922–23.		
	Sheep.	Lambs.	Total.
	lbs.	lbs.	lbs.
Central	5,043,775	426,958	5,470,733
North-Central ..	6,173,859	449,070	6,622,929
Western	25,228,586	1,885,224	27,113,810
Wimmera	13,410,548	883,865	14,294,413
Mallee	4,113,295	217,278	4,330,573
Northern	9,546,776	681,884	10,228,660
North-Eastern ..	4,138,398	313,052	4,451,450
Gippsland	3,433,682	247,700	3,681,382
Total Clip 1922–23	71,088,919	5,105,031	76,193,950
Total Clip 1921–22	72,829,509	5,365,837	78,195,346
Total Clip 1920–21	67,617,476	3,532,465	71,149,941
Total Clip 1919–20	91,282,613	7,096,976	98,379,589
Total Clip 1918–19	92,094,437	8,891,994	100,986,431

——	1919–20.	1920–21.	1921–22.	1922–23.
	lbs.	lbs.	lbs.	lbs.
Wool clip	98,379,589	71,149,941	78,195,346	76,193,950
Wool stripped from Victorian skins and on Victorian skins exported (estimated) ..	34,467,578	19,100,630	25,317,431	26,274,000
Total production ..	132,847,167	90,250,571	103,512,777	102,467,950
Total value ..	£7,908,007	£4,729,400	£4,662,750	£6,380,600

In 1922–23 there were 9,920,239 sheep and 2,278,303 lambs shorn, as compared with 10,072,358 sheep and 2,471,431 lambs in 1921–22, 10,595,458 sheep and 1,725,305 lambs in 1920–21, and 12,275,005 sheep and 3,141,655 lambs in 1919–20.

Weight of a fleece.

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

WEIGHT OF A FLEECE, 1918–19 TO 1922–23.

Year.	Weight of a Fleece.		
	Sheep.	Lambs.	Sheep and Lambs combined.
	lbs.	lbs.	lbs.
1918–19	7·41	2·31	6·21
1919–20	7·44	2·26	6·38
1920–21	6·38	2·05	5·77
1921–22	7·23	2·17	6·23
1922–23	7·17	2·25	6·25

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, 1918–19 TO 1922–23.

Year.	Production.		Used in Manufactures.		Available for Export.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	£
1918–19	126,647,061	7,621,413	7,823,050	423,748	118,824,011	7,197,665
1919–20	132,847,167	7,908,007	11,300,400	612,105	121,546,767	7,295,902
1920–21	90,250,571	4,729,400	12,799,590	639,980	77,450,981	4,089,420
1921–22	103,512,777	4,662,750	13,293,010	553,875	90,219,767	4,108,875
1922–23	102,467,950	6,380,600	15,926,225	995,389	86,541,725	5,385,211

Prices of wool.

The following information as to the average prices of wool per lb. which have prevailed during the past three seasons has been obtained from Melbourne wool brokers :—

PRICES OF WOOL, 1920-21 TO 1922-23.

Class of Wool.	Average Price per lb. in—		
	1920-21.	1921-22.	1922-23.
GREASY MERINO.			
Extra Super (Western District)	30d. to 36d.	28d. to 30d.	34d. to 36d.
Super	24d. to 28d.	22d. to 24d.	27d. to 30d.
Good	16d. to 20d.	16d. to 18d.	23d. to 25d.
Average	12d. to 14d.	12d. to 14d.	18d. to 20d.
Wasty and Inferior	6d. to 8d.	8d. to 10d.	14d. to 16d.
Extra Super Lambs	18d. to 20d.	24d. to 26d.	28d. to 30d.
Super Lambs	13d. to 15d.	16d. to 18d.	20d. to 22d.
Good Lambs	10d. to 12d.	11d. to 12d.	16d. to 17d.
Average Lambs	7d. to 8d.	7d. to 8d.	13d. to 14d.
Inferior Lambs	2d. to 4d.	3d. to 5d.	6d. to 9d.
GREASY CROSSBRED.			
Extra Super Comebacks ..	22d. to 24d.	22d. to 24d.	29d. to 31d.
Super Comebacks	19d. to 21d.	17d. to 19d.	24d. to 26d.
Fine Crossbred	9d. to 11d.	13d. to 15d.	18d. to 20d.
Medium Crossbred	5d. to 7d.	8d. to 10d.	14d. to 16d.
Coarse Crossbred and Lincoln	2d. to 3½d.	3d. to 5d.	7d. to 9d.
Super Fine Crossbred Lambs ..	11d. to 14d.	14d. to 16d.	20d. to 22d.
Good Crossbred Lambs ..	6d. to 7d.	8d. to 10d.	12d. to 14d.
Coarse and Lincoln Lambs ..	4d. to 5d.	4d. to 5d.	8d. to 10d.
SCOURED.			
Extra Super Fleece	45d. to 51d.	42d. to 46d.	46d. to 50d.
Super Fleece	38d. to 41d.	34d. to 38d.	40d. to 44d.
Good Fleece	29d. to 32d.	26d. to 30d.	32d. to 36d.
Average Fleece	23d. to 27d.	18d. to 22d.	24d. to 26d.
RECORD PRICES FOR THE SEASON.			
Greasy Merino Fleece ..	49½d.	42½d.	40½d.
„ Comeback Fleece ..	37½d.	31d.	38½d.
„ Merino Lambs ..	26d.	32¼d.	41½d.
„ Comeback Lambs ..	27d.	24½d.	28d.
Scoured Fleece	64d.	51d.	57¾d.

Flocks of sheep in districts.

Returns which were collected in March, 1919, gave 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, 1919.

District.	Number of—		Average Number of Sheep to a Flock.	Percentage of—	
	Flocks.	Sheep.		Flocks.	Sheep.
Central	3,384	1,377,304	407	11·94	8·75
North-Central	2,434	1,371,189	563	8·59	8·71
Western	6,080	4,848,391	797	21·46	30·80
Wimmera	4,282	2,440,595	570	15·11	15·50
Mallee	1,514	840,734	555	5·34	5·34
Northern	5,286	2,499,582	473	18·65	15·88
North-Eastern	2,449	1,038,230	424	8·64	6·60
Gippsland	2,909	1,325,171	455	10·27	8·42
Total	28,338	15,741,196	555	100·00	100·00

The figures do not include 32,706 sheep which were travelling on roads or were located in cities and towns. Flocks were more numerous in all districts, and their average size was greater in every district, except the Central, in 1919 than in 1913. In the six years referred to the number of flocks increased by 895 in the Central, 357 in the North-Central, 506 in the Western, 251 in the Wimmera, 156 in the Mallee, 562 in the Northern, 301 in the North-Eastern, and 476 in the Gippsland district, the total increase for the State being 3,504, or 14 per cent. The average number of sheep to a flock showed a very marked increase in the North-Central, Wimmera, Mallee, Northern, and North-Eastern districts, and a slight increase in the Western and Gippsland districts, while there was a small reduction in the Central district. The average number of sheep to a flock was 555 in 1919, as

compared with 477 in 1917, 478 in 1913, 531 in 1910, 642 in 1908, and 706 in 1906. The number of sheep in the State increased from 11,892,224 in 1913 to 15,773,902 in 1919. All divisions of the State showed substantial increases during the six-year period 1913–19.

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, 1919.

Size of Flocks.	Number of—		Percentage of—	
	Flocks.	Sheep.	Flocks.	Sheep.
Under 500	20,430	3,185,381	72·10	20·24
500 to 1,000	4,339	2,972,551	15·31	18·88
1,000 „ 2,000	2,233	3,005,850	7·88	19·10
2,000 „ 5,000	955	2,733,598	3·37	17·35
5,000 „ 10,000	247	1,691,768	·87	10·75
10,000 „ 20,000	111	1,516,830	·39	9·64
Over 20,000	23	635,218	·08	4·04
Total	28,338	15,741,196	100·00	100·00

A comparison of the above figures with those for 1913 shows that flocks of less than 500 sheep had increased by 848, and those of from 500 to 1,000 by 1,323, from 1,000 to 2,000 by 931, from 2,000 to 5,000 by 327, from 5,000 to 10,000 by 56, and from 10,000 to 20,000 by 21. Flocks of 20,000 and over had decreased by 2. During the six years under review the number of sheep in flocks of from 1,000 to 2,000 increased from 1,844,901 to 3,005,850, or by 63 per cent. The increase in the number of sheep in the whole State in the same period was 33 per cent. Twenty-one of the 23 largest and 70 of the 111 second largest flocks in 1919 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 returns dated June, 1923, for New South Wales, Federal Capital Territory, and

South Australia; March, 1923, for Victoria and Tasmania; January, 1923, for New Zealand; and December, 1922, for Queensland, Western Australia, and the Northern Territory:—

LIVE STOCK IN AUSTRALASIA.

State, &c.	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	Other.		
Victoria	494,947	794,898	990,762	11,765,520	294,962
New South Wales ..	658,686	3,244,905		34,723,684	340,579
Federal Capital Territory	1,345	6,275		139,063	274
Queensland ..	713,015	563,683	6,391,780	17,641,071	160,617
South Australia ..	264,150	170,362	255,449	6,305,133	75,520
The Northern Territory	39,845	760,766		6,161	361
Western Australia ..	181,159	58,387	881,209	6,664,135	67,561
Tasmania	37,313	69,991	148,206	1,558,494	46,056
New Zealand ..	330,818	1,248,643	2,232,051	23,081,439	400,889

Bee-keeping. The returns for 1922-23 show that there were in that year 3,756 bee-keepers, who owned 44,676 frame and 7,384 box hives, producing 2,208,684 lbs. and 76,316 lbs. of honey respectively, and 27,182 lbs. of beeswax. The number of bee-keepers owning 20 hives and upwards was 584, as compared with 571 in the previous season. The quantity of honey produced in the Wimmera, the chief producing district, was 855,364 lbs. in 1922-23, as compared with 1,172,403 lbs. in the previous season. The more important particulars of the industry for the past five years are given below:—

BEE-KEEPING, 1918-19 TO 1922-23.

Season ended May.	Number of Bee-keepers.	Number of Hives.	Honey produced.	Beeswax produced.
			lbs.	lbs.
1919	4,374	52,782	1,644,447	25,286
1920	3,914	40,970	1,396,704	24,735
1921	3,408	37,075	1,724,942	24,222
1922	4,046	50,147	2,712,675	32,737
1923	3,756	52,060	2,285,000	27,182

Poultry Farming.

The following table shows the numbers of poultry and poultry-owners as ascertained in each of the four census years 1881 to 1911 :—

POULTRY AND POULTRY-OWNERS: 1881, 1891, 1901, AND 1911.

Census.	Poultry-owners.	Fowls.	Ducks.	Geese.	Turkeys.
1881	97,152	2,332,529	181,698	92,654	153,078
1891	142,797	3,487,989	303,520	89,145	216,440
1901	132,419	3,619,938	257,204	76,853	209,823
1911	144,162	3,855,538	288,413	59,851	190,077

It is estimated that the gross value of poultry and egg production for the year 1922–23 was about £4,316,000.

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, 1923, sums amounting to £966,350 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 1888–9 ..	142,963	1919–20	36,672
1889–90 to 1898–9 ..	208,638	1920–21	36,158
1899–1900 to 1908–9 ..	170,050	1921–22	40,766
1909–10 to 1918–19 ..	283,693	1922–23	47,410

In addition to the expenditure of £966,350 referred to above, a loan of £150,000 for the purchase of wire-netting to be advanced to land-holders was allocated to shires in 1890, and one of £50,000 in 1896, both of which have been repaid. Further sums were advanced in later years 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:—£3,766 in 1918–19, £13,540 in 1919–20, £44,380 in 1920–21, £15,447 in 1921–22, and £23,731 in 1922–23. 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 during each of the past five years was as shown in the following statement :—

RABBITS, HARES, AND WILD-FOWL SOLD AT THE MELBOURNE FISH MARKET, 1918-19 TO 1922-23.

Year.	Rabbits.	Hares.	Wild-fowl.
	pairs.	brace.	brace.
1918-19	622,896	50	19,224
1919-20	444,456	..	20,022
1920-21	405,564	40	7,158
1921-22	429,372	8	21,708
1922-23	431,196	21	16,428

Frozen rabbits, &c., exported.

Large quantities of frozen rabbits and hares and of rabbit and hare skins have been exported to oversea 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.

Year.	Frozen Rabbits and Hares.		Rabbit and Hare Skins.	
	Quantity.	Value.	Quantity.	Value.
	pairs.	£	lbs.	£
1918-19	1,176,106	87,333	1,932,217	134,900
1919-20	2,725,692	224,737	3,266,621	780,038
1920-21	1,094,689	131,130	1,893,827	326,681
1921-22	454,052	35,385	2,623,228	201,921
1922-23	141,312	10,176	2,140,915	237,853

FISHERIES.

Numbers of men and boats engaged in fishing.

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 1922–23 :—

VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED, 1922-23.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet	10	8	263	134
Barwon Heads and Ocean Grove ..	10	6	945	71
Brighton	9	5	400	200
Corner Inlet, Welshpool, Toora, and Port Franklin	89	63	8,245	3,636
Dromana	30	21	1,113	288
Frankston	9	9	437	120
Geelong	77	39	3,621	1,382
Gippsland Lakes	204	146	12,486	7,385
Kerang	8	7	35	116
Lorne	4	3	152	40
Mallacoota	6	6	500	75
Mentone	12	9	180	195
Mordialloc, Chelsea and Carrum ..	54	37	2,213	636
Mornington	38	28	1,993	637
Portarlington and St. Leonards ..	91	56	3,746	1,335
Portland	51	36	3,788	539
Port Albert	36	23	2,468	1,071
Port Fairy	59	39	7,345	621
Port Melbourne	68	41	3,119	671
Queenscliff	139	83	13,682	752
Sandringham	38	21	1,903	203
Sorrento, Portsea, and Rye	55	32	2,130	626
St. Kilda	12	8	204	230
Torquay	8	5	134	100
Warrnambool	19	14	748	228
Werribee	13	7	381	90
Waranga Basin	22	12	185	224
Western Port (Cowes, Hastings, Grantville, Flinders, San Remo, and Tooradin)	112	87	8,096	2,394
Williamstown	36	19	1,396	586
Total	1,319	870	81,908	24,585

Melbourne Fish Market.

The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1921-22 and 1922–23 were as shown in the next table.

FISH SOLD IN THE MELBOURNE FISH MARKET, 1921–22 AND 1922–23.

		1921–22.		1922–23.	
		Quantity.	Value.	Quantity.	Value.
			£		£
Fresh Fish (Victorian)	lbs.	10,481,420	124,900	9,458,170	135,170
Crayfish	doz.	32,748	24,561	32,729	30,274
Imported Fish (fresh or frozen) ..	lbs.	2,183,328	45,486	2,195,598	54,890
Oysters	bags	7,189	26,101	8,876	36,563
Total		..	221,048	..	256,897

In addition to the above, 7,264 cwt. of smoked fish, and 361 baskets of prawns were sold in this market in 1922-23.

Victorian fish sold. The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and elsewhere in 1922-23 were as follows :—

VICTORIAN FISH SOLD IN 1922-23.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lbs.	doz.	£	£
Melbourne	9,458,170	15,490	135,170	14,328
Ballarat	468,864	2,610	6,720	1,760
Other	75,291	308	1,076	285
Total	10,002,325	18,408	142,966	16,373

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

FISH IMPORTED, 1921–22 AND 1922–23.

		1921–22.		1922–23.	
		Quantity.	Value.	Quantity.	Value.
Fish—			£		£
Fresh or Frozen	lbs.	1,548,863	53,585	1,679,684	50,216
Smoked	„	43,943	2,705	30,564	2,569
Fresh Oysters	cwt.	2,297	3,675	2,924	4,081
Potted or Concentrated, &c. ..		..	12,156	..	10,281
Preserved in tins, &c. ..	lbs.	6,356,000	290,308	6,090,118	256,514
N.E.I.	cwt.	2,600	9,955	3,835	13,455
Total		..	372,384	..	337,116

The most important item in this table is fish preserved in tins and other air-tight vessels, of which 1,128,975 lbs. came from the United Kingdom, and 2,744,241 lbs. from Canada, in 1922–23.

Imports by United Kingdom of staple articles produced in Victoria.

In Victoria the natural conditions are eminently suitable for agricultural and pastoral pursuits, and there is room for considerable expansion in these avenues of production. There is little need to fear over-production, as the United Kingdom offers an almost unlimited market for many articles which could be supplied from this State. This is readily seen from the figures in the subjoined table, which show the values of certain articles imported into the United Kingdom from Australia, other British Possessions, and Foreign Countries for each of the years 1920, 1921, and 1922 :—

IMPORTS OF CERTAIN ARTICLES INTO UNITED KINGDOM FROM AUSTRALIA, OTHER BRITISH POSSESSIONS, AND FOREIGN COUNTRIES, 1920, 1921, AND 1922.

Articles.	Year.	Value of Imports into United Kingdom from—			
		Australia.	Other British Possessions.	Foreign Countries.	All Countries.
		£	£	£	£
Butter	1920	3,282,376	4,384,351	16,852,021	24,518,748
	1921	11,479,626	9,261,866	21,598,455	42,339,947
	1922	6,996,678	10,944,134	19,374,724	37,315,536
Cheese	1920	514,923	17,976,327	1,783,169	20,274,419
	1921	501,912	15,408,725	1,314,320	17,224,957
	1922	434,118	10,364,632	1,236,855	12,035,605
Wheat	1920	18,635,968	15,626,563	112,490,819	146,753,350
	1921	17,783,123	15,540,733	37,282,212	70,606,068
	1922	10,265,586	14,344,172	34,184,425	58,794,183
Wheatmeal and Flour ..	1920	2,325,722	4,560,046	14,360,213	21,245,981
	1921	1,627,426	7,168,404	10,268,195	19,064,025
	1922	1,378,076	5,312,521	3,981,133	10,671,730
Meat	1920	16,073,668	32,202,453	92,221,984	140,498,105
	1921	8,097,492	26,664,727	97,513,808	132,276,027
	1922	6,680,141	18,895,151	76,393,599	101,968,891
Fruit—Fresh, Dried, etc. ..	1920	1,539,749	6,864,323	46,971,395	55,375,467
	1921	2,179,189	6,677,162	35,801,498	44,657,849
	1922	3,182,570	6,839,648	34,137,246	44,159,464
Wine	1920	317,365	37,250	12,418,796	12,773,411
	1921	183,370	56,836	5,077,769	5,317,975
	1922	147,913	46,485	5,437,293	5,631,691
Wool	1920	51,702,095	23,633,162	12,288,705	87,623,962
	1921	18,914,465	18,638,851	3,997,569	41,550,885
	1922	27,379,129	25,494,379	5,977,176	58,850,684
Hides and Skins, Undressed ..	1920	4,101,449	13,954,244	13,911,419	31,967,112
	1921	1,045,668	4,455,351	5,413,727	10,914,746
	1922	1,981,563	6,018,370	6,936,602	14,936,535
Tallow and Stearine	1920	1,275,503	1,359,695	1,424,064	4,059,262
	1921	509,408	907,119	793,281	2,209,808
	1922	718,445	880,617	735,393	2,334,455
Leather	1920	906,819	5,714,418	13,024,179	19,645,416
	1921	336,236	2,166,417	5,842,849	8,345,502
	1922	386,075	2,682,734	7,658,216	10,727,025
Total—Eleven Articles ..	1920	100,675,637	126,312,832	337,746,764	564,735,233
	1921	62,657,915	106,946,191	224,903,683	394,507,789
	1922	59,550,294	101,822,843	196,052,662	357,425,799

Agriculture in Victoria and Great Britain.

The figures relating to agriculture and live stock in Victoria and Great Britain in 1922 are for comparative purposes placed side by side in the table which follows :—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1922.

		Victoria.	Great Britain.
Area	acres	56,245,760	56,208,959
Wheat	bushels	35,697,220	63,832,000
Oats	„	8,093,459	112,808,000
Barley	„	2,442,041	46,432,000
Peas	„	214,544	2,093,520
Potatoes	tons	148,354	5,203,000
Turnips and swedes	„	1,878*	17,788,000
Mangolds	„	8,120	8,594,600
Hay	„	1,665,089	6,691,000
Horses	No.	494,947	1,308,396
Cattle	„	1,785,660	6,869,468
Sheep	„	11,765,520	20,122,117
Pigs	„	294,962	2,449,820

* Includes beet, carrots, and parsnips.

MINING.

The supervision of mining and the inspection of mines are regulated by Act of Parliament. Authority for all mining operations, whether on Crown or private lands, must be obtained in the prescribed manner, and mining leases giving the right to enter on private land for mining purposes may be issued to another than the owner.

Miners' Rights.

The taking out of a " miner's right " entitles the holder to prospect for gold on Crown lands. The right may be had on payment of a sum of 2s. 6d. per annum and remains in force for any number of years not exceeding fifteen. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands, which is called a " claim." The revenue in 1922–23 from miners' rights was £2,233.

Mining Leases.

Leases for the purpose of mining for gold are granted for a term not exceeding fifteen years at a yearly rental of 2s. 6d. per acre. For mining leases of land to be worked by means of dredging or hydraulic sluicing the yearly rent is 5s. per acre. Other mineral and coal mining leases are also issued at varying rates. The revenue from these sources in 1922–23 was £3,369.

Area occupied for Mining.

The area of Crown and private lands under occupation for mining purposes on 31st December, 1922, was 49,178 acres. The subjoined table shows the area being worked for different minerals :—

AREA UNDER OCCUPATION FOR MINING PURPOSES, 31ST DECEMBER, 1922 (CROWN LANDS AND PRIVATE LAND).

Nature of Mineral, &c.	Area.
	acres.
Gold	37,344
Coal (ordinary)	3,747
Coal (brown)	894
Aluminium	37
Bluestone	24
Clay Slum	176
Copper	214
Copper and Silver	71
Dolomite and Clay	1
Eurite and Gold	9
Felspar	25
Granite	27
Gypsum	1,043
Hematite and Iron Ores	8
Infusorial Earth	9
Iron	336
Iron Oxides	5
Kaolin	81
Limestone	90
Limestone and Clay	27
Magnesite	133
Manganese	166
Manganese and Cobalt	19
Marble	106
Molybdenite	431
Molybdenite, Copper, and Silver	28
Ochre	3
Oxide	11
Pigments	5
Pigments and Clay	21
Pigments and Limestone	65
Porphyry	12
Sand	49
Shale	17
Silicate of Alumina	63
Silver and Gold	30
Silver and Lead	187
Slate	53
Sulphates and Oil	224
Tin	2,286
Wolfram and Tin	454
Water-right Licences	647
Total	49,178

Mining development.

The mining industry has been well fostered by the Government, not only in the way of financial assistance but also by means of geological surveys and boring. Apart from the annual expenditure of the Mines Department from consolidated revenue, of which a statement is appended, loan moneys amounting to £510,454 (including £239,432 expended on the State Coal Mine), and portions of surplus revenues of past years amounting to £85,000, were expended or advanced for developmental purposes from 1st July, 1899, to 30th June, 1923.

STATE EXPENDITURE ON MINING, 1918-19 TO 1922-23.

Item.	Expenditure from Consolidated Revenue.				
	1918-19.	1919-20.	1920-21.	1921-22.	1922-23.
	£	£	£	£	£
Mines Department	22,030	24,423	27,359	26,785	27,085
State Coal Mine	266,244	367,733	385,105	499,076	436,753
Brown Coal Mine	34,516	98,053	75,186	44,426	48,886
Coal Mines Regulation—Sinking Fund and Depreciation Fund	17,107	56,613	22,419	82,786	22,342
Diamond drills for prospecting ..	11,728	11,703	10,992	9,809	9,411
Testing plants	3,813	4,028	4,643	3,212	3,148
Geological and underground surveys of mines	2,186	2,138	2,443	2,506	3,071
Mining Development—					
Advances to companies, &c., boring for gold, coal, &c. ..	17,871	16,993	9,006	8,161	6,963
Miscellaneous	4,061	5,347	1,702	2,024	1,806
Total	379,556	587,031	538,855	678,785	559,465

Yearly grants are also made to Schools of Mines, particulars of which will be found on page 320 of this work. Since 1st July, 1899, £510,454 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	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	239,432
Miscellaneous	9,740
Total	£510,454

The advances from loan moneys and revenue to mining companies to 30th June, 1923, for the development of mining, totalled £251,903, of which sum £39,725 had up to that date been repaid, £42,825 realized, and £124,269 written off, leaving £45,084 outstanding. Interest received during 1922-23 amounted to £320, and interest outstanding on 30th June, 1923, to £3,249.

Total mineral production.

The mineral production of the State 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 1922.

TOTAL MINERAL PRODUCTION TO 31ST DECEMBER, 1922.

Metals and Minerals.	Recorded prior to 1922.		Recorded during 1922.		Total Recorded to end of 1922.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Fine ozs.	£	Fine ozs.	£	Fine ozs.	£
Gold	70,860,259	300,994,473	106.872	453,962	70,967,131	301,448,435
Silver .. {	1,441,855	219,306	6,978	1,080	1,448,833*	220,386
{	30,577	7,880	..	..	30,577	7,880
Platinum ..	311	1,671	..	..	311	1,671
	tons.		tons.		tons.	
Coal, black ..	9,170,628	5,615,077	559,284	664,251	9,729,912	6,279,328
„ brown ..	543,541	186,974	90,402	31,179	633,943	218,153
Ore—copper ..	18,730	218,590	..	..	18,730	218,590
„ tin ..	16,595	903,523	115	12,071	16,710	915,594
„ antimony ..	100,382	555,055	2,612	22,966	102,994	578,021
„ silver-lead ..	793	5,760	..	..	793	5,760
„ iron ..	5,434	12,540	..	..	5,434	12,540
„ manganese ..	257	1,019	150	930	407	1,949
Wolfram ..	118	11,785	..	..	118	11,785
Diamonds ..	..	128	..	..	..	128
Sapphires, &c. ..	..	630	..	..	..	630
Gypsum ..	43,764	31,095	6,945	4,662	50,709	35,757
Magnesite ..	1,384	4,200	97	291	1,481	4,491
Kaolin	20,218	26,858	2,340	2,375	22,558	29,233
Diatomaceous earth	8,057	33,137	..	..	8,057	33,137
Pigment clays ..	1,647	2,059	..	..	1,647	2,059
Phosphate rock ..	11,072	11,822	1,096	1,096	12,168	12,918
Molybdenite ..	109	4,366	591	2,550	700	6,916
Fluorspar ..	623	1,888	..	..	623	1,888
Bluestone, freestone, granite, &c.† .. Limestone, &c.‡ ..	..	6,449,129	..	468,468	..	6,917,597
Total ..	..	315,298,965	..	1,665,881	..	316,964,846

* Extracted from gold at the Melbourne Mint. † 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 mining. 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 successively 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 gold produced from 1851 to 1922 was £301,448,435, 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 1922.

Period.	Quantity (Fine 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	104,512
1891–1900 ..	7,476,038*	1922	106,872

* Gross ozs.

The yield has been on the down grade since 1906, the return for 1922 having been the lowest since 1851, with the exception of that for the year 1921. The quantities raised in the other principal gold-producing States in 1922 were 538,246 ounces in Western Australia, 80,584 ounces in Queensland, and 25,222 ounces in New South Wales. The total production of gold in the world in 1920, as shown in the United States Mint Report, was 16,205,029 ozs.

Mining district gold yields. The yield of gold for the past 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, exceed the total output of 1921 by 251 ounces, and that of 1922 by 3 ounces.

DISTRICT YIELDS OF GOLD, ALLUVIAL AND QUARTZ, 1921 AND 1922.

Mining District.	1921.			1922.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Ararat and Stawell ..	4,722	168	4,890	4,370	460	4,830
Ballarat	1,557	6,080	7,637	1,378	1,434	2,812
Beechworth ..	11,149	19,331	30,480	11,438	22,628	34,066
Bendigo	988	61,105	62,093	914	52,537	53,451
Castlemaine ..	2,820	2,998	5,818	3,105	15,582	18,687
Gippsland	2,285	548	2,833	2,231	463	2,694
Maryborough ..	748	380	1,128	510	897	1,407
Total	24,269	90,610	114,879	23,946	94,001	117,947

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, 1918 TO 1922.

Mining District.	Amount Distributed.				
	1918.	1919.	1920.	1921.	1922.
	£	£	£	£	£
Ararat and Stawell	..	..	..	..	..
Ballarat	..	..	..	13	..
Beechworth	34,050	19,220	36,690	13,455	18,450
Bendigo	..	..	44,226	6,750	20,250
Castlemaine	17,100	5,800	11,595	5,830	17,883
Gippsland	525	160	2,668	1,096	..
Maryborough	1,250	..	..	..	..
Total	52,925	25,180	95,179	27,144	56,583

Gold miners. 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, 1918 TO 1922.

Year.	Alluvial Miners.	Quartz Miners.	Total.
1918	..	..	3,547
1919	1,155	1,910	3,065
1920	1,138	2,604	3,742
1921	1,073	1,977	3,050
1922	1,048	2,262	3,310

The number of men employed in each mining district in 1922 was as follows :—Ararat and Stawell, 173 ; Ballarat, 83 ; Bendigo, 1,705 ; Beechworth, 750; Castlemaine, 324; Gippsland, 123; and Maryborough, 152.

Value of machinery on gold-fields. 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, 1918 TO 1922.

Year.	Approximate Value of Machinery Employed in—		
	Alluvial Mining.	Quartz Mining.	Total.
	£	£	£
1918	..	..	650,600
1919	198,490	425,110	623,600
1920	181,400	703,416	884,816
1921	156,642	508,643	665,285
1922	135,295	508,630	643,925

Dredging and sluicing. A feature of alluvial mining in Victoria for the past twenty 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 1922 the

number of bucket dredges at work was 6, and the number of pump hydraulic sluices 2, in addition to which 18 jet elevators and 6 gravitation plants were operating. Particulars relating to these dredging and sluicing plants for the past five years are as follows :—

DREDGING AND SLUICING, 1918 TO 1922.

Year.	Number of Plants.	Area Worked.	Quantity of Material Treated.	Gold Obtained.	Tin Obtained.
		Acres.	Cub. yds.	Ozs.	Tons.
1918	67	230	7,626,581	33,983	124
1919	56	161	5,517,159	24,540	107
1920	43	130	4,179,778	19,855	78
1921	42	99	3,554,674	15,734	78
1922	32	41	1,736,735	11,939	115

These plants employed 244 men in 1922. The yield of gold in that year per cubic yard of material was 3·3 grains, which was a large increase on the yield of the previous year. Since the inception of dredge mining 1,866,080 ounces of gold and 1,464 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 past five years :—

CYANIDATION, 1918 TO 1922.

Year.	Number of Plants.	Quantity of Tailings Treated.	Yield of Gold.	Value of Yield.
		Tons.	Ozs.	£
1918	34	45,600	4,420	18,250
1919	33	44,581	4,361	16,484
1920	28	37,596	4,226	16,216
1921	20	39,937	5,326	17,212
1922	12	41,163	5,847	22,654

Records show that the total amount of tailings which have been treated by the cyanide and other processes is 15,963,787 tons, and that the gold that has been won thereby amounts to 1,275,291 ounces, which is equal to an average yield of 1 dwt. 14 grs. per ton.

A Sludge Abatement Board, appointed by the Government, is intrusted 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 *débris*.

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, 1918 TO 1922.

Year.	Number of Batteries.	Quantity of Ore Treated.	Yield of Gold.
		tons.	ozs.
1918	33	4,092	2,905
1919	34	2,941	3,778
1920	33	2,664	2,849
1921	34	1,748	1,367
1922	34	1,286	1,424

Since 1897, the year in which the first battery was erected, 72,190 tons of ore have been crushed for 50,150 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 633,943 tons (valued at £218,153), of which 90,402 tons were obtained in 1922. Of the total output for that year 89,887 tons valued at £30,987 were obtained from the State Brown Coal Mine at Morwell.

The State coal-field.

There is a State coal mine at Wonthaggi, on the Powlett River Coal-field, the development of which was undertaken 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, 1922, was 511,174 tons, valued at £595,927. The total output up to the end of 1922 was 5,581,009 tons, valued at £3,748,492. The average number of men employed at the mine throughout the year ended 30th June, 1922, was 1,554.

Victorian coal production and value.

The quantity of coal, exclusive of brown coal, raised in Victoria up to the end of 1922 was 9,729,912 tons, valued at £6,279,328. 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 and 1922, 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

* Total production up to date mentioned.

The quantities of coal produced in the other States in 1922 were as follows:—New South Wales, 10,183,133 tons; Queensland, 958,519 tons; Western Australia, 438,443 tons; and Tasmania, 69,238 tons.

Mining accidents.

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, 1918 TO 1922.

Year.	Gold Mines.			Coal Mines.		
	Miners Employed.	Persons Killed.	Persons Injured.	Miners Employed.	Persons Killed.	Persons Injured.
1918	3,547	5	12	1,584	4	6
1919	3,065	4	9	2,192	5	13
1920	3,724	3	13	2,011	1	5
1921	3,050	5	2	1,994	5	11
1922	3,310	..	4	1,953	..	11

As a result of gold mining accidents during the past five years 17 persons were killed and 40 were injured and rendered unfit for work for a period of at least fourteen days. These numbers were equivalent to annual rates of 1·02 and 2·40 respectively per 1,000 employed. Coal mining accidents during the same period accounted for 15 deaths and 46 injuries resulting in disablement for at least fourteen days, these being equal to yearly rates of 1·54 and 4·73 respectively per 1,000 employees.

Boring for gold and coal.

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

GOVERNMENT BORING OPERATIONS, 1918 TO 1922.

Year.	Drills worked by—		Bores put down for—			Total Depth Bored.
	Steam.	Other Power.	Gold.	Coal.	Total.	
						feet.
1918	2	10	..	214	214	41,080
1919	2	10	6	216	222	38,340
1920	2	13	5	358	363	37,957
1921	1	14	20	400	420	40,000
1922	1	14	6	182	188	25,200

Antimony. Up to the end of 1922 the quantity of antimony ore produced in Victoria was 102,994 tons valued at £578,021. Nearly the whole of it was obtained at Costerfield. The production for 1922 yielded 1,283 tons of concentrates valued at £22,966. For the previous year the yield was 347 tons of concentrates of the value of £5,890.

Tin. The production of tin ore in the State up to the end of 1922 was 16,710 tons, valued at £915,594. In the year 1922 the quantity produced was 115 tons, as against 80 tons in the preceding year, and 85 tons in 1920. Of the tin won during the past five years nearly the whole was obtained in the Beechworth district.

Gypsum. The quantity of gypsum produced in the State in 1922 was 6,945 tons, nearly all of which was obtained at Lake Boga, Bolton, and Cowangie. The output for the previous year was 11,139 tons, which was obtained almost entirely at Boort, Lake Boga, and Lascelles. Up to the end of 1922 the quantity raised in Victoria was 50,709 tons, valued at £35,757.

Kaolin. The quantity of kaolin produced in 1922 was 2,340 tons, and in the previous year 2,142 tons. Up to the end of last year the total output was 22,558 tons, valued at £29,233.

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, 1918-19 TO 1922-23.

Year ended June.	Number of Quarries.	Quantity of Stone Operated on				Approximate Value of Stone Raised.
		Bluestone.	Free-stone.	Granite.	Limestone.	
		c. yds.	c. yds.	c. yds.	c. yds.	£
1919 ..	99	837,080	1,282	1,760	47,854	189,770
1920 ..	91	785,847	2,824	1,490	56,446	219,413
1921 ..	105	1,068,131	417	1,485	56,031	340,450
1922 ..	112	1,212,637	4,437	1,515	58,073	369,030
1923 ..	106	1,244,262	10,776	1,775	73,448	384,510

In 1922-23 the number of persons employed in quarries was 1,582, and the wages paid amounted to £298,977. 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 has been well maintained in the last ten years, during which period nearly all existing lines of manufacture have shown a notable expansion, and many industries new to the State have been firmly established. Since 1913 the number of factories has increased by 26 per cent., the number of persons employed by 29 per cent., the amount of salaries and wages paid by 138 per cent., the value of output by 132 per cent., the value of machinery and plant and premises by 123 per cent., and the engine power of factories by 106 per cent. The difference between the cost of materials used and the value of the output was equivalent to an added value of £318 12s. 3d. per person employed in 1922–23, as compared with £163 19s. 7d. in 1913. This favorable economic result coincides with a larger proportion of establishments using mechanical power in 1922–23, when 81 per cent. were so equipped, as against 71 per cent. in 1913, and with the increased aggregate engine power of factories previously referred to. 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 has increased from 4·05 per cent. in 1913 to 4·95 per cent. in 1922–23.

Since 1913 the number of factories employing over 100 hands has increased by 12 per cent., and the number of hands employed by them has increased by 25 per cent. While factories of this size formed only 3·2 per cent. of the total number in the State in 1922–23, they employed 41·0 per cent. of the the total number of hands. The figures relating to distinct industries show that steady progress has been maintained in almost every class of factory during recent years. This is most noticeable in industries associated with the

manufacture of clothing and textile fabrics (including boots) and with the preparation of food, &c.

The appended table summarizes the position of the industries at various stages since 1871, but except for the period 1904 to 1922-23 the information for different years is not strictly comparable, for the reason that it has not been compiled upon the same basis throughout.

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
1904 ..	4,208	76,287	4,794,365	13,668,185	23,126,180
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

* Particulars not available. † 1880. ‡ 1890. § 1900.

Factories and Wages Board Legislation.

The first Factories Act in Victoria was passed in 1873, and since that year many other Acts dealing with the subject have been placed upon the statute-book. The *Factories and Shops Act* 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.

Production of different industries, 1922-23.

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 1922-23 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 :—

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1922-23.

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of Amounts drawn by Working Proprietors.	Fuel and Light used.	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
Class I.—Treating Raw Material the product of Pastoral Pursuits, or Vegetable Products, not otherwise classed.							£	£	£	£
Boiling down	13	206	10	162	..	..	39,941	10,894	214,499	274,827
Bone milling	13	682	15	109	..	2	24,122	15,501	51,765	108,959
Tanning	49	3,858	73	2,353	2	15	520,487	41,380	1,825,999	2,775,224
Fellmongering	30	1,672	30	576	..	3	137,539	35,199	1,507,302	1,802,440
Chaffcutting and grain crushing ..	182	2,636	178	711	..	14	73,979	12,901	956,445	1,120,095
Other	8	51	4	250	..	1	52,450	242	122,969	233,003
Total	295	9,105	310	4,141	2	35	848,518	116,117	4,678,979	6,314,548
Class II.—Oils and Fats, Animal and Vegetable.										
Oil, grease, glue	11	155	7	123	..	16	30,419	8,462	129,083	210,195
Soap and candle	19	662	13	600	..	156	142,685	28,686	661,836	1,152,270
Total	30	817	20	723	..	172	173,104	37,148	790,919	1,362,465

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1922-23—*continued.*

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of Amounts drawn by Working Proprietors.	Fuel and Light used.	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
Class III.—Processes relating to Stone, Clay, Glass, &c.							£	£	£	£
Brick, pottery, &c.	92	6,903	65	2,994	..	142	631,454	246,357	91,683	1,359,547
Cement, including cement pipes ..	20	3,022	12	726	..	2	171,989	94,157	121,944	612,348
Glass, including bottles	7	438	12	715	..	11	167,415	49,136	67,461	393,021
Glass bevelling	26	92	23	238	..	7	51,581	1,393	94,293	184,699
Marble and stone dressing ..	42	441	59	364	..	5	87,920	2,685	67,510	225,951
Modelling	25	293	28	364	..	7	75,938	4,682	98,613	241,028
Other	19	256	14	270	..	1	54,701	27,176	19,726	127,951
Total	231	11,445	213	5,671	..	175	1,240,998	425,586	561,230	3,144,545
Class IV.—Working in Wood.										
Cooperage	9	99	8	180	..	..	48,173	1,418	38,021	110,013
Saw-milling (forest)	227	3,768	320	2,897	..	13	616,686	1,811	29,618	1,132,628
Saw-milling, moulding, &c. ..	336	10,813	325	5,317	2	103	1,126,637	33,365	2,097,173	3,856,533
Mantelpiece	10	69	11	217	..	4	40,884	608	50,513	107,148
Wood carving, turning	22	467	23	274	..	7	62,923	2,506	65,369	174,918
Other	9	157	10	173	..	55	42,199	1,407	66,256	137,221
Total	613	15,373	697	9,058	2	182	1,937,502	41,115	2,346,950	5,518,461

Class V.—Metal Works, Machinery, &c.										
Agricultural implement	61	1,723	63	2,517	2	72	555,394	36,935	626,561	1,511,724
Engineering, iron foundry, &c.	531	12,934	633	9,533	2	174	2,055,596	179,372	2,482,822	5,809,039
Railway workshop	18	3,233	..	5,699	..	7	1,211,233	35,777	1,663,131	3,213,280
Nail	9	362	6	144	..	3	29,642	2,012	162,572	219,565
Sheet-iron, tin, &c.	107	723	100	1,886	1	220	348,743	13,058	713,835	1,289,381
Brass, copper smithing	97	903	119	1,090	1	53	229,974	13,397	273,112	655,738
Wireworking	21	367	27	284	..	16	58,592	2,380	202,510	317,064
Metallurgical, &c., cyanide	11	90	15	66	..	..	14,379	5,391	101,008	141,321
Oven, range	18	105	21	153	..	..	36,197	1,815	42,924	106,753
Other	45	673	45	442	2	10	89,583	9,539	171,650	357,186
Total	918	21,113	1,029	21,814	8	555	4,629,333	299,676	6,440,125	13,621,051
Class VI.—Connected with Food and Drink or the preparation thereof.										
Bacon curing	24	1,262	32	443	..	19	104,841	16,905	1,030,686	1,289,267
Butter, cheese, butterine	189	4,979	34	2,096	..	208	518,307	118,446	6,912,622	8,071,692
Meat freezing, preserving	16	5,050	7	1,354	..	26	315,381	47,231	1,820,034	2,466,632
Biscuit	8	515	7	787	..	570	194,112	22,244	662,725	1,079,128
Flourmilling	47	5,593	31	1,040	..	18	244,436	53,518	4,476,424	5,415,067
Jam, sauce, &c.	47	1,330	31	1,207	2	960	327,708	22,779	986,127	1,660,783
Oatmeal, starch, &c.	40	1,306	21	428	..	355	119,634	18,097	749,519	1,075,845
Sugar, confectionery, &c.	118	5,990	117	2,125	13	1,766	637,716	122,631	4,379,557	6,061,650
Aerated water, cordial, &c.	124	531	121	805	9	95	182,163	6,020	313,151	702,647
Malt	22	433	12	252	1	7	63,334	14,706	338,588	550,070
Brewing	14	3,809	5	1,085	..	1	291,935	61,049	977,949	2,322,814
Distilling	10	326	3	107	..	3	24,957	7,533	81,256	140,345
Condiments, coffee, cocoa, &c.	17	918	8	272	1	186	78,549	9,388	515,666	734,280
Tobacco, &c.	13	739	15	1,240	..	665	347,686	6,053	1,520,060	2,418,996
Other	42	3,332	35	377	1	34	87,977	33,948	77,023	280,705
Total	731	36,113	479	13,618	27	4,913	3,538,736	560,548	24,841,387	34,269,930

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1922-23—*continued.*

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of Amounts drawn by Working Proprietors.	Fuel and Light used.	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
Class VII.—Clothing and Textile Fabrics, and Fibrous Material.							£	£	£	£
Woollen mill	23	9,072	21	2,148	..	2,432	657,367	90,034	1,824,362	3,264,025
Clothing, tailoring, &c.	531	541	505	1,769	50	7,693	1,178,820	21,345	2,132,059	3,914,120
Dressmaking and millinery ..	505	448	136	281	322	8,413	824,802	12,154	1,618,128	3,000,713
Underclothing, shirt	202	997	101	384	119	6,171	661,065	13,788	1,580,317	2,666,312
Hat, cap	53	788	54	724	6	965	265,580	14,697	434,796	874,368
Hosiery	169	1,018	113	486	80	3,946	470,741	10,921	1,307,024	2,201,783
Oilskin, waterproof clothing ..	4	29	2	49	..	122	27,839	1,022	64,899	114,987
Boot, shoe	371	2,994	439	6,735	21	5,239	1,922,345	34,131	3,059,769	6,157,132
Fur	40	78	33	152	10	328	57,848	1,361	263,640	418,644
Rope, twine, &c.	8	1,486	7	549	..	347	130,451	11,276	300,301	592,155
Sail, tent, &c.	16	33	14	96	1	87	29,070	389	163,590	236,828
Other	37	244	41	233	9	465	93,386	5,059	204,936	358,930
Total	1,959	17,728	1,466	13,606	618	36,208	6,319,314	216,177	12,953,821	23,799,997

Class VIII.—Books, Paper, Printing, Engraving, &c.										
Printing	406	4,718	472	5,772	10	1,590	1,667,786	43,497	1,940,466	5,086,340
Account-book, stationery, &c. ..	30	602	28	661	1	655	194,448	5,124	313,736	665,962
Fancy box	29	397	22	250	7	765	123,664	3,013	248,676	503,224
Die sinking, engraving, &c. ..	18	115	22	195	..	3	37,141	1,017	20,327	88,193
Other	34	3,194	33	688	1	132	157,777	49,542	234,770	605,218
Total	517	9,026	577	7,566	19	3,145	2,180,816	102,193	2,757,975	6,948,937
Class IX.—Musical Instruments ..	18	355	11	416	..	17	90,659	1,727	111,824	250,804
Class X.—Arms and Explosives ..	10	792	3	244	..	159	76,733	7,744	222,653	370,308
Class XI.—Vehicles and Fittings, Saddlery, Harness, &c.										
Coachbuilding	301	1,088	355	2,257	..	28	433,644	15,093	514,677	1,185,775
Bicycle, &c.	390	1,456	436	2,568	1	77	532,257	16,478	521,843	1,391,845
Saddle, harness	40	54	44	341	..	76	73,339	637	110,606	216,044
Other	19	84	25	188	..	11	34,997	916	54,007	117,421
Total	750	2,682	860	5,354	1	192	1,074,237	33,124	1,201,133	2,911,085
Class XII.—Shipbuilding, Fitting, &c.	11	1,606	8	607	..	3	134,990	5,903	121,202	294,051
Class XIII.—Furniture, Bedding, &c.										
Upholstery, bedding, &c.	64	571	44	524	5	300	134,863	5,154	361,976	604,755
Cabinet, including billiard table ..	308	2,374	399	2,716	1	118	508,397	13,156	668,743	1,462,627
Picture frame	17	46	20	69	..	15	15,085	335	26,506	52,926
Other	8	103	5	155	..	21	34,790	2,210	71,667	131,172
Total	397	3,094	468	3,464	6	454	693,135	20,855	1,128,892	2,251,480

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1922-23—*continued.*

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of Amounts drawn by Working Proprietors.	Fuel and Light used.	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employees.	Working Proprietors.	Employees.				
Class XIV.—Drugs, Chemicals, and by-products.							£	£	£	£
Blacking, blue, &c.	23	252	15	178	..	183	52,194	2,316	269,749	404,657
Chemicals, drugs, &c.	49	1,259	34	574	2	458	190,038	17,162	475,533	883,130
Fertilizers	8	1,727	2	780	..	4	183,446	33,351	711,167	1,161,811
Other	42	436	36	220	1	24	39,415	1,824	117,287	197,221
Total	122	3,674	87	1,752	3	669	465,093	54,653	1,573,736	2,646,819
Class XV.—Surgical and Scientific Appliances	38	60	32	159	1	11	29,880	1,168	25,013	76,867
Class XVI.—Timepieces, Jewellery, and Plated-ware	111	479	125	925	1	100	180,605	6,604	242,188	558,436

Class XVII.—Heat, Light, and Energy.										
Electric apparatus	69	386	67	684	..	33	126,801	4,603	150,498	372,944
Electric light	88	72,106	4	1,381	..	66	377,048	398,393	1,686	1,614,139
Gas, coke	45	1,969	5	2,350	..	89	639,954	5,534	883,700	1,941,808
Other	7	1,418	1	235	..	449	95,525	8,655	204,436	480,952
Total ..	209	75,879	77	4,650	..	637	1,239,329	417,185	1,240,320	4,409,843
Class XVIII.—Leatherware (except Saddlery and Harness)	64	476	71	645	2	406	164,810	5,330	407,283	696,008
Class XIX.—Wares, not elsewhere included.										
Umbrella	7	14	5	50	..	141	24,770	292	74,983	124,182
Rubber goods	18	6,412	16	1,525	..	574	415,060	88,751	799,144	1,434,236
Brush, broom	19	183	19	297	1	92	61,410	1,645	113,600	216,463
Basket, wickerware	28	1	32	203	..	2	28,160	130	24,806	65,827
Total	72	6,610	72	2,075	1	809	529,400	90,818	1,012,533	1,840,708
Grand Total	7,096	216,427	6,605	96,487	691	48,842	25,547,192	2,443,681	62,658,163	111,286 343

Increase in value of output of each industry, 1917-18 and 1922-23.

Nearly every manufacturing industry in the State has shown a substantial increase in the value of output during the past five years. The output for the years 1917–18 and 1922–23 is shown in the following table, the industries being arranged in order of increase in value :—

OUTPUT OF INDUSTRIES, 1917–18 AND 1922–23.

Industry.	Value of Output.		Increase in Five Years.	
	1917–18.	1922–23.	Value.	Per cent.
	£	£	£	
Butter, cheese, and butterine	5,180,833	8,071,692	2,890,859	55·8
Boot and shoes	3,442,302	6,157,132	2,714,830	78·9
Engineering, iron foundries, &c.	3,096,090	5,809,039	2,712,949	87·6
Sugar, confectionery, &c. ..	3,523,998	6,061,650	2,537,652	72·0
Printing	2,650,127	5,086,340	2,436,213	91·9
Woollen mills	1,036,081	3,264,025	2,227,944	215·0
Sawmills, moulding, &c. ..	1,875,000	3,856,533	1,981,533	105·7
Railway workshops	1,295,640	3,213,280	1,917,640	148·0
Hosiery	714,053	2,201,783	1,487,730	208·3
Flour mills	3,989,510	5,415,067	1,425,557	35·7
Clothing, tailoring, &c. ..	2,648,371	3,914,120	1,265,749	47·8
Meat preserving, freezing ..	1,231,560	2,466,632	1,235,072	100·3
Dressmaking and millinery ..	1,821,898	3,000,713	1,178,815	64·7
Underclothing, shirt ..	1,580,033	2,666,312	1,086,279	68·7
Tobacco, &c.	1,414,934	2,418,996	1,004,062	71·0
Bicycle, &c.	394,839	1,391,845	997,006	25·3
Brewing	1,334,344	2,322,814	988,470	74·1
Brick, pottery, &c.	445,729	1,359,547	913,818	205·0
Electric light	760,117	1,614,139	854,022	112·4
Cabinet, including billiard table	614,586	1,462,627	848,041	138·0
Agricultural implements ..	830,876	1,511,724	680,848	81·9
Gas, coke	1,263,030	1,941,808	678,778	53·7
Sawmills, forest	460,510	1,132,623	672,118	146·0
Sheet iron, tin, &c.	675,750	1,289,381	613,631	90·8
Chaffcutting and grainerushing	534,777	1,120,095	585,318	109·4
Coachbuilding	664,700	1,185,775	521,075	78·4
Cement, including cement pipes	159,006	612,348	453,342	285·1
Oatmeal, starch, &c. ..	672,368	1,075,854	403,486	60·0
Tanning	2,385,512	2,775,224	389,712	16·3
Brass, copper	266,078	655,738	389,660	146·4
Chemicals, drugs, &c. ..	494,229	883,130	388,901	78·7
Fertilizers	780,672	1,161,811	381,139	48·8
Upholstery, bedding, &c. ..	250,092	604,755	354,663	141·8
Condiments, coffee, cocoa, &c.	405,775	734,280	328,505	81·0
Fur	107,171	417,772	310,601	289·8
Electric apparatus	88,511	372,994	284,483	321·4
Biscuit	800,626	1,079,128	278,502	34·8
Aerated waters, cordials, &c. ..	444,536	702,647	258,111	58·1
Leatherware (except saddlery)	442,763	696,008	253,245	57·2
Rubber goods	1,197,260	1,434,236	236,976	19·8

OUTPUT OF INDUSTRIES, 1917–18 AND 1922–23—*continued.*

Industry.	Value of Output.		Increase in Five Years.	
	1917–18.	1922–23.	Value.	Per cent.
	£	£	£	
Hat, cap	637,482	874,368	236,886	37·2
Fancy box	275,447	503,224	227,777	82·7
Modelling in plaster, &c. ..	21,875	241,028	219,153	1001·8
Bacon curing	1,084,440	1,289,267	204,827	18·9
Wireworking	113,530	317,064	203,534	17·9
Soap, candle	951,114	1,152,270	201,156	21·2
Other	12,008,540	13,767,500	1,758,960	14·6
Total	67,066,715	111,286,343	44,219,628	65·9

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., 1913 TO 1922–23.

Year.	Number of Establishments.	Horse-power of Engines.	Value of Machinery and Plant in Use.	Number of Employees.	Number of Working Proprietors	Amount of Wages Paid.
			£			£
1913	84	2,398	196,848	1,824	86	194,948
1914	79	2,434	190,460	1,875	82	210,007
1915	82	2,510	193,350	2,165	97	268,884
1916–17	74	3,187	214,896	2,362	82	300,796
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	3,299	85	631,920
1920–21	80	4,707	436,395	2,764	87	575,132
1921–22	78	5,341	504,355	2,902	93	625,443
1922–23	79	5,530	518,815	2,947	105	658,027

The quantity of bark used in connexion with tanning operations in 1922–23 was 13,683 tons. The output of tanneries for each of the last ten years was as follows :—

OUTPUT OF TANNERIES, ETC., 1913 TO 1922–23.

Year.	Number Tanned—			Sheep Skins Stripped.	Wool Washed (weight after washing).	Value of Articles produced or Work done.
	Hides.	Calf Skins.	Sheep and other Skins.			
	No.			No.	lbs.	£
1913 ..	538,117	181,643	863,580	1,128,302	7,424,263	1,961,653
1914 ..	554,242	210,894	936,975	1,639,161	7,816,250	2,132,935
1915 ..	765,088	166,197	1,150,449	1,463,775	12,224,184	3,201,455
1916–17 ..	722,649	230,380	1,027,847	1,538,178	13,843,439	3,962,202
1917–18 ..	601,950	217,605	1,418,595	1,641,000	24,560,590	5,061,236
1918–19 ..	670,956	234,548	1,742,388	2,354,487	34,483,316	6,918,270
1919–20 ..	738,907	251,973	2,780,017	5,030,438	38,191,912	8,896,091
1920–21 ..	694,322	308,542	1,406,472	2,604,413	14,619,943	4,200,077
1921–22 ..	792,974	512,515	2,042,817	2,214,980	17,453,847	3,953,049
1922–23 ..	780,221	663,813	2,403,940	2,407,830	19,939,785	4,577,664

The value of the leather, &c., imported into Victoria from oversea countries during the year ended 30th June, 1923, was £288,322.

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

SOAP AND CANDLE WORKS, 1913 TO 1922–23.

Year.	Number of Establishments.	Value of Machinery and Plant in Use.	Number of Employees.	Amount of Wages Paid.	Products.		Value of Output.
					Soap.*	Candles.	
		£		£	cwt.	cwt.	£
1913 ..	18	117,692	561	60,703	223,598	39,099	610,881
1914 ..	17	120,215	604	65,155	243,558	37,564	641,104
1915 ..	17	121,946	627	71,282	267,426	41,031	721,845
1916–17	18	128,100	670	84,036	214,526	38,746	802,179
1917–18	17	130,795	756	91,604	228,310	37,290	951,114
1918–19	15	140,600	669	92,663	206,429	39,680	957,295
1919–20	16	143,310	725	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	726	139,519	267,858	31,613	1,096,955
1922–23	19	196,355	756	142,685	296,888	39,519	1,152,270

* Not including soap made in small soap works not classified as factories, viz., 3,564 cwt. in 1913, 3,489 cwt. in 1914, 1,664 cwt. in 1915, 927 cwt. in 1916–17, 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, and 1,346 cwt. in 1922–23.

The quantity of tallow used in 1922–23 in the manufacture of soap and candles was 192,786 cwt. in factories, and 413 cwt. in minor works.

The imports from oversea countries in 1922–23 included 394,083 lbs. of soap valued at £24,513, and 77,519 lbs. of candles valued at £3,716.

Brickyards, potteries, &c.

Particulars relating to brickyards and potteries for the ten years 1913 to 1922-23 are shown in the following statement. The value of the land, plant, buildings, &c., used in connexion with such works in 1922-23 was £826,045 :—

BRICKS, POTTERY, PIPES, AND TILES, 1913 TO 1922-23.

Year.	Number of Establishments.	Number of Employees.	Amount of Wages Paid	Number of Bricks Made.*	Value of—	
					Pipes and Tiles.	Pottery.
			£		£	£
1913 ..	106	1,974	233,157	175,645,000	132,709	32,839
1914 ..	109	2,117	260,877	188,238,000	124,826	47,948
1915 ..	89	1,839	230,969	142,601,000	134,623	52,732
1916-17 ..	79	1,636	200,781	108,444,000	147,840	57,266
1917-18 ..	78	1,842	231,090	107,139,000	171,836	73,398
1918-19 ..	84	2,296	314,452	133,176,000	246,763	121,286
1919-20 ..	93	2,504	336,295	119,142,000	255,562	97,844
1920-21 ..	92	2,729	481,352	203,425,000	362,495	177,410
1921-22 ..	93	2,583	495,288	169,715,000	355,784	185,293
1922-23 ..	92	3,136	631,454	227,183,000	439,159	203,828

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

The estimated value of bricks made in 1922-23 was £716,560, being an increase of £258,254 on the value of those made in the preceding year.

Forest Saw-mills.

Detailed information in regard to the forest saw-mills of the State for the ten years 1913 to 1922-23 is given in the table which follows :—

FOREST SAW-MILLS, 1913 TO 1922-23.

Year.	Number of Mills.	Value of Machinery and Plant in Use.	Number of Employees.	Amount of Wages Paid.	Victorian Timber Sawn.	
					Quantity.	Value.
		£		£	Super ft.	£
1913 ..	167	262,964	2,118	211,454	81,770,000	290,280
1914 ..	167	273,086	2,127	232,305	84,374,000	316,400
1915 ..	138	233,343	1,564	169,027	62,589,000	234,710
1916-17 ..	151	235,140	1,678	206,709	70,038,000	297,663
1917-18 ..	162	260,280	1,935	248,940	78,984,000	355,430
1918-19 ..	187	315,670	2,278	319,547	91,540,000	503,470
1919-20 ..	203	366,355	2,627	405,335	99,142,000	693,995
1920-21 ..	246	473,275	3,181	563,627	113,215,000	905,720
1921-22 ..	239	517,725	3,014	627,432	112,008,000	896,070
1922-23 ..	227	516,800	2,910	616,680	118,366,000	946,930

In addition to the forest saw-mills there were 386 other factories working in wood. Particulars relating to these for the year 1922-23 are given on page 520.

Firewood, &c.

It is estimated that the approximate value of the production of firewood for consumption in the year 1922-23 was £928,000. In addition, there were supplies of railway sleepers, piles, posts and rails, shingles, and timber for mines obtained

from the forests, but it has been found impossible to procure reliable information as to their value.

Engineering, iron foundry, &c.

During the past decade there has been a very marked expansion in engineering works and iron foundries. Since 1913 the number of factories has increased by 54 per cent., the number of persons employed therein by 11 per cent., the amount of wages paid by 100 per cent., the value of machinery and plant by 94 per cent., the value of materials used by 106 per cent., and the value of the output by 123 per cent. The chief particulars of the industry for the years 1913 to 1922-23 are given in the next table:—

ENGINEERING, IRON FOUNDRY, ETC., 1913 TO 1922-23.

Year.	Number of Factories.	Horse-power of Engines.	Value of Machinery and Plant.	Number of Employees.	Amount of Wages Paid.	Value of—		
						Materials Used.	Fuel and Light Used.	Output.
			£		£	£	£	£
1913 ..	345	6,670	715,909	8,745	1,029,136	1,206,001	90,005	2,824,892
1914 ..	354	7,899	762,392	8,601	1,038,622	1,298,255	94,284	2,961,187
1915 ..	364	7,990	784,447	8,552	1,056,075	1,349,270	106,483	3,029,713
1916-17	364	7,964	809,940	7,726	1,008,627	1,365,280	104,334	2,936,342
1917-18	388	8,045	844,350	7,351	1,011,930	1,414,060	110,900	3,096,090
1918-19	402	8,694	903,110	7,537	1,077,720	1,578,990	134,440	3,359,580
1919-20	441	10,795	1,023,395	9,042	1,395,379	1,917,877	128,435	4,220,094
1920-21	510	11,567	1,207,630	10,265	1,984,834	2,882,847	206,806	6,206,289
1921-22	517	11,872	1,325,500	9,632	2,067,009	2,511,800	196,239	5,897,158
1922-23	531	12,934	1,389,075	9,707	2,055,596	2,482,822	179,372	5,809,039

The above figures are exclusive of railway workshops, which in 1922-23 numbered 18, and gave employment to 5,706 hands who were paid £1,211,233; the value of the materials dealt with by such workshops in that year was £1,663,131, and the value of the output was £3,213,280, of which 65 per cent. was from the Newport Workshops.

Agricultural implement works.

The subjoined statement contains the leading particulars relating to agricultural implement works for the last ten years:—

AGRICULTURAL IMPLEMENT WORKS, 1913 TO 1922-23.

Year.	No. of Factories.	No. of Employees.	Wages Paid.	Value of—		
				Fuel, &c., Used.	Materials Used.	Output.
			£	£	£	£
1913 ..	66	2,166	268,880	16,915	324,063	710,832
1914 ..	65	1,895	242,158	16,866	278,283	638,827
1915 ..	64	1,678	206,764	15,337	213,257	526,756
1916-17 ..	63	1,832	250,450	18,666	359,342	743,196
1917-18 ..	62	1,904	261,045	20,911	435,665	830,876
1918-19 ..	60	1,628	249,360	18,100	337,730	702,870
1919-20 ..	61	1,701	272,262	20,001	349,555	757,062
1920-21 ..	60	2,641	512,363	42,193	756,204	1,750,704
1921-22 ..	58	2,851	643,874	43,794	806,066	1,567,843
1922-23 ..	61	2,589	555,394	36,935	626,561	1,511,724

The wages averaged for each employee £124 2s. 9d. in 1913 and £214 10s. 5d. in 1922-23. The stripper-harvester, which is a Victorian invention, is one of the principal implements manufactured.

Bacon curing.

In the following table particulars of bacon and ham curing establishments are given for the ten years 1913 to 1922-23. The value of the machinery, plant, land and buildings in connexion with these establishments was £145,637 in 1913 and £272,425 in 1922-23.

BACON CURING, 1913 TO 1922-23.

Year.	Number of Establishments.	Number of Employees.	Amount of Wages Paid.	Pigs Slaughtered for Curing.	Weight of Bacon and Hams Cured.	Value of Output.
			£	No.	lbs.	£
1913 ..	28	423	49,305	179,710	16,345,955	726,906
1914 ..	26	442	57,965	181,756	16,298,474	772,318
1915 ..	25	362	49,672	129,259	11,451,031	767,778
1916-17 ..	23	405	58,191	167,003	15,376,600	972,477
1917-18 ..	21	433	65,870	197,880	17,908,100	1,084,440
1918-19 ..	21	482	76,308	201,770	18,343,400	1,107,910
1919-20 ..	21	529	99,736	182,320	16,675,090	1,384,351
1920-21 ..	22	421	90,394	139,881	13,369,107	1,335,186
1921-22 ..	22	445	103,783	163,917	15,583,960	1,366,832
1922-23 ..	24	462	104,841	186,524	17,293,395	1,239,267

This table does not include particulars relating to pigs slaughtered for curing, or to bacon and hams cured in small curing works; the pigs so slaughtered numbered 666 in 1913, 974 in 1914, 439 in 1915, 379 in 1916-17, 140 in 1917-18, 130 in 1918-19, 145 in 1919-20, 150 in 1920-21, 164 in 1921-22, and 116 in 1922-23; the quantity (in pounds) of bacon and hams cured in these works was 51,620 in 1913, 87,258 in 1914, 45,030 in 1915, 31,300 in 1916-17, 12,970 in 1917-18, 9,790 in 1918-19, 11,500 in 1919-20, 14,000 in 1920-21, 12,010 in 1921-22, and 9,600 in 1922-23.

In addition, the following quantities of bacon and hams were returned as having been cured on farms:—2,943,303 lbs. in 1913, 2,476,023 lbs. in 1914, 2,208,943 lbs. in 1915, 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, and 1,975,729 lbs. in 1922–23. The total quantity of bacon and hams cured in 1922–23 was thus 19,278,724 lbs.—an increase of 1,869,916 lbs. as compared with 1921–22.

Butter and cheese factories.

The number of butter, cheese, and kindred factories in 1922–23 was 182. Of these 143 were making butter, 24 cheese, 4 concentrated milk, 7 condensed milk, 9 powdered milk, 13 casein and 1 milk sugar. There were also 27 creameries attached to the factories. The number of factories and the value of machinery, plant, land and buildings, the number of employees and the amount of their wages, and the total value of the output for the ten years 1913 to 1922–23 were as follows:—

BUTTER AND CHEESE FACTORIES, 1913 TO 1922–23.

Year.	Number of Factories.	Value of Machinery, Plant, Land, and Buildings.	Number of Employees.	Amount of Wages Paid.	Value of Output.
		£		£	£
1913	197	649,931	1,311	159,529	3,562,057
1914	197	643,677	1,290	161,740	3,228,640
1915	190	644,960	1,145	139,543	2,715,784
1916–17	182	647,128	1,398	185,024	4,815,833
1917–18	181	683,140	1,642	226,050	5,086,238
1918–19	180	786,275	1,885	273,335	6,056,342
1919–20	181	1,025,325	2,026	338,507	6,365,927
1920–21	184	1,238,745	2,093	414,420	9,194,654
1921–22	188	1,395,425	2,293	492,446	7,115,642
1922–23.. ..	182	1,509,545	2,188	497,816	7,899,377

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on page 493.

Meat freezing and preserving works.

Meat freezing and preserving works numbered sixteen in 1922–23, and gave employment to 1,380 hands and 7 working proprietors, the wages of the hands amounting to £315,381. The approximate value of machinery, plant, land and buildings in that year was £1,285,570. The output for each of the last ten years is given in the following table :—

MEAT FREEZING AND PRESERVING, 1913 TO 1922–23.

Year.	Frozen.			
	Cattle.	Sheep.	Rabbits.	Poultry.
	Qrs.	No.	No.	No.
1913	126,568	2,107,180	4,674,588	25,284
1914	212,520	1,710,152	3,778,164	30,504
1915	..	47,546	3,584,388	8,652
1916–17	28,492	418,418	2,846,904	4,900
1917–18	3,832	196,267	7,394,140	4,620
1918–19	8,640	668,970	2,335,990	2,700
1919–20	177,230	4,001,500	5,385,854	2,736
1920–21	49,372	786,086	2,189,378	9,468
1921–22	55,355	1,186,704	903,400	8,856
1922–23	17,006	2,657,515	282,624	5,284

Year.	Preserved.			
	Beef.	Mutton.	Rabbits.	Other Meats, &c.
	Cwt.	Cwt.	Cwt.	Cwt.
1913	49,445	8,793	63	3,321
1914	49,103	7,316	2,368	5,936
1915	38,835	2,092	422	3,448
1916–17	15,591	4,484	5,245	2,693
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

NOTE.—In addition to the above, there were treated at freezing works 5,050 calves and 39,420 hares in 1913; 11,708 calves, 1,713 pigs, and 57,576 hares in 1914; 3,072 hares in 1915; 1,120 calves, 156 pigs, and 6,872 hares in 1916–17; 166 calves, 971 pigs, and 9,180 hares in 1917–18; 1,360 calves, 615 pigs, and 16,220 hares in 1918–19; 130 calves, 1,000 pigs and 65,530 hares in 1919–20; 2,569 calves and 5,465 pigs in 1920–21; and 2,855 calves and 7,335 pigs in 1921–22.

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, 1923 :—

MEATS IMPORTED AND EXPORTED OVERSEA, 1922–23.

Meats.	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Frozen—				
Mutton	..	..	43,883,318 lbs.	880,472
Lamb	..	..	50,220,946 ,,	1,493,156
Beef	..	..	3,238,741 ,,	41,890
Rabbits and Hares ..	..	..	141,312 prs.	10,176
Game	896 lbs.	106	300 lbs.	13
Other	..	..	..	22,349
Potted and Concentrated	..	20,401	..	5,128
Preserved in tins ..	..	7,495	2,337,492 lbs.	48,750
Sausage Casings.. ..	..	81,795	..	97,339
Not elsewhere included ..	..	527	..	193
Total value ..	..	110,324	..	2,599,466

Flour mills.

The value of the machinery, plant, land and buildings used in connexion with flour mills was estimated at £486,151 in 1913, and at £706,735 in 1922–23. Particulars of the industry for the ten years 1913 to 1922–23 are as follows :—

FLOUR MILLS, 1913 TO 1922–23.

Year.	Number of Mills.	Number of Employees.	Amount of Wages Paid.	Wheat Ground into Flour.	Flour Made.	Value of Total Output.
			£	bushels.	tons.	£
1913 ..	61	790	102,882	12,459,988	252,763	2,633,604
1914 ..	57	836	109,910	12,173,943	246,136	2,726,878
1915 ..	51	608	70,982	6,574,753	134,401	2,739,730
1916–17 ..	54	857	126,280	12,483,990	263,095	3,458,633
1917–18 ..	55	988	155,330	15,034,990	311,450	3,989,510
1918–19 ..	53	1,029	169,233	16,621,290	347,840	4,656,403
1919–20 ..	51	1,028	189,224	16,920,890	353,683	6,082,741
1920–21 ..	51	911	191,688	12,387,960	260,032	5,745,507
1921–22 ..	45	963	228,195	14,697,290	308,532	5,759,281
1922–23 ..	47	1,058	244,436	16,601,530	352,002	5,415,067

In addition to the flour made, the wheat ground in 1922–23 produced 7,643,408 bushels of bran and 6,372,741 bushels of pollard. Other grain operated on amounted to 39,826 bushels in 1913, 38,992 bushels in 1914, 43,618 bushels in 1915, 44,150 bushels in 1916–17, 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, and 44,363 bushels in 1922–23.

Exports of bread-stuffs.

During the year 1922–23, 1,418,978 lbs. of biscuits, valued at £52,036, and 178,812 tons of flour, valued at £2,024,921, were exported from Victoria to countries beyond Australia.

Jam, pickle, and sauce works.

In 1922–23 there were 47 establishments in which the manufacture of jams, pickles, and sauces was carried on, and the number of persons employed therein was 2,200 of whom 33 were working proprietors. The wages paid to the employees amounted to £327,708, and the value of machinery, plant, land and buildings was £391,820. 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, 1913 TO 1922–23.

Year.	Fruit Used.	Sugar Used.	Jams and Jellies Made.	Fruit Preserved.	Fruit Pulped.	Sauce Made.	Pickles Made.
	cwt.	cwt.	cwt.	cwt.	cwt.	pints.	pints.
1913 ..	400,048	179,243	265,727	102,608	100,690	6,458,748	1,752,396
1914 ..	341,189	175,538	271,755	81,425	75,299	5,648,280	1,840,920
1915 ..	300,861	193,243	305,445	52,939	40,993	5,827,176	1,285,476
1916–17 ..	372,424	257,481	347,152	60,419	132,182	6,433,032	1,803,408
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

Some of these establishments also candied fruit peel, the quantities being 5,519 cwt. in 1913, 6,892 cwt. in 1914, 4,628 cwt. in 1915, 3,360 cwt. in 1916–17, 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, and 6,831 cwt. in 1922–23. The value of the output in 1922–23 of the whole of the establishments whose produce is shown in the above table was £1,660,783.

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 Government has decided to remodel the plant, and the preliminary arrangements in connexion with this work are now in hand. A sum of £65,000 has been voted for the purpose.

The State Rivers and Water Supply Commission is well advanced with an irrigation scheme on the Macallister River, which will provide water for the whole district. Under irrigation it is anticipated that the beet supply will at least double itself, and that the industry will expand on more favorable and economical 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.
1913-14	1,000	7,432	920
1914-15	990	8,843	1,182
1915-16	461	4,928	560
1916-17	1,320	15,159	1,948
1917-18	1,200	14,487	1,650
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

The last season was a favorable one, the sugar content being high. Growers were paid 42s. 6d. per ton for their beets, and a profit of £13,290 was realized.

Breweries. Particulars regarding breweries for the ten years 1913 to 1922-23 are set forth in the next table. Machinery and plant were valued at £351,319 in 1913 and at £630,425 in 1922-23, whilst land and buildings were valued at £383,267 and £435,135 respectively in those years. The wages paid in 1922-23 amounted to £291,935.

BREWERIES, 1913 TO 1922-23.

Year.	Number of Breweries.	Number of Employees.	Materials Used—			Beer Made.	Value of Output.
			Sugar.	Malt.	Hops.		
			cwt.	bushels.	lbs.	gallons.	£
1913 ..	26	966	123,073	586,375	653,803	20,925,000	1,024,708
1914 ..	25	1,036	133,707	678,526	738,953	23,865,000	1,196,306
1915 ..	22	893	111,363	600,333	661,299	20,340,000	1,061,196
1916-17	19	857	105,238	616,630	710,470	20,112,000	1,118,288
1917-18	18	866	109,640	650,500	748,840	21,021,000	1,334,344
1918-19	17	932	112,080	625,770	722,590	20,963,000	1,476,335
1919-20	17	1,008	110,020	720,515	769,765	22,610,000	1,830,548
1920-21	16	1,048	104,140	753,260	736,580	22,257,000	2,098,720
1921-22	15	1,047	107,160	688,090	717,950	22,388,000	2,200,882
1922-23	14	1,086	110,051	723,511	768,870	23,212,000	2,322,814

Distilleries. The number of distilleries working in 1922-23 was 10, and the persons employed numbered 113, of whom three were working proprietors. The estimated value of the machinery, plant, land and buildings was £279,855. The quantities of materials used in manufacture and of spirits distilled in each of the last ten years were as follows :—

DISTILLERIES, 1913 TO 1922-23.

Year.	Materials Used.				Spirits Distilled.
	Wine.	Malt.	Other Grain.	Molasses.	
	gallons.	bushels.	bushels.	lbs.	proof gal.
1913	944,277	54,544	..	1,057,280	335,251
1914	1,248,957	39,043	118	1,649,760	409,815
1915	984,817	34,896	118	1,592,640	386,152
1916-17	1,452,048	176,472	170	1,093,120	658,357
1917-18	1,137,640	376,830	..	3,962,560	1,150,091
1918-19	1,206,530	385,690	397	5,604,480	1,185,629
1919-20	1,524,860	180,306	..	3,230,080	702,586
1920-21	1,041,890	125,414	1,422	2,682,960	572,671
1921-22	671,162	58,848	..	1,167,600	390,840
1922-23	1,100,568	77,717	..	85,120	473,152

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 :—13,357 gallons in 1913, 12,256 gallons in 1914, 9,955 gallons in 1915, 9,937 gallons in 1916–17, 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, and 14,930 gallons in 1922–23.

Tobacco factories.

The number of tobacco, cigar, and cigarette factories licensed in 1922-23 was thirty, of which seventeen were too small to be classified as ordinary factories and were consequently not included in the statistical tabulation on page 521. In the year mentioned the remaining thirteen employed 1,905 hands who were paid £347,686 in wages, and used machinery, plant, land and buildings valued at £337,080. 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, 1913 TO 1922–23.

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured.			
	Australian.	Imported.	Tobacco.	Snuff.	Cigars.	Cigarettes.
	lbs.	lbs.	lbs.	lbs.	No.	No.
1913 ..	254,561	5,113,935	5,605,566	500	25,019,435	103,382,600
1914 ..	340,296	4,708,548	5,140,695	746	23,533,572	140,100,500
1915 ..	515,969	4,414,921	5,022,910	565	22,676,586	138,111,000
1916–17 ..	656,320	5,254,110	6,089,929	446	26,268,733	123,480,200
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	5,189,098	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	6,709,060	231	32,699,019	99,771,650

Woollen mills.

There were twenty-three woollen mills working in 1922–23, and the number of persons employed therein was 4,601 of whom twenty-one were working proprietors. The wages paid to employees amounted to £657,367, and the approximate value of the machinery, plant, land and buildings was £2,496,995. The value of the raw materials used in mills during the year was £1,824,362, and that of the goods manufactured in the same period was £3,264,025.

The quantities of wool and cotton used and of goods manufactured in each of the last ten years were as follows :—

WOOLLEN MILLS, 1913 TO 1922-23.

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.	No.	£
1913	3,489,150	1,068,214	1,017,776	4,965,527	287,814	19,443	513,252
1914	3,607,690	1,075,666	1,036,079	5,546,841	258,859	22,455	577,434
1915	6,521,130	702,653	1,331,137	5,136,258	347,988	6,418	931,774
1916–17	5,114,320	599,288	1,238,363	5,250,093	259,080	3,661	1,006,635
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

During the period 1913 to 1922-23 the value of the output of woollen mills increased by 536 per cent. The articles manufactured showed a considerable increase in quantity in the ten-year period. The amount of tweed and cloth was, however, less in 1922-23 than in the preceding year.

Boot factories.

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

BOOT FACTORIES, 1913 TO 1922-23.

Year.	Number of Factories.	Persons Employed.	Value of Land, Buildings, and Machinery.	Wages Paid.
			£	£
1913	162	6,951	426,573	578,503
1914	172	6,924	455,158	603,318
1915	174	6,847	483,683	625,886
1916–17	201	8,494	529,950	843,772
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

OUTPUT OF BOOT FACTORIES, 1913 TO 1922-23.

Year.	Goods Manufactured—		Value of Materials Used.	Value of Output.
	Boots and Shoes.	Slippers.*		
	pairs.	pairs.	£	£
1913	5,013,143	254,844	1,230,725	2,094,866
1914	4,913,593	272,866	1,281,352	2,160,500
1915	5,257,415	191,044	1,502,285	2,436,673
1916-17	6,210,866	212,582	2,171,812	3,460,404
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

* Includes canvas shoes and house-boots.

Dress (exclusive of boot) factories.

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 £13,354,238 in 1922-23, as compared with £5,430,240 in 1913. During the period 1913 to 1922-23 the persons employed increased by 11 per cent., the wages paid by 125 per cent., the value of materials used by 160 per cent., and the value of the output by 146 per cent. Particulars of the industry for each of the last ten years are as follows :—

DRESS (EXCLUSIVE OF BOOT) FACTORIES, 1913 TO 1922-23.

Year.	Number of Factories.	Number of Persons Employed.			Amount of Wages Paid.	Value of Materials Used.	Value of Output.
		Males.	Females.	Total.			
					£	£	£
1913 ..	1,296	4,221	25,955	30,176	1,579,957	2,868,302	5,430,240
1914 ..	1,298	4,019	25,660	29,679	1,591,133	3,001,379	5,568,744
1915 ..	1,198	3,833	24,126	27,959	1,554,921	3,295,009	5,901,238
1916-17	1,196	3,744	25,739	29,483	1,747,478	3,919,333	6,765,326
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

Electric light and power works.

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

ELECTRIC LIGHT AND POWER WORKS, 1913 TO 1922–23.

Year.	Number of Stations.	Horse-power of Machinery.	Value of Machinery and Plant.	Persons Employed.	Wages Paid.	Electricity Supplied.	Value of Output.
			£		£	British Units.	£
1913 ..	51	26,213	1,165,020	860	114,874	35,638,000	400,192
1914 ..	58	28,485	1,418,511	924	131,854	44,890,000	473,918
1915 ..	63	33,127	1,569,553	957	135,045	53,210,000	536,251
1916–17	74	42,144	1,787,477	1,144	178,430	71,622,000	673,769
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

The electricity supplied in 1922–23 represented an increase of 343 per cent. on that supplied in 1913.

The particulars relating to the power house at Newport under the control of the Victorian Railways Commissioners are not included in the above table. The quantity of electricity generated there in the year under review was 221,775,000 units.

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 under construction a coal winning and electrical undertaking 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, and for the erection of a power station close to the site of the open cut, having an initial capacity of 50,000 kilowatts. This station is rapidly nearing completion.

In addition, a plant is being installed, which will be capable, in the initial stages, of supplying annually 96,000 tons of brown coal briquettes.

In order to relieve the insistent demands for electrical power until the Morwell station is in operation, the Commission has installed at Newport a station with an initial capacity of 14,000 kilowatts. It is intended that this station shall take only the "peak" loads when the Morwell station comes into operation.

Supply of electricity from the Commission's temporary 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 and Yarragon. Ultimately, supply will be given to other towns throughout Gippsland and on the route of the main transmission line.

A transmission line has been built from Geelong, stretching through the south-western district of Victoria to the town of Warrnambool (a distance of 117 miles), giving supply to the latter town and to the following towns en route:—Colac, Camperdown and Terang. Supply from this source will shortly be made available also to the towns of Winchelsea,

Birregurra, Cobden, Beeac, Alvie, etc. This transmission line (operating at 44,000 volts) is believed to be among the longest in the British Empire.

Supply has also been given to the towns of Point Lonsdale, Queenscliff, Portarlington and Drysdale 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 Mornington Peninsula and many large industrial users. This energy is at present being generated at the Newport Station. The Commission has also taken over the supply and retail distribution of energy to Dandenong.

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, etc.

Plans are complete for the building of hydro-power stations at Royston, Rubicon, Rubicon Lower, Snobbs Creek and Sugarloaf—all to feed into a common Sub-station about eight miles from Sugarloaf. The total capacity of hydraulic turbines to be installed in these stations is 25,800 brake horse power. The construction of the transmission line from Sugarloaf to Thomastown has been commenced.

The erection of the plant and buildings necessary to give effect to the above proposals is being rapidly pushed forward.

Gasworks. The approximate value of the machinery, plant, land and buildings connected with gasworks in Victoria was £1,784,490 in 1913, and £2,005,675 in 1922-23. The gas made in the latter year was 56 per cent. in excess of that made in 1913. Particulars in regard to these works are given below.

GASWORKS, 1913 TO 1922-23.

Year.	Number of Works.*	Persons Employed.	Wages Paid.	Coal Used.	Gas Made.	Coke Produced.	Value of Output.
			£	tons.	cubic feet.	tons.	£
1913 ..	47	1,973	302,354	294,541	3,480,180,000	176,810	935,910
1914 ..	47	2,117	332,971	300,152	3,806,380,000	195,178	979,229
1915 ..	47	2,175	347,434	307,902	4,107,578,000	204,957	1,035,941
1916-17 ..	47	2,093	365,777	317,450	4,449,230,000	200,673	1,181,096
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

* Including one establishment manufacturing coke only, which has not worked since 1919-20.

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 348,385 in 1913, 332,586 in 1914,

328,230 in 1915, 345,272 in 1916–17, 396,717 in 1917–18, 355,933 in 1918–19, 343,764 in 1919–20, 360,876 in 1920–21, 300,188 in 1921–22, and 248,481 in 1922–23.

Number and Location of Factories.

The facilities afforded in the metropolitan area have had the effect of bringing within that area the more important of the manufactories. The distribution of factories by classes as between the metropolis and the remainder of the State, for 1913, 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.			
	1913.	1920–21.	1921–22.	1922–23.	1913.	1920–21.	1921–22.	1922–23.
Treating raw material, product of pastoral pursuits, &c. ..	86	95	89	87	275	207	204	208
Treating oils and fats, animal, vegetable, &c.	14	18	19	21	12	9	9	9
Processes in stone, clay, glass, &c. ..	98	126	130	140	111	82	85	91
Working in wood ..	201	250	265	289	250	330	322	324
Metal works, machinery, &c. ..	484	654	671	705	237	209	213	213
Connected with food and drink, &c. ..	197	271	277	289	459	429	431	442
Clothing and textile fabrics, &c. ..	1,137	1,361	1,460	1,589	374	348	358	370
Books, paper, printing, &c... ..	274	328	345	356	173	155	162	161
Musical instruments, &c.	5	15	14	17	..	1	1	1
Arms and explosives	8	11	10	9	3	..	1	1
Vehicles, saddlery, harness, &c. ..	249	329	365	371	275	345	361	379
Ship and boat building and repairing..	12	10	10	10	1	2	1	1
Furniture, upholstery and bedding ..	247	353	337	367	23	33	29	30
Drugs, chemicals, and by-products ..	52	83	88	91	39	39	27	31
Surgical and other scientific appliances	20	32	35	36	1	2	2	2
Jewellery, time-pieces and plated-ware ..	87	100	101	105	5	7	8	6
Heat, light, and power	41	69	80	88	85	111	117	121
Leatherware, n.e.i. ..	35	53	58	61	..	..	2	3
Minor wares, n.e.i. ..	42	62	63	68	1	3	3	4
Total ..	3,289	4,220	4,417	4,699	2,324	2,312	2,336	2,397

Since 1913 the number of factories in the State has increased by 1,483, the greatest numerical increase in the classes being that

of the clothing and textile factories, of which there were 448 more in 1922–23 than in 1913.

Employment in factories.

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.	1913.	1919–20.	1920–21.	1921–22.	1922–23.
Treating raw materials, product of pastoral pursuits, &c. ..	3,246	4,759	4,045	4,329	4,488
Treating oils and fats, animal, vegetable, &c.	656	878	835	880	915
Processes in stone, clay, glass, &c.	4,137	4,828	5,486	5,391	6,059
Working in wood	7,653	8,802	9,529	9,537	9,939
Metal works, machinery, &c. ..	20,138	19,079	23,276	22,868	23,406
Connected with food and drink, &c.	15,153	20,545	17,673	17,974	19,037
Clothing and textile fabrics, &c.	40,140	44,245	44,341	48,844	51,898
Books, paper, printing, &c. ..	9,118	9,487	10,281	10,465	11,307
Musical instruments, &c. ..	181	285	384	390	444
Arms and explosives	856	839	650	756	406
Vehicles, saddlery, harness, &c.	5,230	5,707	6,087	6,173	6,407
Ship and boat building and repairing	433	938	900	684	618
Furniture, bedding, and upholstery	3,240	3,657	3,917	3,709	4,392
Drugs, chemicals, and by-products	1,931	2,447	2,564	2,465	2,511
Surgical and other scientific appliances..	102	174	199	203	203
Jewellery, time-pieces, and plated-ware	951	1,347	1,397	1,183	1,151
Heat, light, and power ..	3,419	4,466	4,738	5,090	5,364
Leatherware, n.e.i.	568	1,045	1,057	1,065	1,123
Minor wares, n.e.i.	1,592	2,994	3,384	2,870	2,957
Total	118,744	136,522	140,743	144,876	152,625

The total increase in the number of hands employed during the period covered by the above table was 33,881, which represented an advance of about 29 per cent. The greatest development had taken place in clothing factories, industries connected with food, drink, &c., and metal works, which showed increases of 11,758, 3,884, and 3,268 respectively in the number of persons employed in 1922–23 as compared with the number in 1913.

Size of factories.

An examination of the figures relating to different factories in 1913 and 1922–23 shows that there has been a substantial increase in the last ten years both in the number of factories and in the number of hands employed. These increases have been most pronounced in the smallest sized factories, and in those employing from 51 to 100 hands. Particulars of factories of different sizes in 1913 and 1922–23 are given in the next two tables :—

FACTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.

Size of Factory.	Number of Factories.			Average Number of Hands Employed.		
	1913.	1922–23.	Increase.	1913.	1922–23.	Increase.
			%			%
Under 4 hands..	944	1,547	63·9	2,168	3,418	57·7
4 „ ..	636	687	8·0	2,544	2,748	8·0
5 to 10 „ ..	1,981	2,237	12·9	13,761	15,394	11·9
11 to 20 „ ..	940	1,144	21·7	13,770	16,544	20·1
21 to 50 „ ..	691	912	32·0	21,760	28,718	32·0
51 to 100 „ ..	216	340	57·4	14,875	23,325	56·8
Over 100 „ ..	205	229	11·7	49,866	62,478	25·3
Total ..	5,613	7,096	26·4	118,744	152,625	28·5

PROPORTION OF FACTORIES OF DIFFERENT SIZES.

Size of Factory.	Percentage to Total.			
	Factories.		Hands.	
	1913.	1922–23.	1913.	1922–23.
Under 4 hands	16·8	21·8	1·8	2·3
4 „	11·3	9·7	2·2	1·8
5 to 10 „	35·3	31·5	11·6	10·1
11 to 20 „	16·7	16·1	11·6	10·8
21 to 50 „	12·3	12·9	18·3	18·8
51 to 100 „	3·9	4·8	12·5	15·3
Over 100 „	3·7	3·2	42·0	40·9
Total	100·0	100·0	100·0	100·0

Occupations in factories.

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

OCCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

Occupations.	1913.	1918–19.	1919–20.	1920–21.	1921–22.	1922–23.
Working proprietors ..	5,649	5,471	5,898	6,645	6,904	7,296
Managers, overseers ..	3,314	3,793	4,130	4,354	4,454	4,673
Accountants, clerks ..	3,927	4,919	5,602	6,106	6,307	6,582
Engine-drivers, firemen	1,821	1,914	2,144	2,108	2,156	2,106
Workers in factory or works	98,112	101,608	113,276	116,650	119,598	126,791
Outworkers	1,910	1,022	1,492	1,151	1,476	1,228
Carters, messengers ..	2,925	2,816	3,056	2,964	3,115	3,316
Others	1,086	806	924	765	866	633
Total ..	118,744	122,349	136,522	140,743	144,876	152,625

Outworkers.

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

Sex distribution in factories.

The average numbers of males and females employed in factories and their proportions to the male and female populations, for the years 1913 to 1922–23, 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.
1913 ..	80,054	1,151	38,690	554	118,744	852
1914 ..	79,772	1,119	38,627	543	118,399	832
1915 ..	75,971	1,097	37,863	522	113,834	798
1916–17 ..	74,924	1,123	42,046	574	116,970	836
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

Males formed 67·4 per cent. in 1913 and 67·5 per cent. in 1922–23 of the total persons employed. The increase during the period 1913 to 1922–23 in the number of males employed was 23,038, or 28·8 per cent., and in the number of females employed 10,843, or 28·0 per cent.

Employment of females.

Of the total females in factories 74·3 per cent. are engaged in the textile and clothing industries, and 10·0 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, 1922–23.

Industry.	Number Employed.		Females per 100 Males.
	Males.	Females.	
Oatmeal, &c.	449	355	79·06
Biscuit	794	570	71·79
Jam, pickle, and sauce	1,238	962	77·71
Confectionery	1,708	1,734	101·52
Tobacco, &c.	1,255	665	52·99
Woollen mills	2,169	2,432	112·13
Clothing, tailoring, &c.	2,274	7,743	340·50
Dressmaking, millinery	417	8,735	2,094·72
Underclothing	485	6,290	1,296·91
Hats, caps, &c.	778	971	124·81
Hosiery	599	4,026	672·12
Waterproof clothing	51	122	239·21
Boots and shoes	7,174	5,260	73·32
Printing, &c.	6,244	1,600	25·62
Bookbinding, stationery, &c.	689	656	95·21
Fancybox, &c.	272	772	283·82
Rope, twine	556	347	62·41
Sail, tent	110	88	80·00
Ammunition	84	58	69·05
Match	205	449	219·02
Fancy leather	573	385	67·19
Rubber goods	1,541	574	37·25
All other factories	73,427	4,739	6·45
Total	103,092	49,533	48·05

Child labour in factories.

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 represented 4·18 and 6·48 per cent. respectively in 1922–23, as against 3·66 and 4·84 per cent. in 1913. The number of children

employed in factories and their proportions to the total employees are given in the subjoined table for the years 1913 to 1922-23 :—

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.
1913 ..	2,743	1,840	4,583	3·66	4·84	4·05
1914 ..	2,898	1,816	4,714	3·88	4·78	4·18
1915 ..	3,355	2,197	5,552	4·71	5·89	5·12
1916–17 ..	3,072	2,301	5,373	4·37	5·55	4·81
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

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 1913 to 1922-23 :—

MACHINERY IN FACTORIES.

Year.	Number of Factories equipped with Machinery.	Value of Machinery and Plant.	Horse-power of Engines.
		£	
1913	3,990	10,022,429	105,224
1914	4,106	10,727,526	110,055
1915	4,089	11,068,949	117,815
1916–17	4,226	11,732,062	136,985
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

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, 1913 TO 1922–23.

Year.	Number of Factories using—					
	Steam.	Gas.	Electricity.	Oil.	Water, Wind, or Horses.	Manual Labour.
1913	1,114	883	1,579	335	79	1,623
1914	1,040	858	1,782	348	78	1,544
1915	961	824	1,915	330	59	1,324
1916–17 ..	931	800	2,142	311	42	1,219
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	39	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

Year.	Actual Horse-power of Engines.				
	Steam.	Gas.	Electricity.	Oil.	Total.
1913	67,262	16,759	18,732	2,471	105,224
1914	67,649	17,432	22,584	2,390	110,055
1915	71,223	17,935	26,385	2,272	117,815
1916–17	81,611	18,651	34,348	2,375	136,985
19 7–18	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

Although steam is the principal motive power, and was used to supply 52 per cent. of the total mechanical power employed in factories in 1922–23, a remarkable development is shown in the use of electricity, which in 1913 was used by 1,579, and in 1922–23 by 3,795 factories, the actual horse-power increasing from 18,732 to 81,679 in the same period.

Wages in factories.

The total amount and the average amount of salaries and wages paid to male and female employees in factories are given in the following table :—

SALARIES AND WAGES PAID IN FACTORIES.

Year.	Salaries paid to Managers and Clerks.		Wages paid to Factory Workers.		Average Salary of Managers and Clerks.						Average Wage of Factory Workers.					
	Males.	Females.	Males.	Females.	Males.			Females.			Males.			Females.		
	£	£	£	£	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
1913 ..	1,097,574	109,381	7,828,240	1,679,141	183	12	0	86	12	1	113	6	10	45	12	11
1914 ..	1,187,114	125,610	8,065,222	1,721,994	198	9	7	97	18	1	117	6	10	46	18	6
1915 ..	1,232,981	133,362	7,928,871	1,741,131	205	10	7	94	11	8	121	13	9	48	10	0
1916–17	1,364,269	171,675	8,226,582	2,070,991	220	3	0	97	3	1	128	7	8	52	2	7
1917–18	1,462,220	190,707	8,679,530	2,170,144	231	4	4	99	15	11	132	8	6	55	10	1
1918–19	1,625,584	208,524	9,906,082	2,340,213	244	5	4	101	7	5	141	19	8	60	19	0
1919–20	1,967,959	270,875	12,515,207	2,948,132	264	8	1	118	6	9	157	16	8	70	17	5
1920–21	2,384,372	310,024	15,284,545	3,398,275	298	19	7	124	15	2	185	12	4	82	5	11
1921–22	2,563,467	357,691	16,933,984	3,991,353	316	18	11	133	16	4	202	19	11	91	2	11
1922–23	2,761,045	394,366	18,038,101	4,353,680	331	10	9	134	14	8	204	12	2	94	16	5

The particulars shown in the above table reveal a steady and continued increase in the average earnings of males and females, both as regards the salaries of managers, overseers, and clerks, and the wages of factory workers generally.

The amount of wages paid during the year 1922–23, £25,547,192, represented an average payment for all employees of £175 15s. 9d., which was an increase of £2 19s. 0d. on the average wage for 1921–22, of £16 7s. 5d. on that for 1920–21, of £40 5s. 4d. on that for 1919–20, of £55 6s. 4d. on that for 1918–19, of £65 0s. 5d. on that for 1917–18, of £69 18s. 3d. on that for 1916–17, of £74 0s. 9d. on that for 1915, of £77 5s. 9d. on that for 1914, and of £81 1s. on that for 1913. Concurrent with this increase there was a slight change in the relative proportions of male and female workers during the ten years, the percentages of male to total employees being 69 in 1920–21, 68 in 1915, 1919–20, 1921–22, and 1922–23, 67 in 1913, 1914, and 1918–19, 65 in 1917–18, and 64 in 1916–17. The above average wage for 1922–23 (£175 15s. 9d.) was probably below the average according to the determinations of Wages Boards. This is 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.

Cost and value of production in factories.

The cost of production and the value of the output in each class of manufacturing industry during the year 1922–23 are given in the subjoined statement :—

FACTORY COSTS AND OUTPUT, 1922–23.

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. ..	4,678,979	116,117	848,518	6,314,548
Treating oils and fats, animal, vegetable, &c.	790,919	37,148	173,104	1,362,465
Processes in stone, clay, glass, &c.	561,230	425,586	1,240,998	3,144,545
Working in wood	2,346,950	41,115	1,937,502	5,518,461
Metal works, machinery, &c.	6,440,125	299,676	4,629,333	13,621,051
Connected with food and drink, &c.	24,841,387	560,548	3,538,736	34,269,930
Clothing and textile fabrics, &c.	12,953,821	216,177	6,319,314	23,799,997
Books, paper, printing, &c. ..	2,757,975	102,193	2,180,816	6,948,937
Musical instruments, &c. ..	111,824	1,727	90,659	250,804
Arms and xplosives ..	222,653	7,744	76,733	370,308
Vehicles, saddlery, harness, &c.	1,201,133	33,124	1,074,237	2,911,085
Ship and boat building and repairing	121,202	5,903	134,990	294,051
Furniture, upholstery, and bedding	1,128,892	20,855	693,135	2,251,480
Drugs, chemicals, and by-products	1,573,736	54,663	465,093	2,646,819
Surgical and other scientific instruments	25,013	1,168	29,880	76,867
Jewellery, time-pieces, and plated-ware	242,188	6,604	180,605	558,436
Heat, light, and power ..	1,240,320	417,185	1,239,329	4,409,843
Leatherware, n.e.i.	407,283	5,330	164,810	696,008
Minor wares, n.e.i.	1,012,533	90,818	529,400	1,840,708
Total	62,658,163	2,443,681	25,547,192	111,286,343

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, 1922–23.

Class of Industry.	Percentage of Costs, &c., on Total Value of Production.			
	Materials.	Fuel, Light, &c.	Wages.	All other Expenditure, Interest, and Profit.
Treating raw material, product of pastoral pursuits, &c.	74·1	1·8	13·5	10·6
Treating oils and fats, animal, vegetable, &c.	58·1	2·7	12·7	26·5
Processes in stone, clay, glass, &c. ..	17·8	13·5	39·5	29·2
Working in wood	42·5	0·8	35·1	21·6
Metal works, machinery, &c. ..	47·3	2·2	34·0	16·5
Connected with food and drink, &c. ..	72·5	1·6	10·3	15·6
Clothing and textile fabrics, &c. ..	54·4	0·9	26·6	18·1
Books, paper, printing, &c. ..	39·7	1·4	31·4	27·5
Musical instruments, &c.	44·6	0·7	36·1	18·6
Arms and explosives	60·1	2·1	20·7	17·1
Vehicles, saddlery, harness, &c. ..	41·3	1·1	36·9	20·7
Ship and boat building and repairing	41·2	2·0	45·9	10·9
Furniture, upholstery, and bedding ..	50·1	0·9	30·8	18·2
Drugs, chemicals, and by-products ..	59·4	2·1	17·6	20·9
Surgical and other scientific instruments	32·5	1·5	38·9	27·1
Jewellery, ime-pieces, and plated-ware	43·4	1·2	32·3	23·1
Heat, light, and power	28·1	9·5	28·1	34·3
Leatherware, n.e.i.	58·5	0·8	23·7	17·0
Minor wares, n.e.i.	55·0	4·9	28·8	11·3
Total	56·3	2·2	23·0	18·5

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 40 per cent. and the cost of raw materials 18 per cent. of the value of the finished article, whilst in the industries connected with food and drink the expenditure on wages amounts to 10 per cent. and that on raw materials to over 73 per cent. of the value of the output.

Cost of production, 1913 to 1922-23.

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 1913 to 1922-23 :—.

COST OF PRODUCTION AND VALUE OF OUTPUT OF FACTORIES, 1913 TO 1922-23.

Year.	Cost of Production.				Total Value of Output.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	All other Expenditure, Interest, and Profit.	
	£	£	£	£	£
1913	28,465,699	739,835	10,714,336	8,016,777	47,936,647
1914	28,986,694	804,325	11,099,940	8,549,026	49,439,985
1915	30,728,743	834,966	11,036,345	8,866,039	51,466,093
1916-17 ..	37,103,750	1,024,156	11,833,517	10,085,861	60,047,284
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

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

PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES. 1913 TO 1922-23.

Year.	Proportion of Outlay to Output.				Total.
	Materials.	Fuel, Light, and Power.	Salaries and Wages.	Other Expenditure, Interest, and Profit.	
	%	%	%	%	%
1913	59·4	1·5	22·4	16·7	100·0
1914	58·6	1·6	22·5	17·3	100·0
1915	59·7	1·6	21·5	17·2	100·0
1916-17	61·8	1·7	19·7	16·8	100·0
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

The ratio of salaries and wages to the value of the output of factories was 20·3 per cent. on the average of the past five years, as against 20·7

per cent. in the period 1913 to 1917–18. The cost of materials was 60·6 per cent. of the value of output in the period 1918–19 to 1922–23 as compared with 60·7 per cent. in the years 1913 to 1917–18. The proportionate outlay on fuel, light, and power has remained fairly uniform during the past ten years. The balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was £17 2s. 2d. in every £100 of the total output value in the period 1918–19 to 1922–23, as compared with £16 18s. 6d. in the preceding five-year period.

Capital invested in manufacturing plant and premises.

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 1922–23 :—

VALUE OF MACHINERY AND PLANT AND LAND AND BUILDINGS CONNECTED WITH FACTORIES, 1922–23.

Class of Industry.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
Treating raw material, product of pastoral pursuits, &c.	682,795	766,045
Treating oils and fats, animal, vegetable, &c. ..	234,485	199,935
Processes in stone, clay, glass, &c.	988,190	795,270
Working in wood	1,027,445	815,430
Metal works, machinery, &c.	2,908,200	2,755,985
Connected with food and drink, &c.	4,689,135	4,644,725
Clothing and textile fabrics, &c.	3,432,905	5,068,015
Books, paper, printing, &c.	2,162,270	1,971,175
Musical instruments, &c.	31,770	112,920
Arms and explosives..	213,640	199,250
Vehicles, saddlery, harness, &c.	307,945	1,114,285
Ship and boat building and repairing	107,460	234,790
Furniture, upholstery, and bedding	166,485	734,085
Drugs, chemicals, and by-products	458,465	600,550
Surgical and other scientific instruments ..	12,060	43,520
Jewellery, time-pieces, and plated-ware ..	64,230	220,605
Heat, light, and power	5,780,290	1,420,555
Leatherware, n.e.i.	50,330	149,165
Minor wares, n.e.i.	676,615	582,220
Total	23,994,715	22,428,525

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 to £25,035,625, 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 factories are shown in the next table for the years 1913 to 1922–23 :—

VALUES OF MACHINERY AND PLANT AND LAND AND BUILDINGS CONNECTED WITH FACTORIES, 1913 TO 1922–23.

Year.	Value of Machinery and Plant.	Value of Land and Buildings.
	£	£
1913	10,022,429	10,753,309
1914	10,727,526	11,248,120
1915	11,068,949	11,460,123
1916–17	11,732,062	12,052,227
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

It will be seen from these figures that the values of machinery and plant and land and buildings more than doubled between 1913 and 1922–23.

Accidents in factories.

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

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, 1913 TO 1922.

Year.	Number of Employees.	Number of Accidents.	Percentage of Accidents to Number of Employees.
1913	110,487	407	·368
1914	110,660	391	·353
1915	91,888	464	·505
1916	92,320	503	·544
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

Manufactures—Penal Department.

The foregoing tables do not include particulars relating to work of various kinds done by the Penal Department at Pentridge. At this establishment the manufacture of clothing, brushware, boots, mats, blankets, flannel, underclothing, bread, &c., and printing are carried on. The estimated value of the output for 1922–23 was £23,690, and of the materials used £16,680. The articles produced are used principally by Government Departments.

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, 1918–19 TO 1922–23.

Produce.	Value in—				
	1918–19.	1919–20.	1920–21.	1921–22.	1922–23.
Cultivation.	£	£	£	£	£
Wheat	5,994,469	5,726,667	14,307,377	10,509,945	8,031,875
Oats	1,175,882	1,848,903	1,295,229	931,346	1,416,355
Barley, malting	272,567	304,377	263,963	221,757	298,792
„ other	188,489	173,196	183,389	179,843	137,445
Maize	190,522	336,920	186,529	194,358	205,314
Other Cereals	49,915	58,207	49,532	66,537	75,553
Grass and Clover Seed	5,405	5,606	8,570	6,113	3,537
Potatoes	1,079,496	1,328,640	586,458	555,111	1,040,662
Onions	236,451	274,375	131,104	157,930	139,888
Other Root Crops	16,813	14,148	13,151	11,259	11,800
Hay	4,622,523	8,304,475	5,259,863	4,413,091	6,327,338
Straw	71,263	68,893	75,015	66,164	76,644
Green Forage*	368,205	449,010	397,620	447,050	512,255
Tobacco	6,513	16,240	3,800	24,160	35,600
Grapes, not made into wine, raisins, &c.	26,674	42,025	21,010	39,978	71,793
Raisins, ordinary	79,930	138,899	84,533	125,154	132,308
„ sultanas	237,738	494,037	263,772	445,319	555,059
Currants	139,880	139,153	157,298	187,605	171,642
Wine	202,396	347,370	333,346	166,883	171,749
Hops	3,654	10,365	14,988	22,650	23,195
Other Crops	79,526	71,859	57,027	68,536	81,447
Fruit grown for sale in orchards and gardens	893,108	1,274,715	1,054,491	1,184,069	1,172,325
Fruit in private orchards and gardens	14,895	13,810	15,250	12,660	10,670
Market Gardens	405,790	442,155	427,035	500,640	493,780
Total	16,362,104	21,884,045	25,190,350	20,538,158	21,197,026

* Exclusive of area under sown grasses.

VALUE OF VICTORIAN PRODUCTION, 1918–19 TO 1922–23—*continued.*

Produce.	Value in—				
	1918–19.	1919–20.	1920–21.	1921–22.	1922–23.
Dairying and Pastoral.	£	£	£	£	£
Milk consumed in natural state ..	2,034,510	2,424,050	2,622,010	2,027,040	1,995,280
Butter made ..	4,868,670	4,945,480	7,043,950	5,127,570	6,660,600
Cheese made ..	257,880	344,210	189,070	203,620	163,180
Cream made (not for butter)	29,290	32,970	76,560	80,130	127,530
Condensed, Concentrated, and Powdered Milk	1,331,240	1,516,000	1,885,080	2,074,620	1,434,720
Horses	97,640	..	..	71,800	..
Cattle	5,383,660	4,856,100	5,269,650	3,099,300	3,384,270
Pigs	884,280	2,782,290	1,250,680	1,277,730	1,280,040
Sheep (without wool)	3,288,330	1,139,960	1,750,220	1,991,600	3,752,260
Wool	7,621,410	7,908,010	4,729,400	4,662,750	6,380,600
Total ..	25,796,910	25,949,070	24,816,620	20,616,160	25,178,480
Mining.					
Gold	674,655	575,260	648,969	443,938	453,962
Coal	367,640	406,620	528,919	634,397	695,430
Stone from Quarries (including limestone) ..	189,770	300,100	383,002	434,520	468,468
Other Metals and Minerals	110,260	48,150	46,755	30,299	48,021
Total ..	1,342,325	1,330,130	1,607,645	1,543,154	1,665,881
Forest Produce.					
Timber (Forest Sawmills only) ..	503,470	693,995	905,720	896,070	946,930
Firewood (estimated)..	604,650	790,140	923,200	918,550	927,860
Bark for Tanning ..	120,300	153,260	125,830	138,520	136,830
Total ..	1,228,420	1,637,395	1,954,750	1,953,140	2,011,620
Miscellaneous.					
Honey and Beeswax ..	37,639	35,930	45,346	48,075	40,122
Poultry production (estimated)	2,738,620	3,579,230	4,545,620	4,406,750	4,315,810
Rabbits and Hares ..	210,130	913,220	401,690	238,632	266,478
Fish	172,977	181,760	167,340	149,400	160,151
Total ..	3,159,366	4,710,140	5,159,996	4,842,857	4,782,561
Total Value of Primary Products	47,889,125	55,510,780	58,729,361	49,493,469	54,835,568
Manufacturing— Added Value* ..	26,880,485	34,259,060	38,330,232	43,592,856	46,355,804
Grand Total ..	74,769,610	89,769,840	97,059,593	93,086,325	101,191,372

* 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 value of primary production was greater in the year 1922–23 than in the preceding year, the most noticeable increase being shown in "Dairying and Pastoral." There has been a marked improvement in the value of forest produce in recent

years, this having advanced from £863,810 in 1913 to £2,011,620 in 1922–23.

The total value of primary production in 1922–23 was £54,835,568, and that of manufactures (added value) was £46 355,804. The former exceeded by £5,342,099 and the latter by £2,762,948 the corresponding values in the preceding year.

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, 1918–19 TO 1922–23.

Produce.	Value of Produce per head in—														
	1918–19.			1919–20.			1920–21.			1921–22.			1922–23.		
	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*	£	*s.*	*d.*
Cultivation ..	11	8	9	14	12	7	16	11	6	13	4	10	13	6	7
Dairying and Pastoral	18	0	7	17	7	0	16	6	7	13	5	10	15	16	8
Mining	0	18	9	0	17	9	1	1	2	0	19	11	1	0	11
Forest	0	17	2	1	1	11	1	5	9	1	5	2	1	5	4
Miscellaneous ..	2	4	2	3	3	0	3	7	10	3	2	5	3	0	2
Total Primary Produce ..	33	9	5	37	2	3	38	12	10	31	18	2	34	9	8
Manufactures ..	18	15	9	22	18	1	25	4	5	28	2	2	29	3	0
Grand Total	52	5	2	60	0	4	63	17	3	60	0	4	63	12	8

The figures show the steadily increasing importance of the manufacturing industries. Relatively to population, the amount added in the process of manufacture to the value of the raw materials used was 55 per cent. higher in 1922–23 than in 1918–19.