# Principal Agricultural and Pastoral Features of the various Districts of the State of Victoria, Season 1923-24.

| —— | Area. | Number of Occupiers. | CULTIVATION. | | | | | | | | PASTORAL. | | | | | PRODUCE. | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | | | Wheat. | Oats. | Barley. | Potatoes. | Onions. | Maize for Grain. | Vines. | Orchards Growing Fruit for sale. | Dairy Cows. | Other Cattle. | Horses. | Pigs. | Sheep. | Butter. | Wool. | Honey. |
| | Acres. | | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | No. | No. | No. | No. | No. | lb. | lb. | lb. |
| Central .. .. | 4,065,280 | 18,207 | 9,790 | 27,346 | 21,116 | 29,962 | 1,851 | 3,540 | 180 | 44,082 | 145,509 | 123,032 | 99,083 | 42,824 | 936,207 | 12,227,104 | 5,754,830 | 60,932 |
| North Central .. .. | 2,929,920 | 5,874 | 9,592 | 11,907 | 2,334 | 11,193 | .. | .. | 167 | 4,091 | 39,998 | 56,509 | 23,361 | 12,852 | 991,912 | 5,109,345 | 6,765,895 | 106,219 |
| Western .. .. | 8,775,040 | 13,234 | 53,761 | 45,642 | 7,727 | 7,617 | 2,181 | .. | 47 | 2,300 | 191,496 | 176,825 | 63,750 | 54,194 | 3,789,393 | 25,405,903 | 29,528,156 | 402,976 |
| Wimmera .. .. | 7,394,560 | 6,736 | 636,303 | 123,837 | 5,517 | 121 | .. | .. | 1,705 | 3,472 | 24,209 | 32,897 | 69,792 | 6,997 | 1,882,879 | 1,048,635 | 15,983,153 | 1,154,591 |
| Mallee .. .. | 10,784,000 | 8,277 | 1,151,279 | 175,566 | 3,987 | 9 | .. | 40 | 31,092 | 4,067 | 22,162 | 26,636 | 65,471 | 10,098 | 549,681 | 2,125,957 | 4,742,775 | 27,619 |
| Northern .. .. | 6,337,280 | 12,873 | 548,212 | 114,828 | 5,491 | 6 | .. | 42 | 3,488 | 21,938 | 96,843 | 119,960 | 91,040 | 38,269 | 1,592,098 | 11,654,154 | 11,297,550 | 157,350 |
| North-Eastern .. .. | 7,220,480 | 5,661 | 36,915 | 14,496 | 656 | 896 | .. | 4,387 | 5,920 | 2,052 | 70,234 | 137,366 | 32,088 | 20,882 | 700,038 | 7,060,509 | 4,527,066 | 95,380 |
| Gippsland .. .. | 8,739,200 | 9,524 | 8,265 | 7,032 | 9,741 | 9,502 | 682 | 21,095 | .. | 1,467 | 147,698 | 179,993 | 41,490 | 73,679 | 617,553 | 22,257,116 | 3,913,936 | 105,646 |
| TOTAL .. .. | 56,245,760 | 80,386 | 2,454,117 | 520,654 | 56,564 | 59,306 | 4,714 | 29,104 | 42,599 | 83,469 | 738,149 | 853,218 | 486,075 | 259,795 | 11,059,761 | 86,888,723 | 82,513,361 | 2,110,713 |

Minor Crops of Special Interest :—Acreage : Chicory, 608 ; Hops, 224 ; Tobacco, 1,047 ; Millet (Broom), 2,626 ; Sugar Beet, 1,937 ; Beans, 979 ; these are confined to the Central, North-Eastern, and Gippsland Districts.

## TOTALS.

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per Acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bush. | lb. | No. | No. |
| 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 |
| 1923 | 26·12 | 2,454,117 | 15·40 | 82,513,361 | 1,591,367 | 11,059,761 |

## KARKAROOC

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 11·46 | 919,321 | 3·70 | 7,651,908 | 36,565 | 646,205 |
| 1920 | 14·93 | 941,720 | 13·67 | 4,491,767 | 40,556 | 636,431 |
| 1921 | 16·29 | 1,103,854 | 11·22 | 5,909,676 | 50,116 | 685,095 |
| 1922 | 10·44 | 1,142,359 | 8·01 | 5,556,476 | 51,900 | 552,023 |
| 1923 | 15·07 | 1,151,279 | 12·27 | 4,742,775 | 48,798 | 549,681 |

## WIMMERA

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 13·06 | 676,295 | 14·09 | 22,911,671 | 55,143 | 2,244,026 |
| 1920 | 16·04 | 617,545 | 22·65 | 8,343,285 | 54,606 | 1,919,901 |
| 1921 | 15·99 | 717,013 | 20·27 | 18,841,569 | 61,447 | 2,060,213 |
| 1922 | 17·15 | 734,027 | 21·61 | 19,013,866 | 61,812 | 1,975,580 |
| 1923 | 20·21 | 635,205 | 21·27 | 15,983,153 | 57,106 | 1,882,579 |

## MALLEE

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 20·15 | 454,213 | 7·61 | 19,279,778 | 209,810 | 1,805,475 |
| 1920 | 20·15 | 585,370 | 16·79 | 12,416,481 | 217,448 | 1,803,983 |
| 1921 | 23·69 | 627,315 | 17·05 | 15,349,165 | 249,992 | 1,973,998 |
| 1922 | 13·15 | 606,422 | 12·91 | 14,370,942 | 240,726 | 1,573,936 |
| 1923 | 17·60 | 546,312 | 14·87 | 11,297,500 | 219,805 | 1,592,086 |

## NORTHERN

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 27·27 | 12,628 | 7·31 | 7,968,231 | 228,168 | 1,093,930 |
| 1920 | 34·42 | 10,779 | 17·25 | 3,660,069 | 235,172 | 832,030 |
| 1921 | 39·57 | 37,316 | 13·49 | 6,229,997 | 257,834 | 827,397 |
| 1922 | 26·10 | 37,980 | 15·93 | 6,639,923 | 244,686 | 793,769 |
| 1923 | 34·99 | 36,915 | 16·32 | 4,527,066 | 207,600 | 700,033 |

## NORTH CENTRAL

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 21·21 | 6,588 | 12·37 | 10,592,082 | 100,569 | 1,377,434 |
| 1920 | 28·37 | 14,315 | 13·90 | 7,366,979 | 94,680 | 1,043,584 |
| 1921 | 32·75 | 16,596 | 17·47 | 9,234,151 | 110,251 | 1,124,959 |
| 1922 | 20·85 | 12,077 | 15·04 | 9,396,511 | 109,021 | 1,104,493 |
| 1923 | 27·30 | 9,592 | 16·31 | 6,765,895 | 96,947 | 991,912 |

## WESTERN

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 26·47 | 37,239 | 15·93 | 44,599,572 | 382,551 | 4,638,264 |
| 1920 | 25·99 | 37,225 | 20·16 | 25,173,183 | 328,204 | 3,982,451 |
| 1921 | 27·36 | 78,165 | 18·01 | 35,981,148 | 366,629 | 3,970,232 |
| 1922 | 26·09 | 90,865 | 16·41 | 24,392,538 | 405,143 | 4,060,682 |
| 1923 | 33·01 | 53,761 | 15·01 | 29,528,156 | 368,321 | 3,789,393 |

## CENTRAL

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 23·48 | 4,262 | 13·47 | 10,687,229 | 267,630 | 1,297,749 |
| 1920 | 31·36 | 13,107 | 19·22 | 6,591,695 | 248,392 | 1,043,629 |
| 1921 | 31·15 | 13,316 | 17·53 | 7,704,250 | 277,702 | 1,015,360 |
| 1922 | 27·62 | 10,730 | 16·59 | 7,541,541 | 295,626 | 1,039,615 |
| 1923 | 30·11 | 5,795 | 16·24 | 5,754,830 | 260,541 | 936,207 |

## GIPPSLAND

| Year. | Average Rainfall. | Wheat. Area. | Wheat. Average per acre. | Wool. Total Production. | Live Stock. Cattle. | Live Stock. Sheep. |
|---|---|---|---|---|---|---|
| | Inches. | Acres. | Bushels. | lb. | No. | No. |
| 1919 | 27·02 | 2,611 | 18·02 | 9,166,594 | 368,404 | 1,535,427 |
| 1920 | 33·37 | 5,804 | 20·32 | 5,965,279 | 356,301 | 859,782 |
| 1921 | 31·73 | 5,251 | 16·60 | 5,015,982 | 375,207 | 779,564 |
| 1922 | 32·92 | 7,354 | 13·77 | 5,606,331 | 379,373 | 745,981 |
| 1923 | 33·58 | 6,285 | 18·25 | 3,913,036 | 327,691 | 617,583 |

# VICTORIA.

*Showing*

*Statistics of Wheat, Wool, Live Stock and Rainfall in each District for 5 years ; and Agricultural and Pastoral Statistics in detail, for the Season 1923-24.*

Scale of Miles

Dept of Lands & Survey Melb.

## PRODUCTION.

### LAND SETTLEMENT, ETC.

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

| | Acres. |
|---|---|
| Lands alienated in fee simple | 25,152,534 |
| Lands in process of alienation | 8,342,846 |
| Crown lands | 22,750,380 |
| Total | 56,245,760 |

The Crown lands comprise—

| | |
|---|---|
| Permanent forests (under Forests Act) | 3,389,583 |
| Timber reserves (under Forests Act) | 734,555 |
| State forests and Timber reserves (under Land Act) | 329,600 |
| Water reserves | 314,616 |
| Reserves for Agricultural Colleges, &c. | 85,590 |
| Reserves in the Mallee | 397,881 |
| Other reserves | 302,917 |
| Roads | 1,777,319 |
| Water frontages, beds of rivers, lakes, &c.; unsold land in cities, towns, and boroughs | 3,000,918 |
| Land in occupation under— | |
| Perpetual leases | 108,633 |
| Other leases and licences | 88,658 |
| Temporary grazing licences | 9,053,128 |
| Unoccupied | 3,166,982 |
| Total | 22,750,380 |

**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 1913. 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, 1914 TO 1923.

| 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. | £ |
| 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 |
| 1923 .. .. | 3,015 | 200,517 | 142,940 | 167,669 |

* 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 1923 the amount realized by the sale of Crown lands was £34,339,213, which represents an average of £1 0s. 7d. 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, 1923.

| Location. | Classification. | | | | | Total. |
|---|---|---|---|---|---|---|
| | Agricultural and Grazing. | | | | Auriferous. | |
| | First. | Second. | Third. | Unclassed. | | |
| County. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Buln Buln .. .. .. | 4,126 | 29,983 | 79,769 | .. | .. | 113,878 |
| Croajingolong .. .. | 2,510 | 4,450 | 584,975 | 837,400 | 13,850 | 1,443,185 |
| Dargo .. .. .. | .. | .. | 105,748 | 241,100 | 72,000 | 418,848 |
| Tambo .. .. .. | .. | .. | 218,860 | 378,850 | 900 | 598,610 |
| Tanjil .. .. .. | .. | .. | 110,000 | 361,650 | 67,000 | 538,650 |
| Wonnangatta .. .. | .. | 39 | 160,688 | 879,197 | .. | 1,039,924 |
| Bogong .. .. .. | 1,712 | 14,019 | 215,043 | 158,724 | 106,718 | 496,216 |
| Benambra .. .. .. | .. | 403 | 305,770 | 316,474 | 90,811 | 713,458 |
| Delatite .. .. .. | 510 | 18,612 | 220,353 | 230,050 | 61,333 | 530,858 |
| Moira .. .. .. | 546 | 409 | 11,116 | .. | .. | 12,071 |
| Anglesey .. .. .. | .. | 3,924 | 81,471 | .. | 3,210 | 88,605 |
| Bourke .. .. .. | .. | 162 | .. | .. | .. | 162 |
| Dalhousie .. .. .. | .. | 814 | 2,673 | .. | 5,427 | 8,914 |
| Evelyn .. .. .. | .. | 13,237 | 391 | .. | 1,639 | 15,267 |
| Mornington .. .. .. | .. | 994 | 7,378 | .. | .. | 8,372 |
| Bendigo .. .. .. | 80 | 735 | 2,358 | .. | 4,317 | 7,490 |
| Rodney .. .. .. | .. | 351 | .. | .. | 2,420 | 2,771 |
| Borung .. .. .. | .. | 667 | 71,915 | 423 | 5,729 | 78,734 |
| Gladstone .. .. .. | 450 | 1,182 | 2,349 | .. | 16,098 | 20,079 |
| Lowan .. .. .. | .. | 604 | 190,566 | 10,608 | .. | 201,778 |
| Kara Kara .. .. .. | 24 | 126 | 3,606 | .. | 4,379 | 8,135 |
| Talbot .. .. .. | 50 | 546 | 278 | .. | 44,500 | 45,374 |
| Tatchera .. .. .. | .. | 70 | .. | .. | .. | 70 |
| Heytesbury .. .. .. | .. | 1,176 | 166,504 | .. | .. | 167,680 |
| Polwarth .. .. .. | 13,257 | 16,707 | 28,518 | .. | .. | 58,482 |
| Grant .. .. .. | .. | 155 | 25,252 | .. | 14,991 | 40,398 |
| Grenville .. .. .. | 99 | 321 | .. | .. | 12,574 | 12,994 |
| Ripon .. .. .. | .. | 380 | 24,466 | .. | 4,495 | 29,341 |
| Normanby .. .. .. | .. | 267 | 132,871 | 8,810 | .. | 141,948 |
| Dundas .. .. .. | .. | .. | 53,138 | 15,754 | .. | 68,892 |
| Villiers .. .. .. | .. | .. | 1,893 | .. | .. | 1,893 |
| Follett .. .. .. | .. | 1,252 | 181,660 | 39,199 | .. | 222,111 |
| Totals .. .. | 23,364 | 111,585 | 2,989,609 | 3,478,239 | 532,391 | 7,135,188 |
| Throughout the State .. .. | Swamp or reclaimed lands .. .. .. | | | | | 1,688 |
| " " .. .. | Lands which may be sold by auction .. | | | | | 7,646 |
| The north-western portion of the State | Mallee lands (such as are suitable to be eventually classed 1st, 2nd, or 3rd class for selection) .. | | | | | 5,075,588 |
| Total area remaining for disposal .. .. .. .. | | | | | | 12,220,110 |

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, 1923, 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 1923 there were submitted 542 applications to have brought under the Act land amounting to 9,623 acres in extent, and to £673,983 in value ; whilst the land actually brought under the Act during the year by application was 12,439 acres valued at £708,410. Up to the end of 1923 there had been brought under the Act 3,097,626 acres valued at £63,599,745.

**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 1923-24 comprised contributions £2,086, interest on stock £2,845, and interest on £75,073—advanced under *The Protection of Public Buildings Act* 1885—£3,003. During the year no payment was made out of the fund in settlement of claims, but £6,637 was paid as interest on securities under the *Special Funds Act* 1920, No. 3067, and £10,000 as a contribution to the Students' Loan Fund, under Act No. 3285. The balance at the credit of the assurance fund on 30th June, 1924, was £154,309. The amount paid up to 30th June, 1924, 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—*vide* section 20, Act 2629. The value of the land must not exceed the maximum allowed under the Act. An application on the proper form must be filled in, and the agreement with full details and the application must be lodged with the Board, together with a valuation fee of £4. Where the agreement is submitted on behalf of more than one applicant, an additional fee of £2 must be lodged in respect of each additional applicant. The fee may be returned if, after a preliminary inspection, the Board does not approve of the application. Should the Board decide to acquire the land, the purchaser is required to deposit an amount not exceeding four half-yearly instalments, and is otherwise subject to all the provisions of the Closer Settlement Act with regard to payments, residence, improvements, &c.

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

Conditional purchase leases are granted to successful applicants under the Closer Settlement Act, and are for such a term not exceeding 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 for eight months during each year. Personal residence by the lessee's wife, or child over 18 years of age, or parent dependent for support, may, with the approval of the Board, be considered personal residence by the lessee. A farm

lessee cannot transfer, assign, mortgage, or sublet the whole or any part of his allotment within the first three years of the lease. The Crown grant may be issued to the lessee at the end of any half-year after the first twelve years have expired, on payment of the balance of purchase money. The residence condition is not carried into the Crown grant.

**Farm allotments.** Lands for farm allotments are subdivided into suitable areas, of which none must exceed in value £2,500 except in the case of blocks mainly consisting of grazing land, when the value may be increased to £3,500; and no lease of any of these areas can be granted to a person who at the date of application is directly or indirectly the owner of any other land in Victoria (township land excepted) the value of which, together with that of the allotment applied for, exceeds the amount stated. Improvements of a permanent and substantial character must be effected by the lessee of a farm allotment to the value of at least two instalments of the purchase money before the end of the first year from the date of the lease, 10 per cent. of the purchase money before the end of the third year, and a further 10 per cent. before the end of the sixth year. Improvements must thus be made to the value of at least 20 per cent. of the total purchase money payable for the allotment. If an approved deputy is fulfilling the residential condition, the value of the improvements must be at least 30 per cent. of the total purchase money. If they are made in excess of requirements during the first three years, the excess is set off against the expenditure necessary by the end of the sixth year. Where special circumstances warrant action, the Minister, upon the recommendation of the Board, may modify the improvement conditions.

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

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

Advances of money to assist in effecting improvements may be granted by the Board up to 80 per cent. of the value of the permanent improvements effected, such advances to be repaid by half-yearly instalments

extending over twenty years, bearing interest at 5 per cent. Advances to acquire stock and for the purchase of seed, manure, and implements can also be made. The total advances for all purposes must not exceed £625.

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

The period for repaying the advances on improvements is usually limited to twenty years, and for live stock, seed, manure, and implements, to 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. Advances made by the Board for this purpose are repayable on the same terms as those made to assist in effecting improvements which are referred to above.

**Wire netting advances.**

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

(*a*) if such land is held under conditions set forth in the Closer Settlement Acts ; 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 457) the following is a complete statement of all estates acquired by the Closer Settlement Board for the purpose of closer settlement at 30th June, 1924, including

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

## CLOSER SETTLEMENT ESTATES AT 30TH JUNE, 1924.

| Estates. | Area. | Estates. | | No. of Lessees. | | | Areas available for Allotment. |
|---|---|---|---|---|---|---|---|
| | | 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 | 1,390 | .. | .. | .. | .. |
| 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 | 33,580 | 23 | .. | 4 | .. |
| Boorool .. .. | 2,221 | 45,810 | 46,012 | 4 | .. | .. | 1,636 |
| Chester .. .. | 1,069 | 12,024 | 12,024 | 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 | 76 | .. | .. | .. |
| Cremona .. | 1,292 | 20,140 | 21,923 | 1 | .. | 1 | .. |
| Crystal Waters .. | 1,036 | 8,159 | 8,196 | .. | .. | .. | 1,036 |
| 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 | .. | .. | .. |
| Edeyrn .. .. | 1,991 | 10,455 | 10,501 | .. | .. | .. | 2,015 |
| Englefield .. | 11,242 | 33,302 | 33,564 | 4 | .. | .. | 4,709 |
| Ercildoune .. | 1,190 | 12,199 | 12,214 | 7 | .. | .. | .. |
| Eumeralla .. | 10,034 | 57,570 | 61,045 | 34 | .. | 6 | .. |
| Eurack .. .. | 5,109 | 53,640 | 57,216 | 45 | .. | .. | .. |
| Exford .. .. | 8,005 | 64,039 | 67,584 | 43 | .. | 6 | .. |
| Gellion's .. | 560 | 21,575 | 21,660 | 6 | .. | .. | .. |
| Glenaladale .. | 2,110 | 28,787 | 29,464 | 16 | .. | .. | .. |
| Glendenning and Melville Forest .. | 43,800 | 153,453 | 154,576 | 38 | .. | .. | 6,516 |
| 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 | 31,573 | 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 | 111,867 | 28 | .. | .. | 1,893 |
| Konongwootong .. | 10,180 | 104,363 | 106,657 | 62 | .. | 15 | .. |
| Koyuga .. | 790 | 3,914 | 3,914 | 2 | .. | .. | .. |
| Laidlaw's .. | 1,047 | 7,325 | 7,373 | 3 | .. | .. | .. |
| Lara .. .. | 8,332 | 45,825 | 48,082 | 32 | .. | 7 | .. |
| Leslie Manor .. | 18,005 | 121,085 | 121,813 | 31 | .. | .. | 3,207 |
| 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 .. .. | 10,027 | 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 .. | 8,333 | 48,634 | 49,878 | 11 | .. | .. | .. |
| Moyhu .. .. | 2,417 | 19,581 | 20,337 | 22 | .. | .. | .. |

CLOSER SETTLEMENT ESTATES AT 30TH JUNE, 1924—*continued.*

| Estates. | Area. | Estates. | | No. of Lessees. | | | Areas available for Allotment. |
|---|---|---|---|---|---|---|---|
| | | 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.* | | | | | | | |
| Mundara .. | 1,915 | 16,516 | 16,589 | .. | .. | .. | 1,915 |
| Nanneella .. | 738 | 7,767 | 7,842 | 6 | .. | 13 | .. |
| Narmbool .. | 9,198 | 60,873 | 61,323 | 4 | .. | .. | 3,295 |
| Nathalia .. | 30 | 361 | 388 | .. | .. | 5 | .. |
| Nerrin Nerrin .. | 7,740 | 67,915 | 69,242 | 28 | .. | 1 | .. |
| Numurkah .. | 2,363 | 18,901 | 19,004 | 12 | .. | 1 | .. |
| Oaklands .. | 8,050 | 26,309 | 26,749 | 10 | .. | .. | .. |
| Overnewton .. | 11,485 | 71,492 | 73,340 | 67 | .. | .. | .. |
| Pannoo .. | 15,101 | 98,455 | 100,609 | 41 | .. | .. | .. |
| Pirron Yalloak .. | 1,059 | 23,796 | 25,108 | 21 | .. | .. | .. |
| Restdown .. | 17,894 | 60,391 | 61,409 | 52 | .. | .. | .. |
| Richmond Vale .. | 1,539 | 11,000 | 11,137 | 10 | .. | 1 | .. |
| Romsey .. | 285 | 8,834 | 8,935 | 14 | .. | .. | 115 |
| Section 20 .. | 54,879 | 386,507 | 389,426 | 250 | .. | 2 | .. |
| Shepparton (Ascot Park) .. | 488 | 3,671 | 3,671 | .. | .. | .. | .. |
| Springs .. .. | 398 | 2,290 | 2,318 | 8 | .. | .. | .. |
| Springvale .. | 3,396 | 25,895 | 26,318 | 22 | .. | .. | .. |
| Squattleseamere .. | 8,217 | 54,436 | 54,676 | 12 | .. | .. | 4,424 |
| Staughton Vale .. | 9,847 | 66,466 | 68,023 | 41 | .. | .. | .. |
| Stoneyhurst .. | 1,886 | 33,030 | 33,261 | .. | .. | .. | 1,868 |
| Strathkellar .. | 10,228 | 74,150 | 76,458 | 60 | .. | 2 | .. |
| Tandarra .. | 4,558 | 21,083 | 21,240 | 19 | .. | .. | .. |
| Thomastown .. | 581 | 11,230 | 15,783 | 26 | .. | 1 | .. |
| Tipperary Park .. | 657 | 4,764 | 4,785 | .. | .. | .. | 657 |
| Walmer .. | 13,769 | 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 .. .. | 46 | 1,042 | 1,164 | 10 | .. | 3 | .. |
| Wein Wein Gurk | 3,021 | 8,684 | 8,964 | 13 | .. | .. | .. |
| Werneth .. | 6,585 | 31,043 | 31,778 | 21 | .. | .. | .. |
| Werribee .. | 15,218 | 148,802 | 164,332 | 35 | .. | .. | .. |
| Whitfield .. | 4,247 | 36,096 | 38,366 | 34 | .. | 1 | .. |
| Willows .. .. | 380 | 5,131 | 5,165 | 3 | .. | .. | .. |
| Woolongoon .. | 14,320 | 100,405 | 101,003 | 23 | .. | .. | 2,276 |
| Wootong Vale .. | 11,560 | 57,500 | 57,851 | 18 | .. | .. | .. |
| Wyuna .. .. | 23,024 | 120,876 | 124,640 | 114 | .. | 10 | .. |
| Land purchased for Discharged Soldiers, but granted to civilians under Closer Settlement Acts .. .. | 62,685 | 451,787 | 451,975 | 241 | .. | .. | .. |
| Land disposed of under Discharged Soldiers' Settlement Acts .. | .. | .. | .. | 137 | .. | .. | .. |
| Purchases for Immigration .. | 5,920 | 103,056 | 103,236 | 5 | .. | .. | 4,822 |
| | 697,136 | 4,464,008 | 4,599,700 | 2,651 | .. | 146 | 41,532 |
| Crown Lands (Farms)— | | | | | | | |
| Inverloch .. | 220 | 693 | 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 | 14,918 | 16,459 | 18 | .. | 17 | .. |

## Closer Settlement Estates at 30th June, 1924—*continued.*

| Estates. | Area. | Estates. | | No. of Lessees. | | | Areas available for Allotment. |
|---|---|---|---|---|---|---|---|
| | | 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. |
| Workmen's Homes— | | | | | | | |
| Brunswick .. | 91 | 2,792 | 3,349 | .. | 56 | .. | .. |
| Cadman's .. | 18 | 844 | 1,627 | .. | 42 | .. | .. |
| Dal Campbell .. | 45 | 2,358 | 3,458 | .. | 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 | 2,338 | .. | 47 | .. | .. |
| Tooronga .. | 101 | 17,675 | 27,601 | .. | 210 | .. | .. |
| Thornbury .. | 11 | 5,625 | 7,086 | .. | 47 | .. | .. |
| | 627 | 63,133 | 94,545 | .. | 967 | .. | .. |
| Crown Lands (Workmen's Homes)— | | | | | | | |
| Dowling Forest .. | 225 | 1,350 | 1,376 | .. | 15 | .. | .. |
| Geelong .. | 3 | 300 | 2,347 | .. | 10 | .. | .. |
| 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 | .. | 79 | .. | .. |
| **Irrigable Areas.** | | | | | | | |
| Farms— | | | | | | | |
| Bamawm .. | 13,362 | 122,944 | 134,823 | 141 | .. | 11 | .. |
| Berrys' .. .. | 343 | 3,426 | 3,450 | 10 | .. | .. | .. |
| Cohuna .. | 11,543 | 114,856 | 121,0 2 | 103 | .. | 6 | 710 |
| Cornelia Creek .. | 2,507 | 16,501 | 19,823 | 7 | .. | .. | 194 |
| Dingee .. .. | 470 | 4,160 | 4,617 | 5 | .. | 8 | .. |
| Echuca .. .. | 3,235 | 29,142 | 31,471 | 26 | .. | .. | .. |
| Koondrook .. | 3,422 | 23,202 | 23,964 | 32 | .. | .. | .. |
| Koyuga .. | 4,173 | 36,228 | 40,4 2 | 36 | .. | 14 | 6 |
| Kyabram .. | 3,049 | 36,091 | 38,508 | 18 | .. | 7 | 115 |
| Nanneella .. | 8,565 | 78,654 | 84,105 | 87 | .. | 2 | 30 |
| Nyah .. .. | 35 | 120 | 605 | 2 | .. | .. | .. |
| Section 20 .. | 82 | 12,719 | 12,768 | 10 | .. | .. | .. |
| Shepparton .. | 9,242 | 136,839 | 152,979 | 190 | .. | 40 | .. |
| Stanhope .. | 20,889 | 228,630 | 233,270 | 67 | .. | 11 | 1,219 |
| Swan Hill .. | 6,878 | 71,817 | 82,363 | 123 | .. | 1 | .. |
| Tongala .. | 15,228 | 172,395 | 190,382 | 153 | .. | 21 | 146 |
| Werribee .. | 7,996 | 153,871 | 166,016 | 104 | .. | 20 | 434 |
| Land purchased for Discharged Soldiers, but granted to civilians under Closer Settlement Acts .. .. | 8,592 | 108,748 | 108,873 | 215 | .. | .. | .. |
| Land disposed of under Discharged Soldiers Settlement Acts .. | .. | .. | .. | 450 | .. | .. | .. |
| Purchases for Immigration .. | 30,598† | 476,461 | 477,332 | 73 | .. | .. | 2,072 |
| | 150,956 | 1,826,804 | 1,926,903 | 1,852 | .. | 141 | 4,926 |
| Crown Lands— | | | | | | | |
| Swan Hill No. 3 .. | 655‡ | 2,450 | 2,528 | .. | .. | .. | .. |
| Grand Total .. | 852,498 | 6,377,131 | 6,648,047 | 4,521 | 1,046 | 304 | 46,458 |

† 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, 1924, the Board had acquired 164 properties, with a total area of 852,489 acres, of which 46,458 acres were then available for allotment. Of the estates acquired, an area of 16,959 acres had been used at the date mentioned for settlement of migrants from overseas. Portions of estates, amounting in the aggregate to 48,811 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, 1924, 587 allotments, containing 53,835 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 up to 30th June, 1924, is given in the next statement.

SUMMARY OF CLOSER SETTLEMENT TO 30TH JUNE, 1924.

| Classification of Holdings. | Number. | Average Capital Value. | Average Area. | Total Area. |
|---|---|---|---|---|
| | No. | £ | Acres. | Acres. |
| Areas settled— | | | | |
| Farms .. .. .. .. | 3,934 | 1,224 | 170 | 670,081 |
| Agricultural Labourers' Allotments .. | 304 | 136 | 12 | 3,675 |
| Workmen's Homes Allotments .. | 1,046 | 90 | ¾ | 784 |
| Allotments granted to Discharged Soldiers, and transferred to Discharged Soldiers Settlement Acts .. .. | 587 | 958 | 92 | 53,835 |
| Public Competition, Auction, &c. .. | .. | .. | .. | 48,811 |
| Total area of land settled .. .. .. .. .. | | | | 777,186 |
| Area of land available for— | | | | |
| Farm Lands and Agricultural Labourers' Allotments .. .. | | | | 46,458 |
| Public Competition, Auction, &c. .. .. .. .. | | | | 1,089 |
| Area of land acquired but not yet available .. .. .. | | | | 22,749 |
| Loss of area on subdivision (roads, channels, reserves, &c.) .. .. | | | | 5,016 |
| Total land acquired to 30th June, 1924 .. .. | | | | 852,498 |

**Closer Settlement Farm Allotments.** The next table shows the extent of operations with regard to Farm Allotments up to 30th June, 1920, and progressive totals for each of the following years :—

FARM ALLOTMENTS—EXTENT OF OPERATIONS TO THE YEARS 1920 TO 1924.

| Year ended 30th June. | Number. | Total Area. | Average Area. | Total Capital Value. | Average Capital Value. |
|---|---|---|---|---|---|
| | | Acres. | Acres. | £ | £ |
| 1920 .. .. | 3,060 | 471,239 | 154 | 3,418,020 | 1,117 |
| 1921 .. .. | 3,090 | 470,967 | 152½ | 3,429,900 | 1,110 |
| 1922 .. .. | 3,168 | 478,683 | 151 | 3,481,632 | 1,099 |
| 1923 .. .. | 3,403 | 525,434 | 151 | 3,828,375 | 1,125 |
| 1924 .. .. | 3,934 | 670,081 | 170 | 4,815,216 | 1,224 |

The sum of £5,193,488 had been repaid to the Closer Settlement Fund up to 30th June, 1924. Of that amount £2,390,673 had been transferred to revenue to meet interest due to stockholders, £90,000 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 £2,518,716 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, 1924, being £94,099. The balance of unredeemed securities is now £5,216,390, on which the interest payable amounts to £217,567 per annum. Up to 30th June, 1924, 13,663 applications for advances aggregating £1,394,934 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, 3039 of 1919, 3061 of 1920, 3130 of 1921, and 3253 of 1922, 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 30th June, 1924, the Closer Settlement Board and the State Rivers and Water Supply Commission had specially purchased for the settlement of soldiers 1,744,111 acres at a cost of £13,214,902. The number of soldiers settled up to that date was as follows :—

| | |
|---|---|
| On land specially purchased by the Closer Settlement Board | 6,282 |
| On land specially purchased by the State Rivers and Water Supply Commission .. .. .. .. | 1,410 |
| On Closer Settlement old estates—Dry areas .. .. | 36 |
| On Closer Settlement old estates—Irrigable areas .. | 567 |
| On Crown Lands—Ordinary and Mallee Areas .. .. | 1,270 |
| On Crown Lands—Merbein and Nyah Irrigation Areas .. | 186 |
| Soldiers receiving assistance from the Closer Settlement Board, on share farming, leasing agreements and freehold land .. .. .. .. .. | 814 |
| Total .. .. .. | 10,565 |

In addition to the above there were available or in process of being made available 18 allotments, of which 1 was on land specially purchased by the Closer Settlement Board, and 17 were on Crown land. There were also 952 blocks available under ordinary Closer Settlement conditions, for which returned soldiers could apply.

Up to the end of June, 1924, the amount of assistance rendered by the Board to soldier settlers by way of advances was £6,223,942.

## 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, 1923.

| 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 | 1,290,663 |
| Broken River Works .. | Stock and Domestic | .. | 14,853 |
| | | Acre feet. | |
| Goulburn-Waranga .. | Irrigation, &c. .. | 330,000 | 1,724,377 |
| North-west (Kerang) Lakes | Stock and Domestic | 88,500 | 18,778 |
| Kow Swamp Works .. | Irrigation, &c. .. | 40,860 | 187,566 |
| Loddon River Works .. | ,, ,, .. | 14,000 | 167,636 |
| Sugarloaf Reservoir (under construction) .. | ,, ,, .. | 300,000 | 867,512 |
| Glenmaggie Reservoir .. | ,, ,, .. | 150,000 | 207,160 |
| | | 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 | 166,909 |
| Irrigation and Water Supply Districts (23) | ,, ,, .. | .. | 2,216,892 |
| Waterworks Districts (23) | Stock and Domestic | .. | 2,093,286 |
| First Mildura Irrigation and Water Supply Trust .. | Irrigation .. .. | .. | 117,018 |
| | | Gallons. | |
| Waterworks Trusts (98) .. | Stock and Domestic | 1,180,000,000 | 1,278,847 |
| Municipal Corporations (29) | ,, ,, | 3,110,000,000 | 785,602 |
| Abolished Irrigation and Water Supply Trusts (8) | Irrigation .. .. | .. | 32,724 |
| Miscellaneous Expenditure | .. .. .. | .. | 178,647 |
| Melbourne and Metropolitan Board of Works .. | Domestic .. .. | 6,460,000,000 | 5,675,755 |
| Geelong Waterworks and Sewerage Trust .. | ,, .. .. | 2,703,967,000 | 633,057 |
| Total .. | .. .. .. | .. | 17,742,240 |

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 had been redeemed at 30th June, 1923—£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 the above date was £938,182. Further particulars relating to this Board will be found on page 223, 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., £212,480.

**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, 1923. |
|---|---|---|---|---|---|---|
| | £ | £ | £ | £ | £ | £ |
| State Works .. .. | 4,730,412 | .. | 2,798* | .. | .. | 4,730,412 |
| Irrigation and Water Supply Districts (23) .. .. | 2,216,892 | .. | 15,406 | 575,152 | 19,573 | 1,622,167 |
| First Mildura Irrigation and Water Supply Trust .. | 117,018 | .. | .. | .. | 6,725 | 110,293 |
| Waterworks Districts (23) .. | 2,093,286 | .. | 46,349 | 175,055 | 42,436 | 1,875,795 |
| Waterworks Trusts (98) .. | 1,241,433 | 6,871 | 37,414 | 125,861 | 172,933 | 949,510 |
| Geelong Waterworks and Sewerage Trust .. .. | 455,812 | .. | .. | .. | 300,235 | 155,577 |
| Municipal Corporations (20) | 776,059 | 43,633 | .. | 165,870 | 147,347 | 506,475 |
| ,, (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 .. | 208,598 | .. | .. | .. | .. | 208,598 |
| Miscellaneous .. .. | 178,647 | .. | .. | .. | .. | 178,647 |
| Total .. .. | 15,249,344 | 50,850 | 102,210 | 1,073,618 | 2,950,920 | 11,275,656 |

* 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, 1923, amounted to £25,842, viz., £7,511 against the First Mildura Trust, £15,179 against Waterworks Trusts, and £3,152 against Municipal Corporations.

## IRRIGATION.

**Progress of Irrigation.**

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

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

were first put into operation—and the average areas for the last five years :—

## PROGRESS OF IRRIGATION IN CLOSER SETTLEMENT AREAS.

| District (having allotted Water Rights). | Area Irrigated. | |
|---|---|---|
| | 1909–10. | Average for last Five Years. |
| | Acres. | Acres. |
| Supplied from the Goulburn— | | |
| Shepparton .. .. | .. | 14,344 |
| Rodney .. .. .. | 32,356 | 51,353 |
| Stanhope .. .. | 2,000 | 7,662 |
| Tongala .. .. .. | 3,000 | 12,264 |
| Rochester .. .. | 500 | 25,612 |
| Echuca North (two years) .. | .. | 2,279 |
| Dingee .. .. .. | .. | 2,884 |
| Tragowel Plains .. .. | 20,000 | 33,233 |
| Supplied from the Murray— | | |
| Cohuna .. .. .. | 12,000 | 17,600 |
| Gannawarra .. .. | 7,825 | 19,815 |
| Koondrook .. .. | 5,029 | 15,326 |
| Swan Hill .. .. | 5,410 | 12,140 |
| Nyah .. .. .. | 569 | 2,472 |
| Merbein .. .. .. | 202 | 7,453 |
| Tresco (two years) .. | .. | 1,466 |
| Supplied from the Werribee— | | |
| Bacchus Marsh .. .. | 31 | 2,581 |
| Werribee .. .. | .. | 4,899 |
| Total .. .. | 88,922 | 233,383 |

The area under irrigated culture in the whole State, in 1923–24, for all kinds of crop, was 324,558 acres. Although, owing to unusually heavy falls of rain during the irrigation season, this was 26,169 acres less than the area irrigated in the previous year, which was exceptionally dry, the average of the previous four years was exceeded by 1,454 acres.

**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. | 1919-20. | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
|---|---|---|---|---|---|---|
| | acres. | acres. | acres. | acres. | acres. | acres. |
| Cereals .. .. | 23,715 | 76,810 | 26,546 | 25,039 | 60,304 | 32,240 |
| Lucerne .. .. | 24,124 | 71,364 | 72,338 | 82,226 | 92,679 | 94,479 |
| Sorghum and other annual fodders .. | 8,094 | 32,955 | 25,963 | 28,112 | 35,591 | 33,356 |
| Pastures .. .. | 50,541 | 117,263 | 100,424 | 88,195 | 88,787 | 91,912 |
| Vineyards and orchards | 17,524 | 43,586 | 50,281 | 55,601 | 61,061 | 64,647 |
| Fallow .. .. | 4,988 | 8,502 | 3,465 | 4,867 | 8,850 | 4,523 |
| Miscellaneous .. | 785 | 2,768 | 3,517 | 3,867 | 3,455 | 3,401 |
| | 129,771 | 353,248 | 282,534 | 287,907 | 350,727 | 324,558 |
| Details not available (private diversions) | 8,000 | 18,000 | From 1st July, 1920, included in detail areas above | | | |
| Total .. | 137,771 | 371,248 | 282,534 | 287,907 | 350,727 | 324,558 |

Of the total area irrigated in 1923-24—324,558 acres—the percentages devoted to different purposes were as follows :—Pastures, 29 ; cereals, 10 ; lucerne, 29 ; vineyards, orchards, and gardens, 20 ; sorghum and other annual fodder crops, 10 ; fallow, 1 ; and miscellaneous, 1.

**Closer Settlement in Irrigation Districts.**

The Commission during 1923-24 provided holdings under ordinary closer settlement conditions for both local —including a few discharged soldiers—and oversea land-seekers. The number of applicants for irrigable blocks

whose applications were granted in the year was 310; of these 29 were discharged soldiers, 208 local civilians, and the remaining 73 approved oversea settlers. The area of the new estates subdivided and made available was about 8,300 acres, of which 1,400 acres were purchased during the year.

In the districts supplied by the Goulburn Irrigation System 3,550 acres were made available as follows:—3,000 acres at Shepparton, which were subdivided into 43 holdings, and 550 acres in the Rodney Irrigation District, which provided 9 more holdings. In the districts served by the River Murray schemes 4,500 acres were subdivided at Murrabit (Gonn Crossing) into 69 allotments. A further small section of the Red Cliffs Estate was subdivided to provide blocks for 7 oversea settlers. The subdivided portions of this estate have now provided 706 holdings, practically all of which are occupied by discharged soldiers.

Since the commencement of the repatriation of Victoria's soldiers, the Commission has placed 2,168 qualified soldier settlers on irrigable holdings under Closer Settlement conditions, and has also made advances to some 60 others who had purchased farms without State aid. Some soldiers, whose health was impaired by the war, and others, for various reasons, have transferred their blocks. Notwithstanding this, there are nearly 600 settled in the Goulburn districts, 1,070 in the Murray areas—of whom 623 are at Red Cliffs—and 143 in the Maffra and Werribee districts.

In view of the enhancement in land values that takes place through the construction of irrigation channels, the Commission purchased in advance of works some 43,000 acres, of which 35,000 acres are still in hand.

During the year thirteen properties, comprising in all 3,200 acres, were purchased at Hallam, near Dandenong. Water supplies from the Mornington Peninsula system will be available for these lands, which it is intended to fully drain and subdivide into holdings suitable for market gardens. As the areas adjacent to Melbourne hitherto used for market gardening purposes are being gradually absorbed by extensions of suburban residential areas, the provision of these lands will tend to important developments in the market gardening industry.

The following statement shows the lands purchased for civilians and discharged soldiers by the State Rivers and Water Supply Commission, and the extent of settlement on each estate after subdivision. The subdivided portions are 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 Settle-*

*ment 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 | 14,100 | 33 | 29 | 388 | 34 | 365 | 336 |
| East Goulburn .. .. | 10,300 | .. | .. | .. | .. | .. | .. | .. |
| Rodney .. .. | 2,800 | 1,400 | 5 | 3 | 19 | 73 | 12 | 9 |
| Stanhope .. .. | 21,500 | 21,500 | 7 | 13 | 330 | 55 | 296 | 283 |
| Kyabram .. .. | 4,400 | 3,000 | 7 | 10 | 57 | 52 | 54 | 44 |
| Tongala .. .. .. | 18,600 | 18,200 | 37 | 34 | 305 | 57 | 293 | 259 |
| Koyuga .. .. | 4,200 | 4,200 | Pt. 1 | .. | 50 | 79 | 48 | 48 |
| Cornelia Creek .. .. | 2,500 | 2,500 | | | 19 | 161 | 19 | 19 |
| Nanneella .. .. | 9,000 | 9,000 | 17 | 7 | 119 | 73 | 116 | 109 |
| Echuca .. .. .. | 3,600 | 3,600 | 8 | 4 | 31 | 101 | 30 | 26 |
| Bamawm .. .. | 13,400 | 13,400 | 28 | 21 | 180 | 70 | 177 | 156 |
| Dingee .. .. .. | 500 | 500 | 3 | 1 | 17 | 27 | 15 | 14 |
| Calivil .. .. .. | 3,300 | .. | .. | .. | .. | .. | .. | .. |
| Cohuna .. .. | 12,000 | 12,000 | 29 | 10 | 137 | 83 | 122 | 112 |
| Koondrook .. .. | 8,400 | 8,400 | 13 | 9 | 123 | 62 | 80 | 71 |
| Swan Hill .. .. | 12,500 | 12,500 | 34 | 16 | 303 | 39 | 288 | 272 |
| Nyah .. .. .. | 3,800 | 3,800 | 8 | 1 | 237 | 15 | 232 | 231 |
| Merbein .. .. .. | 8,300 | 8,300 | .. | .. | 410 | 20 | 410 | 410 |
| Red Cliffs .. .. | 33,000 | 18,000 | 1 | 3 | 706 | 17 | 682 | 679 |
| Bacchus Marsh .. .. | 70 | 70 | 1 | .. | 2 | 36 | 2 | 2 |
| Werribee .. .. | 10,000 | 10,000 | Pt. 1 | 11 | 233 | 36 | 229 | 218 |
| Hallam .. .. .. | 3,200 | .. | .. | .. | .. | .. | .. | .. |
| Maffra .. .. .. | 7,700 | 4,900 | 7 | 4 | 107 | 43 | 41 | 37 |
| | 207,170 | 169,370 | 240 | 176 | 3,773 | 41 | 3,511 | 3,335 |
| Properties purchased under Section 20, *Closer Settlement Act* 1915, outside above Estates, *vide* page 450 | 19,544 | .. | .. | .. | .. | .. | 211 | .. |
| | 226,714 | | | | | | | |

**Progress of Irrigated Closer Settled Districts.**

The good progress in Closer Settlement development has been continued during the past year. The settlers have steadily consolidated their positions by making further improvements, bringing new areas under lucerne and other crops, and increasing the number and improving the quality of their herds. In the dried fruit irrigation areas a high average yield of raisins and currants was experienced, the total yield for Victoria far exceeding previous records. In Red Cliffs, the largest soldier settlement in the State, a number of blocks reached the producing stage, and the harvest returned 570 tons of dried fruit as the result of less than four years' settlement, while this season a further area will become productive, and it is expected that fully 4,000 tons will be produced. At Swan Hill, Kerang, Murrabit, Shepparton, Merbein, Nyah, and other irrigation centres, citrus culture is making great

advances, and, although the year has not been good climatically, growers generally are obtaining satisfactory financial results. In the districts of Stanhope, Rochester, Tongala, and Cohuna, where the settlers favour dairying and sheep raising, pig and poultry raising are fast becoming important adjuncts to the original industries. Remarkable development is evidenced at Stanhope, which area, prior to subdivision, carried about one sheep to the acre, and supported a population of about 60 persons. At the present time, only four years after the greater part of the area has been settled, the district supports over 300 families, comprising a population of approximately 1,200 persons, who possess implements to the value of £28,000, and have made permanent improvements to the value of £130,000.

The Railway from Kerang to Gonn Crossing (Murrabit) is now open for goods traffic, and, adjacent to the site of the new railway station at Gonn Crossing, the Commission has made provision for a township, and has also made two estates available for closer settlement.

At Bacchus Marsh and Werribee lucerne production has been good, although weather conditions militated against successful drying. At Werribee, and to some extent at Bacchus Marsh, fruit and vegetable growing are being introduced with satisfactory results. In the Maffra district water will be available for portion of the area during the coming season, and, with irrigation, a greatly increased yield in the sugar beet crops is anticipated.

The marketing of canned fruit has shown a marked improvement, and the two co-operative canneries, Shepparton and Kyabram, have had a most successful season—over 6,000,000 tins of fruit having been processed. The previous season's production was exceeded by 25 per cent.

The marketing of dried fruits, however, is causing much anxiety owing to unsettled conditions in Europe. Both Commonwealth and State Governments are concentrating on the problem, and success in their efforts is expected.

An advance in the direction of more improved methods and higher yields in irrigation districts should be secured by reason of the recent formation of an Irrigation Research Committee, comprising representatives of the Department of Agriculture and the State Rivers and Water Supply Commission. The function of this Committee is to assist settlers by investigation of various problems of irrigated agriculture and to demonstrate results obtained at several research stations, where attention will be specially devoted to irrigation. During the past year, experimental plots, dealing with the manuring of lucerne, have been established at Swan Hill and Rochester; and it is proposed to further extend this work so as to deal with other problems.

**Total Storages in State.** In 1902 the total capacity of storages in the State was 172,000 acre-feet. The present capacity is about 813,500 acre-feet, and, when the Sugarloaf, Wimmera, and Maffra Storages have been completed, the total capacity will exceed 1,264,000 acre-feet. The Hume Reservoir, which is in course of construction, and is not included in the storages referred to, will contain between 1,100,000 and 2,000,000 acre-feet (*vide* page 470), half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria. The construction of storage works by the State Rivers and Water Supply Commission was continued during the year.

**Goulburn Storages.** At the Sugarloaf Reservoir, on the Upper Goulburn River, work is well advanced with the main retaining wall, which consists of a diaphragm of concrete, a wall of clayey material on the upstream side of the diaphragm, and supporting masses of rock. The valve tower has been completed for some time, and hydraulic lifters for operating the valves have now been placed in position. A volume of some 60,000 acre-feet of water is already held in store, and this will be increased to 300,000 acre-feet when the present undertaking is completed. It has been ascertained by surveys that the site would admit of a storage basin of a total capacity of 918,000 acre-feet. This result could be obtained by progressive stages. During the year plans were prepared for an emergency or power outlet. In view of the possibility of the outlet being utilized in connexion with the Sugarloaf Hydro-electric Scheme (*vide* page 470), the State Electricity Commission was consulted prior to the final adoption of plans.

At the Waranga Reservoir, which has a storage capacity of 333,400 acre-feet, work is proceeding on a wall of reinforced concrete that is being built to remedy certain defects in the present embankment by reason of which water has been allowed to escape. These defects, it is supposed, are caused by yabbies or other boring creatures. In addition, a considerable amount of work has been done on the channel bringing supplies from the Goulburn Weir, and on the two outlet channels.

**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 embankment at Taylor's Lake has been completed, and the storage filled to its full 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 has been made with the earthwork of the storage. The lake is now filled to a depth of 37 feet, the volume stored being

21,000 acre-feet, all of which is held within its natural banks. 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 of the Wimmera–Mallee Supply Scheme now reaches 149,250 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 210,250 acre-feet. The water is distributed throughout a total area of about 11,000 square miles by main and distributary channels aggregating over 4,800 miles in length (exclusive of an approximately equal length of farmers' connecting branches). This system also supplies water to 32 towns.

**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 95 successful public bores in this area with an average depth of 460 feet, and 187 tanks with a total storage capacity of 169,045,000 gallons.

**Millewa Water Supply.**

Works are in progress 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 being constructed 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. Fifty miles of main channels and 162 miles of distributaries have already been constructed; these will serve about 270 Mallee blocks which have been allotted to settlers. The work will be carried out in successive stages to meet the requirements of the gradually extending settlement. In this area and the adjacent Sunset country, 63 tanks have been constructed, with a total storage capacity of 75,000 cubic yards.

**Loddon-Murray Irrigation Areas.**

In the Cohuna and Kerang districts the completion of the Torumbarry Weir has been responsible for a marked impetus in the development of irrigation, extensive areas now being provided for by gravitation entirely where previously a combined gravitation and pumping system was necessary.

The Kerang North-West Lakes were maintained at full supply level during the irrigation season as a result of supplies from the Torumbarry Weir, and further areas, previously irrigated by pumping, have been brought under the influence of gravitation. An area of about 10,000 acres is now being reticulated by a channel system from Third Lake, and work is proceeding on the first 8 miles of the main channel. Drainage works, the aggregate length of which is 5½ miles, have been completed at Murrabit, and an irrigation system, involving a total length of 16 miles of channels, is nearing completion.

**Mornington Peninsula Scheme.**

The important scheme of reticulated supply to the Naval Base, the inland towns of Berwick, Beaconsfield, Dandenong, Somerville, Cranbourne, and Bittern, and the bayside towns of Mornington, Frankston, South 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 highest levels of Berwick town was completed, and a similar scheme was put in hand for giving reticulated supplies to the highest levels at South Frankston.

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, proved so satisfactory that, in addition to considerable extensions being effected in the Dandenong reticulation, the main pipe line to Noble Park and Spring Vale, and a great part of the reticulation for those townships, were laid during the year. The new main supply line from Berwick to Heywood's Hill Reservoir should be available early in 1925.

**Maffra District Irrigation Scheme.**

Good progress was made during the year with the construction of the cyclopean concrete dam on the Macallister River, which, when completed, will impound 150,000 acre-feet of water for the irrigation of 80,000 acres of land. It is expected that, during the summer of 1924–25, the dam will be sufficiently high throughout its whole length, and the construction of the northern main channel far enough advanced, to ensure water being available at the Boisdale Ridge and 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. In the area to be served by the southern main channel, the distributary channels on the Mewburn Park Closer Settlement Estate have been completed, so that a supply can be given to this area also, if urgently required, by pumping from the river pending completion of the main channel.

**Other Irrigation Districts.**

At Red Cliffs, the scheme which has been inaugurated, and which ranks first in importance among the pumping systems of the State, supplies water to an area totalling 18,000 acres, including the township and 706 soldier settlement blocks. The plant is capable of delivering 500 acre-feet of water per day, lifted 105 feet. The total length of channels constructed to date is 121 miles. Following considerable progress in the township, which has been proclaimed an Urban Waterworks District, a concrete standpipe, 70 feet high and 26 feet in diameter, has been erected, and reticulation extended to meet requirements.

In the Carwarp district, surveys are now being carried out to determine the line of a main channel to supply about 50 square miles of new country at Carwarp and Colignan. A scheme to supply water to high lands surrounding Carwarp Railway Station is being pushed forward. The necessary channels—12 miles in length—have been excavated, and a pump and rising main are being installed.

**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 has reached the stage that provides the landholders affected with protection from all but abnormal floods, 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 fully double that amount. The four contracting Governments

have agreed to share equally in the total cost of the works. The total expenditure incurred up to 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 is a little below the junction of the rivers Murray and Mitta Mitta. Originally it was designed to provide for a capacity of 1,100,000 acre-feet, but, at a conference of Ministers representing the four interested Governments, held on the 8th and 9th days of August, 1924, the following proposals raised by the Government of Victoria were agreed to :—

(*a*) That the work of construction of the Hume dam, of sufficient dimensions to provide for a reservoir of 2,000,000 acre-feet, proceed for a period not exceeding three years, and that the question of the ultimate capacity and completion of the reservoir be then the subject of a further conference. All waters to be used to meet the present allocation obligations and as a reserve for dry years.

(*b*) That provision be made for outlet works at the Hume Reservoir suitable for hydro-electric generation purposes, provided, however, that the use of the reservoir for these purposes does not interfere with the volumes of water required for the purposes set out in the River Murray Agreement. The cost of such additional outlet works, estimated at £40,000, shall be borne in equal shares by the States of New South Wales and Victoria, which Governments should have the sole use of any power generated at the reservoir.

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

The Torumbarry Weir and Lock (near Echuca) was substantially completed and brought into operation in December, 1923, and water was made available for the remainder of the irrigation season.

Weir and Lock No. 11—situated about ½ mile downstream from Mildura—will form, when completed, a lock pool for about 40 miles upstream, providing a local reserve storage of great value and reducing the suction lift at the Mildura and Red Cliffs Pumping Stations. Work is proceeding with the excavations. The Constructing Authority for New South Wales is also preparing extensive plant for the construction of No. 10 Weir and Lock at Wentworth ; while, in the South Australian section, Weir and Lock No. 1 at Blanchetown has been completed, No. 3 near Lake Bonney has been nearly completed, and substantial progress has been made with No. 5 near Renmark, and No. 9 near the offtake to Lake Victoria. Lake Victoria Storage Works are also approaching completion.

**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. |
| 95 | 252 | Feet. 44,050 | Feet. 49,000 |

* As at 31st December, 1923.

**Mildura Irrigation Settlement.**

The Mildura Irrigation Settlement, on the River Murray, was established in 1887 under the management of the Chaffey Brothers Limited, and in 1895 the control of the water supply was vested in the First Mildura Irrigation Trust. Water is obtained by pumping from the river. The following particulars are an indication of the prosperity of the settlement :—

POPULATION OF MILDURA SHIRE, 1891 TO 1923.*

| | | | | | | |
|---|---|---|---|---|---|---|
| 1891 | April (Census) | .. 2,321 | 1921 | April (Census) | .. | 13,183 |
| 1901 | March (Census) | .. 3,325 | 1922 | December .. | .. | 13,760 |
| 1911 | April (Census) | .. 6,119 | 1923 | „ .. | .. | 13,950 |

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

The capital value of property in the Shire of Mildura in 1913 was £1,294,160. In 1923 in the same area it had risen to £3.460,000. The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1923, were as follows :—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION TRUST, 1922–23.

| *Receipts.* | £ | *Payments.* | £ |
|---|---|---|---|
| Horticultural Rates .. | 40,784 | Wages and Salaries .. | 15,461 |
| Special Waterings, &c. .. | 7,711 | Firewood .. .. | 18,343 |
| Miscellaneous .. .. | 5,722 | Interest, Sinking Fund and Depreciation .. .. | 7,331 |
| | | Miscellaneous .. .. | 4,910 |
| Total .. .. | 54,217 | Total .. .. | 46,045 |

The extent of watering done represented 22,876 water acres in 1917–18, 39,895 acres in 1918–19, 41,808 acres in 1919–20, 35,632 acres in 1920–21, 44,150 acres in 1921–22, and 42,807 acres in 1922–23.

## 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 1921, 1922, and 1923, and the average yearly amount of rainfall deduced from all available records to December, 1923, 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, 1923. |
| | 1921. | 1922. | 1923. | |
| | Inches. | Inches. | Inches. | Inches. |
| Glenelg and Wannon Rivers .. | 24.77 | 24.42 | 29.75 | 25.80 |
| Fitzroy, Eumeralla, and Merri Rivers | 28.89 | 27.06 | 32.61 | 28.38 |
| Hopkins River and Mt. Emu Creek.. | 23.63 | 23.27 | 29.55 | 25.13 |
| Mt. Elephant and Lake Corangamite | 24.56 | 23.43 | 27.00 | 24.69 |
| Cape Otway Forest .. .. | 39.56 | 43.74 | 47.12 | 38.83 |
| Moorabool and Barwon Rivers .. | 25.61 | 23.17 | 24.47 | 24.16 |
| Werribee and Saltwater Rivers .. | 25.21 | 21.61 | 19.88 | 23.55 |
| Yarra River and Dandenong Creek .. | 34.77 | 35.37 | 34.19 | 33.81 |
| Koo-wee-rup Swamp .. .. | 34.47 | 37.29 | 37.19 | 36.01 |
| South Gippsland .. .. | 35.97 | 38.52 | 43.48 | 39.09 |
| Latrobe and Thomson Rivers .. | 33.18 | 35.94 | 39.12 | 36.33 |
| Macallister and Avon Rivers .. | 19.45 | 24.18 | 22.73 | 23.82 |
| Mitchell River .. .. .. | 22.54 | 25.09 | 24.37 | 26.17 |
| Tambo and Nicholson Rivers .. | 23.30 | 25.62 | 23.08 | 27.59 |
| Snowy River .. .. .. | 27.69 | 28.64 | 28.42 | 34.70 |
| Murray River .. .. .. | 20.66 | 11.66 | 17.17 | 16.73 |
| Mitta Mitta and Kiewa Rivers .. | 39.71 | 26.54 | 38.22 | 35.10 |
| Ovens River .. .. .. | 42.62 | 25.05 | 34.60 | 33.54 |
| Goulburn River .. .. | 30.69 | 21.25 | 27.36 | 26.85 |
| Campaspe River .. .. .. | 28.07 | 16.05 | 22.14 | 23.00 |
| Loddon River .. .. .. | 24.53 | 14.21 | 20.62 | 20.30 |
| Avoca River .. .. .. | 20.74 | 13.26 | 17.39 | 17.16 |
| Avon and Richardson Rivers .. | 18.80 | 15.30 | 17.34 | 15.97 |
| Eastern Wimmera .. .. | 23.47 | 21.11 | 23.70 | 21.40 |
| Western Wimmera .. .. | 19.97 | 20.28 | 23.82 | 20.04 |
| Mallee .. .. .. | 14.96 | 9.09 | 12.95 | 12.67 |
| Weighted Averages .. | 25.35 | 21.35 | 25.34 | 24.29 |

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 12.67 inches per annum, as compared with 24.29 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 1923 and the quarterly averages up to 1923 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 | 86 | 344 | 1,003 | 757 | 1,109 | 908 | 777 | 571 |
| Fitzroy, Eumeralla, and Merri Rivers | 187 | 421 | 998 | 835 | 1,311 | 958 | 765 | 624 |
| Hopkins River and Mt. Emu Creek | 161 | 420 | 775 | 704 | 1,162 | 808 | 857 | 581 |
| Mt. Elephant and Lake Corangamite | 174 | 426 | 692 | 697 | 1,079 | 765 | 755 | 581 |
| Cape Otway Forest | 288 | 585 | 1,585 | 1,173 | 1,606 | 1,287 | 1,233 | 838 |
| Moorabool and Barwon Rivers | 155 | 456 | 638 | 658 | 905 | 705 | 749 | 597 |
| Werribee and Saltwater Rivers | 90 | 504 | 535 | 604 | 662 | 650 | 701 | 597 |
| Yarra River and Dandenong Creek | 317 | 678 | 687 | 871 | 1,070 | 927 | 1,345 | 905 |
| Koo-wee-rup Swamp | 362 | 672 | 850 | 996 | 1,250 | 1,013 | 1,257 | 920 |
| South Gippsland | 368 | 766 | 1,186 | 1,095 | 1,651 | 1,144 | 1,143 | 904 |
| Latrobe and Thomson Rivers | 380 | 695 | 924 | 923 | 1,418 | 1,036 | 1,190 | 979 |
| Macallister and Avon Rivers | 204 | 601 | 500 | 527 | 791 | 602 | 778 | 652 |
| Mitchell River | 162 | 643 | 495 | 592 | 920 | 698 | 860 | 684 |
| Tambo and Nicholson Rivers | 179 | 690 | 373 | 657 | 893 | 685 | 863 | 727 |
| Snowy River | 194 | 809 | 401 | 888 | 1,117 | 914 | 1,130 | 859 |
| Murray River | 38 | 305 | 670 | 494 | 609 | 491 | 400 | 383 |
| Mitta Mitta and Kiewa Rivers | 114 | 626 | 1,212 | 968 | 1,246 | 1,103 | 1,250 | 813 |
| Ovens River | 52 | 519 | 1,372 | 998 | 1,188 | 1,108 | 848 | 729 |
| Goulburn River | 97 | 448 | 842 | 786 | 958 | 847 | 839 | 604 |
| Campaspe River | 54 | 403 | 841 | 690 | 895 | 731 | 424 | 476 |
| Loddon River | 49 | 344 | 825 | 613 | 780 | 634 | 408 | 439 |
| Avoca River | 48 | 272 | 712 | 529 | 707 | 551 | 272 | 364 |
| Avon and Richardson Rivers | 43 | 244 | 702 | 487 | 680 | 528 | 309 | 338 |
| Eastern Wimmera | 61 | 295 | 910 | 652 | 870 | 725 | 529 | 468 |
| Western Wimmera | 58 | 246 | 910 | 621 | 917 | 707 | 497 | 430 |
| Mallee | 33 | 224 | 584 | 366 | 474 | 396 | 204 | 281 |
| The whole State | 119 | 430 | 800 | 685 | 928 | 750 | 687 | 564 |

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 .. .. | 29·971 | 29·923 | 30·080 | 30·076 |
| Monthly range of pressure of air—Inches | 0·891 | 0·767 | 0·814 | 0·979 |
| Mean temperature of air in shade—°Fahr. | 57·7 | 66·6 | 59·4 | 50·0 |
| Mean daily range of temperature of air in shade—°Fahr. .. .. .. | 18·7 | 21·1 | 17·4 | 13·9 |
| Mean relative humidity. Saturation=100 | 66 | 60 | 70 | 76 |
| Mean rainfall in inches .. .. | 7·35 | 5·90 | 6·56 | 5·80 |
| Mean number of days of rain .. .. | 38 | 24 | 33 | 42 |
| Mean amount of spontaneous evaporation in inches .. .. .. .. | 10·21 | 17·25 | 7·82 | 3·62 |
| Mean daily amount of cloudiness—Scale 0 to 10 .. .. .. .. | 6·0 | 5·2 | 5·9 | 6·4 |
| Mean number of days of fog .. .. | 1 | 1 | 6 | 11 |

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1923 and for the past 68 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 1923. | Average for 68 Years. | Extremes between which the Yearly Average Values have oscillated in 68 years. | |
| | | | Highest. | Lowest. |
| Mean atmospheric pressure (inches).. | 29·946 | 30·012 | 30·106 | 29·945 |
| Highest ,, ,, ,, .. | 30·561 | 30·604 | 30·762 | 30·488 |
| Lowest ,, ,, ,, .. | 29·133 | 29·256 | 29·495 | 28·942 |
| Range (inches) .. .. | 1·428 | 1·348 | 1·719 | 1·104 |
| Mean temperature of air in shade (°Fahr.) .. .. .. | 58·6 | 58·4 | 59·9 | 57·3 |
| Mean daily maximum .. (°Fahr.) | 67·1 | 67·3 | 69·0 | 66·0 |
| Mean daily minimum .. ,, | 50·0 | 49·5 | 51·2 | 47·2 |
| Absolute maximum .. ,, | 106·1 | 105·2 | 111·2 | 96·6 |
| Absolute minimum .. ,, | 34·2 | 30·8 | 34·2 | 27·0 |
| Mean daily range .. ,, | 17·1 | 17·8 | 20·4 | 15·0 |
| Absolute annual range .. ,, | 71·9 | 74·4 | 82·6 | 66·0 |
| Solar Radiation (mean maxima) ,, | 114·9 | 117·9 | 127·6 | 106·0 |
| Terrestrial Radiation (mean minima) .. .. (°Fahr.) | 46·4 | 44·0 | 46·8 | 39·5 |
| Rainfall (in inches) .. .. | 22·64 | 25·61 | 38·04 | 15·61 |
| Number of wet days .. .. | 158 | 137 | 171 | 102 |
| Year's amount of free evaporation (in inches) .. .. .. | 40·26 | 38·90 | 45·66 | 31·59 |
| Percentage of humidity (saturation =100) .. .. .. | 63 | 68 | 76 | 62 |
| Cloudiness (scale 10 = overcast, 0 = clear) .. .. .. | 5·7 | 5·9 | 6·4 | 4·8 |
| Number of days of fog .. .. | 25 | 19 | 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 a Central Research Farm was established at Werribee, and it is there that the initiative with regard to practically all experimental and research work is now undertaken. The State farms at Rutherglen and Longerenong are used as district experimental stations for the North-East and the Wimmera respectively. 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 14,458 acres, comprising 5,955 acres at Dookie, 2,386 acres at Longerenong, 2,500 acres at Gunyah Gunyah, 2,800 acres at Olangolah, and 817 acres at Bullarto, were reserved as sites for colleges and experimental farms. The areas at Dookie and Longerenong are being used for the purpose for which they were reserved, but the other three are devoted to other uses.

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

The fee for students in residence at the agricultural colleges is £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. Part time classes are also held for those who are unable to devote full time to the subject. Another feature of the work at the school is the holding of regular classes of instruction in Agricultural Science for those desirous of taking the subject either in the Intermediate or the Leaving grade at the Annual Public Examinations conducted by the University. A practical training is obtained in the orchards, gardens, and nursery connected with the school; the course also includes lectures and demonstrations by various expert teachers. Excursions to up-to-date farms, orchards, and nurseries form part of the work of the school. In 1923 the students enrolled numbered 168.

**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, 1923.

| 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 | 13 | 6 | 4 |
| Hands employed | 42 | 36 | 54 | 17 | 6 |
| Students | 10 | 13 | 72 | 50 | 168 |
| | £ | £ | £ | £ | £ |
| Value of plant and machinery | 3,300 | 2,572 | 5,700 | 4,500 | 150 |
| Value of produce for year | 10,000 | 4,925 | 6,500 | 8,000 | 1,200 |
| Receipts— | | | | | |
| Government Grant | 12,920 | 8,200 | 3,558 | 1,700 | 2,110 |
| Fees | .. | .. | 2,317 | 1,798 | 116 |
| Sale of produce, &c. | 11,447 | 5,111 | 5,187 | 5,322 | 1,226 |
| Other | 401 | 8 | 83 | .. | 2 |
| Total receipts | 24,768 | 13,319 | 11,145 | 8,820 | 3,454 |
| Expenditure— | | | | | |
| Salaries— | | | | | |
| Professional Staff | 372 | 723 | 4,250 | 2,031 | 1,225 |
| General Staff | 6,403 | 6,687 | 6,925 | 2,343 | 1,100 |
| Buildings and maintenance | 1,570 | 2,198 | 11,628 | 5,210 | 317 |
| Other | 4,269 | 2,718 | 202 | 96 | 597 |
| Total expenditure | 12,614 | 12,326 | 23,005* | 9,680 | 3,239 |

* Excluding grant received from the Council of Agricultural Education.

GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1923—*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 .. .. | 430 | 225 | 325 | 443 | .. |
| Hay .. .. .. | 270 | 126 | 250 | 137 | 1 |
| Fruit trees, &c. .. .. | .. | 1½ | 16 | 20 | 14 |
| Vines .. .. .. | .. | 101 | 15 | 5 | ½ |
| Green fodder .. .. .. | 260 | 51 | 45 | 49 | .. |
| Other crops .. .. .. | 100 | 55 | 13 | .. | ½ |
| Total area under crop .. | 1,060 | 559½ | 664 | 654 | 15½ |
| Area of land in fallow .. .. | 750 | 250 | 400 | 423 | .. |
| Area under artificially sown grasses .. | 190 | 132 | .. | 32 | 9 |
| Area resting .. .. .. | .. | 131 | 600 | 555 | .. |
| Total area of arable land .. | 2,000 | 1,072½ | 1,664 | 1,664 | 24½ |
| Balance of area .. .. | 209 | 240½ | 4,291 | 722 | 8½ |
| Total area of farm .. .. | 2,209 | 1,313 | 5,955 | 2,386 | 33 |
| | No. | No. | No. | No. | No. |
| Live Stock— | | | | | |
| Horses .. .. .. .. | 124 | 47 | 90 | 48 | 3 |
| Dairy cows .. .. .. | 60 | 29 | 50 | 23 | 5 |
| All other cattle .. .. .. | 90 | 2 | 100 | 75 | 9 |
| Sheep .. .. .. .. | 880 | 658 | 2,500 | 786 | .. |
| Pigs .. .. .. .. | .. | 20 | 100 | 49 | .. |

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

A citriculturist has been appointed to take charge of the citrus areas. Special attention is being paid to the packing of fruit; classes are formed in the different districts and a special officer has been appointed to instruct the growers in this branch of horticulture, which is so vital to the efficient marketing of the produce.

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

The fear of introducing the fruit-flies *Tephritis tryoni* and *Halterophora capitata* and diseases arising from other causes has necessitated a thorough examination of fruit from Queensland, New South Wales,

and elsewhere. The fruit-fly question is a very grave one, and, should either of the above-named insects obtain a footing in Victoria, a great portion of the large and important fruit industry of our State will be practically ruined.

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

**Forestry.** The State Forests are controlled by a Commission of three, which was appointed in 1919. The State has a wooded area of about 8,000,000 acres, of which 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 which are referred to hereunder:—

(*a*) The coastal region, extending from the shore line some fifty miles northward, carries chiefly messmate and three species of stringybark. In Cape Otway district, however, bluegum, mountain ash, and spotted gum predominate; whilst, in the extreme south-east of the State, silvertop, small-fruited bluegum, bastard mahogany, bloodwood, and Gippsland grey box are found.

(*b*) The mountain region. In the western half of the State the predominant species in the hill forests are messmate, bluegum, manna gum, brown and red stringybarks, and yellow box. In the eastern half of the State the prevailing species are mountain ash, spotted gum, messmate, peppermint, red ash or 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, Anglesea, 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 1923–24 was £166,446, and the expenditure was £168,880. It is estimated that the quantity of timber produced in the rough in 1923–24 was 132,200,000 super feet. In addition, 372,600 tons measurement of fuel timber was produced.

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

**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., 1919-20 TO 1923-24.

| — | 1919-20. | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
|---|---|---|---|---|---|
| *Expenditure.* | £ | £ | £ | £ | £ |
| Department of Agriculture .. | 28,278 | 33,282 | 34,610 | 35,063 | 41,549 |
| Grants to Agricultural and Horticultural Societies, &c. .. | 675 | 975 | 675 | 675 | 775 |
| Development of Export Trade .. | 93,971 | 58,785 | 61,151 | 60,316 | 53,372 |
| Viticultural Education and Inspection of Vineyards .. | 5,000 | 6,112 | 6,881 | 6,334 | 4,454 |
| Maffra Beet Sugar Factory .. | 46,805 | 42,159 | 59,791 | 75,291 | 74,497 |
| Advances to Settlers for losses by bush fires, floods, &c. .. | 1,755 | 2,008 | 91 | 7,300 | 659 |
| Technical Agricultural Education, &c. .. | 23,095 | 28,518 | 26,136 | 26,123 | 31,824 |
| Publishing Agricultural Reports | 250 | 249 | 227 | 329 | 250 |
| Rabbit and Vermin Extermination .. .. .. | 36,672 | 36,158 | 40,766 | 47,410 | 85,489 |
| Stock and Dairy Branch | 28,396 | 35,731 | 42,442 | 43,887 | 48,627 |
| Labour Colonies .. .. | .. | .. | .. | .. | .. |
| State Forests and Nurseries .. | 86,142 | 145,790 | 154,023 | 157,347 | 168,880 |
| Miscellaneous .. .. | 3,172 | 2,999 | 2,428 | 3,104 | 6,006 |
| Total .. .. | 354,211 | 392,766 | 429,221 | 463,179 | 516,382 |
| *Revenue.* | | | | | |
| Department of Agriculture .. | 181,753 | 100,715 | 72,505 | 78,017 | 73,282 |
| State Forests .. .. | 96,889 | 138,679 | 154,611 | 163,038 | 166,446 |

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 1923-24 was £2,459,605—£1,577,411 having been expended on discharged soldiers' land settlement, £855,919 on closer settlement, and £26,275 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 95 per cent. of the total area under this crop. In recent years the chief extensions of the wheat-growing areas have been in the Mallee. In this district, which

has a rainfall at one time thought wholly inadequate, wheat growing was rendered practicable by the introduction of machinery specially suited to the conditions, the extension of railway lines, and storage of water for domestic and stock supplies; and, with more of these facilities being made available each year, further areas are gradually being brought under cultivation. An indication of the growing importance of the Mallee is afforded by recent figures, which show that, of the wheat produced in the State in the last five seasons, the proportion obtained from the Mallee was 30 per cent., as against slightly less than 5 per cent. in 1891–92. The area under cultivation in the Mallee last season for all purposes was 2,320,765 acres.

The area cultivated in the State in 1923–24 was 6,976,441 acres, as against an annual average of 6,181,465 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, which was £1,252,277 in 1900, averaged £3,082,280 in the last five seasons. The value of oversea exports of meats increased from £502,285 in 1900 to an annual average of £2,235,645 in the later period mentioned.

The increase in cultivation has been associated with new and improved farming methods. The chief of these are the practice of fallowing, the use of fertilizers, the selection of suitable seeds, and the increasing attention given to crop rotation. The more general adoption of improved methods in recent years has contributed greatly to the production of the State. The following table shows the progress of cultivation from period to period during the last 69 years:—

ACREAGE CULTIVATED ANNUALLY, 1855 TO 1924.

| Period or Year (ending in March). | Annual Average. | | |
|---|---|---|---|
| | Crop. | Fallow. | Total Cultivation. |
| | acres. | acres. | acres. |
| 1855–65 .. .. .. | 325,676 | 12,146 | 337,822 |
| 1865–75 .. .. .. | 624,377 | 57,274 | 681,651 |
| 1875–85 .. .. .. | 1,306,920 | 137,536 | 1,444,456 |
| 1885–95 .. .. .. | 2,109,326 | 364,282 | 2,473,608 |
| 1895–1905 .. .. .. | 3,022,914 | 524,197 | 3,547,111 |
| 1905–15 .. .. .. | 3,756,211 | 1,276,148 | 5,032,359 |
| 1915–16 .. .. .. | 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 |
| 1923–24 .. .. .. | 4,682,144 | 2,294,297 | 6,976,441 |

**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 nine seasons are given in the next table :—

ANNUAL ACREAGE OF FIVE PRINCIPAL CROPS, 1855 TO 1924.

| Period or Year (ending in March). | Average Annual Area of— | | | | |
|---|---|---|---|---|---|
| | Wheat. | Oats. | Barley. | Potatoes. | Hay. |
| | acres. | acres. | acres. | acres. | acres. |
| 1855–65 .. | 119,001 | 83,296 | 4,843 | 24,123 | 80,117 |
| 1865–75 .. | 278,077 | 129,384 | 19,262 | 36,744 | 117,393 |
| 1875–85 .. | 776,031 | 147,343 | 41,188 | 39,089 | 226,775 |
| 1885–95 .. | 1,236,501 | 210,901 | 64,310 | 48,009 | 437,087 |
| 1895–1905 .. | 1,898,280 | 340,957 | 52,829 | 45,243 | 540,472 |
| 1905–15 .. | 2,190,336 | 390,642 | 60,378 | 56,272 | 848,587 |
| 1915–16 .. | 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 |
| 1923–24 .. | 2,454,117 | 520,654 | 56,564 | 59,306 | 1,277,606 |

**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 nine seasons were as follows :—

ANNUAL PRODUCTION OF PRINCIPAL CROPS, 1855 TO 1924.

| Period or Year (ending in March). | Average Annual Production of— | | | | |
|---|---|---|---|---|---|
| | Wheat. | Oats. | Barley. | Potatoes. | Hay. |
| | bushels. | bushels. | bushels. | tons. | tons. |
| 1855–65 .. | 2,198,874 | 2,068,648 | 103,575 | 62,723 | 111,806 |
| 1865–75 .. | 4,385,814 | 2,636,747 | 390,337 | 111,800 | 153,852 |
| 1875–85 .. | 8,593,308 | 3,297,468 | 799,938 | 135,614 | 276,771 |
| 1885–95 .. | 12,268,905 | 4,649,393 | 1,187,007 | 170,905 | 547,092 |
| 1895–1905 .. | 14,032,145 | 6,649,453 | 947,580 | 134,357 | 672,982 |
| 1905–15 .. | 22,906,743 | 7,342,468 | 1,243,442 | 158,445 | 1,084,726 |
| 1915–16 .. | 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 |
| 1923–24 .. | 37,795,704 | 9,366,205 | 1,455,435 | 238,520 | 1,541,287 |

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

## PERCENTAGE IN EACH DISTRICT OF TOTAL AREA UNDER EACH PRINCIPAL CROP, 1923–24.

| District. | Percentage in each District of Area under— | | | | | |
|---|---|---|---|---|---|---|
| | Wheat. | Oats. | Barley. | Potatoes. | Hay. | Other Crops. |
| Central .. .. .. | 0·40 | 5·25 | 37·33 | 50·52 | 19·25 | 32·90 |
| North-Central .. .. | 0·39 | 2·28 | 4·13 | 18·87 | 6·20 | 2·75 |
| Western .. .. .. | 2·19 | 8·77 | 13·65 | 12·84 | 13·30 | 5·04 |
| Wimmera .. .. | 25·93 | 23·79 | 9·75 | 0·21 | 15·34 | 1·98 |
| Mallee .. .. .. | 46·91 | 33·72 | 7·05 | 0·02 | 18·65 | 12·29 |
| Northern .. .. .. | 22·34 | 22·06 | 9·71 | 0·01 | 16·28 | 15·83 |
| North-Eastern .. .. | 1·50 | 2·78 | 1·16 | 1·51 | 4·78 | 8·34 |
| Gippsland .. .. | 0·34 | 1·35 | 17·22 | 16·02 | 6·20 | 20·87 |

NOTE.—For counties contained in each District, see table on page 487.

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, 1923–24.

| District. | Percentage of Area under all Crops devoted to— | | | | | |
|---|---|---|---|---|---|---|
| | Wheat. | Oats. | Barley. | Potatoes. | Hay. | Other Crops. |
| Central .. .. .. | 2.24 | 6·25 | 4·83 | 6·85 | 56·22 | 23·61 |
| North-Central .. .. | 7·81 | 9·70 | 1·90 | 9·11 | 64·45 | 7·03 |
| Western .. .. | 17·89 | 15·19 | 2·57 | 2·53 | 56·55 | 5·27 |
| Wimmera .. .. | 65·74 | 12·79 | 0·57 | 0·01 | 20·25 | 0·64 |
| Mallee .. .. .. | 71·61 | 10·92 | 0·25 | 0·00 | 14·82 | 2·40 |
| Northern .. .. .. | 59·19 | 12·40 | 0·59 | 0·60 | 22·46 | 5·36 |
| North-Eastern .. .. | 26·33 | 10·34 | 0·47 | 0·64 | 43·61 | 18·61 |
| Gippsland .. .. | 4·61 | 3·92 | 5·43 | 5·30 | 44·15 | 36·59 |
| Total for Victoria .. | 52·41 | 11·12 | 1·21 | 1·27 | 27·29 | 6·70 |

NOTE.—For counties contained in each District, see table on page 487.

**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 last five years :—

AREA AND PRODUCTION OF FIVE PRINCIPAL CROPS PER HEAD OF POPULATION, 1919–20 TO 1923–24.

| Year ended March— | Wheat. | Oats. | Barley. | Potatoes. | Hay. |
|---|---|---|---|---|---|
| | Area per Head of Population. | | | | |
| | acres. | acres. | acres. | acres. | acres. |
| 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 |
| 1924 .. .. | 1·51 | ·32 | ·03 | ·04 | ·79 |
| | Produce per Head of Population. | | | | |
| | bushels. | bushels. | bushels. | tons. | tons. |
| 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 |
| 1924 .. .. | 23·25 | 5·76 | ·89 | ·15 | ·95 |

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. |
| | £ | £ | £ | £ | £ |
| 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 |
| 1923–24 .. .. | 8,189,069 | 1,455,331 | 262,210 | 701,229 | 5,229,162 |
| | £ *s.* *d.* | £ *s.* *d.* | £ *s.* *d.* | £ *s.* *d.* | £ *s.* *d.* |
| Value per acre 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 |
| „ „ 1923–24 | 3 6 9 | 2 15 11 | 4 12 9 | 11 16 6 | 4 1 10 |

The value of the five principal crops was £15,837,001 in 1923–24, as against £17,252,465 in the previous year, £16,811,093 in 1921–22, £21,896,279 in 1920–21, and £17,686,258 in 1919–20.

**Wheat production.**

On the experience of the past five seasons the area under wheat for grain represented 53 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 four seasons :—

WHEAT PRODUCTION, 1860 TO 1924.

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

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 fourteen seasons was 12·97 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, 163,826 acres of wheat were cut for hay last season, so that the total area under wheat in 1923–24 was 2,617,943 acres.

The production of wheat in the other Australian States in 1923–24 was as follows :—New South Wales, 33,040,000 bushels; South Australia, 34,551,955 bushels; Western Australia, 18,920,271 bushels; Queensland, 243,713 bushels; and Tasmania, 305,628 bushels. The total production for the Commonwealth was 124,857,271 bushels.

**Wheat growing in counties.**

The principal wheat growing areas are the Wimmera, Mallee, and Northern districts. Although other districts provide only small proportions of the total area they are not to be regarded as unsuitable for wheat growing, as their average yield per acre is usually greater than in the areas mentioned. The production of wheat in different counties for each of the last three seasons is shown in the following table :—

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

| Districts and Counties. | Year ended March. | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|
| | Area. | | | Produce. | | | Average per Acre. | | |
| | 1922. | 1923. | 1924. | 1922. | 1923. | 1924. | 1922. | 1923. | 1924. |
| | acres. | acres. | acres. | bushels. | bushels. | bushels. | bush. | bush. | bush. |
| **Central—** | | | | | | | | | |
| Bourke .. | 3,212 | 3,598 | 3,438 | 58,403 | 69,281 | 66,877 | 18·18 | 19·26 | 19·45 |
| Grant .. | 9,759 | 6,628 | 5,812 | 170,429 | 120,755 | 107,589 | 17·46 | 18·22 | 18·51 |
| Mornington .. | 277 | 396 | 433 | 3,591 | 7,429 | 7,828 | 12·96 | 18·76 | 18·08 |
| Evelyn .. | 68 | 108 | 107 | 999 | 1,959 | 2,155 | 14·69 | 18·14 | 20·14 |
| **North-Central—** | | | | | | | | | |
| Anglesey .. | 963 | 768 | 1,152 | 12,422 | 12,486 | 23,952 | 12·90 | 16·26 | 20·79 |
| Dalhousie .. | 1,936 | 2,224 | 2,051 | 29,305 | 39,904 | 32,917 | 15·14 | 17·94 | 16·05 |
| Talbot .. | 12,657 | 9,085 | 6,389 | 230,027 | 148,533 | 99,560 | 18·17 | 16·35 | 15·58 |
| **Western—** | | | | | | | | | |
| Grenville .. | 14,439 | 12,473 | 3,889 | 225,576 | 186,168 | 53,507 | 15·62 | 14·93 | 13·76 |
| Polwarth .. | 48 | 78 | 18 | 683 | 1,025 | 371 | 14·23 | 13·14 | 20·61 |
| Heytesbury | 3 | 4 | .. | 90 | 46 | .. | 30·00 | 11·50 | .. |
| Hampden .. | 10,262 | 14,367 | 9,037 | 176,714 | 263,621 | 133,450 | 17·22 | 18·35 | 14·77 |
| Ripon .. | 45,863 | 55,351 | 37,736 | 900,393 | 1,085,819 | 578,469 | 19·63 | 19·62 | 15·33 |
| Villiers .. | 2,075 | 2,097 | 397 | 32,066 | 32,907 | 6,278 | 15·45 | 15·69 | 15·81 |
| Normanby .. | 1,413 | 1,225 | 642 | 20,116 | 21,254 | 11,610 | 14·24 | 17·35 | 18·08 |
| Dundas .. | 4,889 | 4,730 | 1,965 | 68,023 | 73,606 | 22,353 | 13·91 | 15·56 | 11·38 |
| Follett .. | 503 | 540 | 77 | 7,946 | 8,357 | 976 | 15·80 | 15·48 | 12·68 |
| **Wimmera—** | | | | | | | | | |
| Lowan .. | 175,753 | 186,281 | 136,167 | 3,784,022 | 3,942,804 | 2,380,800 | 21·53 | 21·17 | 17·48 |
| Borung .. | 399,993 | 402,825 | 379,007 | 11,218,679 | 9,151,897 | 8,962,260 | 28·05 | 22·72 | 23·65 |
| Kara Kara | 141,267 | 145,521 | 121,129 | 3,115,212 | 2,783,428 | 2,191,925 | 22·05 | 19·12 | 18·10 |
| **Mallee—** | | | | | | | | | |
| Millewa .. | 2,980 | 2,435 | 1,491 | 18,849 | 7,884 | 16,735 | 6·33 | 3·24 | 11·22 |
| Weeah .. | 196,845 | 197,049 | 188,167 | 1,749,843 | 1,725,094 | 1,973,614 | 8·89 | 8·75 | 10.49 |
| Karkarooc .. | 558,420 | 572,498 | 589,959 | 6,077,599 | 4,661,460 | 7,293,987 | 10·88 | 8·14 | 12·36 |
| Tatchera .. | 347,611 | 370,377 | 371,662 | 4,563,124 | 2,743,941 | 4,836,528 | 13·13 | 7·41 | 13·01 |
| **Northern—** | | | | | | | | | |
| Gunbower .. | 34,585 | 35,891 | 30,425 | 545,183 | 384,385 | 382,809 | 15·76 | 10·71 | 12·58 |
| Gladstone .. | 118,395 | 115,209 | 85,075 | 2,208,515 | 1,689,102 | 1,111,661 | 18·65 | 14·66 | 13·07 |
| Bendigo .. | 128,715 | 121,520 | 94,627 | 2,219,737 | 1,529,560 | 1,307,496 | 17·25 | 12·59 | 13·82 |
| Rodney .. | 89,237 | 80,871 | 70,261 | 1,407,542 | 1,104,218 | 1,031,530 | 15·77 | 13·65 | 14·68 |
| Moira .. | 266,383 | 254,931 | 267,824 | 4,483,925 | 3,145,685 | 4,320,837 | 16·83 | 12·34 | 16·13 |
| **North-Eastern—** | | | | | | | | | |
| Delatite .. | 6,793 | 8,129 | 6,726 | 83,112 | 136,692 | 124,759 | 12·23 | 16·82 | 18·55 |
| Bogong .. | 30,306 | 29,646 | 29,857 | 341,831 | 441,893 | 471,081 | 11·28 | 14·91 | 15·78 |
| Benambra .. | 217 | 205 | 332 | 3,808 | 3,570 | 8,290 | 17·55 | 17·41 | 25·00 |
| Wonnangatta | .. | .. | .. | .. | .. | .. | .. | .. | .. |
| **Gippsland—** | | | | | | | | | |
| Croajingolong | 63 | 51 | 39 | 1,108 | 752 | 754 | 17·59 | 14·75 | 19·33 |
| Tambo .. | 95 | 43 | 37 | 1,174 | 767 | 806 | 12·36 | 17·84 | 21·78 |
| Dargo .. | 95 | 167 | 238 | 1,583 | 3,672 | 7,515 | 16·66 | 21·99 | 31·58 |
| Tanjil .. | 4,507 | 6,121 | 7,279 | 95,366 | 150,295 | 212,718 | 21·16 | 24·55 | 29·22 |
| Buln Buln .. | 571 | 872 | 672 | 10,601 | 16,971 | 11,707 | 18·56 | 19·46 | 17·42 |
| **Total** .. | 2,611,198 | 2,644,314 | 2,454,117 | 43,867,596 | 35,697,220 | 37,795,704 | 16·80 | 13·50 | 15·40 |

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, 1914-15 TO 1923-24.

| District and County. | Average Yield of Wheat per Acre (in Bushels) during Year ended March— | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | 1915. | 1916. | 1917. | 1918. | 1919. | 1920. | 1921. | 1922. | 1923. | 1924. |
| **Western District—** | | | | | | | | | | |
| Ripon .. .. | 5·03 | 21·58 | 13·33 | 13·27 | 10·06 | 16·26 | 21·74 | 19·63 | 19·62 | 15·33 |
| **Wimmera District—** | | | | | | | | | | |
| Lowan .. .. | 1·84 | 16·78 | 17·93 | 16·52 | 15·78 | 13·47 | 20·94 | 21·53 | 21·17 | 17·48 |
| Borung .. .. | ·95 | 19·27 | 22·49 | 22·62 | 20·01 | 15·76 | 23·79 | 28·05 | 22·72 | 23·65 |
| Kara Kara .. | 1·09 | 19·36 | 19·66 | 17·68 | 14·39 | 14·10 | 21·25 | 22·05 | 19·12 | 18·10 |
| **Mallee District—** | | | | | | | | | | |
| Weeah .. .. | ·18 | 12·26 | 14·56 | 10·21 | 6·38 | 3·43 | 14·28 | 8·89 | 8·75 | 10·49 |
| Karkarooc .. | ·35 | 10·62 | 14·78 | 10·94 | 7·15 | 3·29 | 13·42 | 10·88 | 8·14 | 12·36 |
| Tatchera .. | ·37 | 10·09 | 15·80 | 12·30 | 9·44 | 4·60 | 13·65 | 13·13 | 7·41 | 13·01 |
| **Northern District—** | | | | | | | | | | |
| Gunbower .. | ·23 | 15·33 | 15·89 | 14·23 | 8·74 | 8·96 | 15·27 | 15·76 | 10·71 | 12·58 |
| Gladstone .. | 1·52 | 17·94 | 19·10 | 14·17 | 11·52 | 12·08 | 18·72 | 18·65 | 14·66 | 13·07 |
| Bendigo .. | ·72 | 19·18 | 17·11 | 13·85 | 11·33 | 9·30 | 14·56 | 17·25 | 12·59 | 13·82 |
| Rodney .. | 1·05 | 20·15 | 14·69 | 12·67 | 10·80 | 6·85 | 15·79 | 15·77 | 13·65 | 14·68 |
| Moira .. .. | 1·74 | 17·88 | 14·44 | 11·38 | 10·70 | 4·79 | 17·46 | 16·83 | 12·34 | 16·13 |

**Varieties of Wheat.**

Australian wheat is noted for its hard, white, and dry qualities, and, on account of the whiteness of the flour made therefrom, it is much sought after by overseas millers for the purpose of mixing with other wheats.

Enquiries in regard to the varieties of wheat sown for the 1924–25 season were made with the view of ascertaining those most in favour amongst Victorian growers, and of enabling the Agricultural Department to advise growers as to the most suitable varieties to grow in a particular district.

An analysis of the replies of the growers who supplied the information is given in the appended table :—

VARIETIES OF WHEAT SOWN IN VARIOUS DISTRICTS OF THE STATE, 1924–25.

| Variety principally sown. | Wheat. | | | | | |
|---|---|---|---|---|---|---|
| | Districts. | | | | Number of Growers. | |
| | Wimmera. | Mallee. | Northern. | Others. | Total. | Per cent. |
| | number. | number. | number. | number. | number. | |
| Federation .. .. | 2,055 | 927 | 2,157 | 624 | 5,763 | 60·6 |
| Major .. .. | 60 | 103 | 470 | 262 | 895 | 9·4 |
| Currawa .. .. | 9 | 436 | 13 | 63 | 521 | 5·5 |
| Turvey .. .. | 5 | 9 | 48 | 301 | 363 | 3·8 |
| Penny .. .. | 51 | 197 | 34 | 44 | 326 | 3·4 |
| Yandilla King .. | 13 | 154 | 68 | 43 | 278 | 2·9 |
| Minister .. .. | 31 | 29 | 68 | 47 | 175 | 1·8 |
| Dart's Imperial .. | 5 | 79 | 34 | 23 | 141 | 1·5 |
| Mac's White .. | .. | 110 | .. | 15 | 125 | 1·3 |
| Ruff's Imperial .. | 108 | 5 | 2 | 3 | 118 | 1·2 |
| Gluyas .. .. | .. | 113 | .. | 2 | 115 | 1·2 |
| Bald's Early .. | 1 | 76 | 29 | 4 | 110 | 1·2 |
| Joffre .. .. | .. | 35 | 23 | 33 | 91 | 1·0 |
| Others (20) .. .. | 58 | 185 | 118 | 126 | 487 | 5·2 |
| Total .. | 2,396 | 2,458 | 3,064 | 1,590 | 9,508 | 100·0 |

**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 60·95 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 1913–14 :—

F.A.Q. WHEAT STANDARD, 1915 TO 1924.

| Season ended March— | Weight of Bushel (f.a.q.). | Season ended March— | Weight of Bushel (f.a.q.). |
|---|---|---|---|
| | lbs. | | lbs. |
| 1915 .. .. | 62 | 1920 .. .. | 62 |
| 1916 .. .. | 61 | 1921 .. .. | 60½ |
| 1917 .. .. | 60¼ | 1922 .. .. | 60 |
| 1918 .. .. | 60 | 1923 .. .. | 60¼ |
| 1919 .. .. | 62½ | 1924 .. .. | 61 |

**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 1923–24 the area harvested for oats in Victoria was 520,654 acres, from which a yield of 9,366,205 bushels was obtained, giving an average of 17·99 bushels to the acre. The appended statement shows the harvest results for this crop for each of the last nine seasons, and for ten-year periods prior thereto back to 1865 :—

OATS GROWN, 1865 TO 1924.

| Period or Year (ending in March). | Annual Average. | | |
|---|---|---|---|
| | Area under Crop. | Produce. | Average per Acre. |
| | acres. | bushels. | bushels. |
| 1865–75 .. .. .. | 129,384 | 2,636,747 | 20·38 |
| 1875–85 .. .. .. | 147,343 | 3,297,468 | 22·38 |
| 1885–95 .. .. .. | 210,901 | 4,649,393 | 22·05 |
| 1895–1905 .. .. .. | 340,957 | 6,649,453 | 19·50 |
| 1905–15 .. .. .. | 390,643 | 7,342,468 | 18·79 |
| 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 |
| 1924 .. .. .. | 520,654 | 9,366,205 | 17·99 |

In addition to the area for grain shown for last season there were 1,084,136 acres of oats cut for hay, so that the total area sown with oats in 1923–24 was 1,604,790 acres. During 1923–24 there were exported from Victoria to oversea countries 164,653 bushels of oats and 31,234 lbs. of oatmeal.

**Varieties of Oats.** Enquiries in regard to the different kinds of oats sown for the 1924–25 season showed that, of those growers who supplied the information, 91 per cent. planted principally Algerian and 8 per cent. Mortgage Lifter oats ; the principal kinds planted by the remaining 1 per cent. of growers included eight varieties.

**Barley.** The area under barley in 1923-24 was 56,564 acres, of which 39,588 were under malting, and 16,976 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, 1919-20 TO 1923-24.

| Year ended March— | Area under Crop. | | Produce. | | Average per Acre. | | |
|---|---|---|---|---|---|---|---|
| | Malting. | Other. | Malting. | Other. | Malting. | Other. | Total. |
| | acres. | acres. | bushels. | bushels. | bushels. | bushels. | bushels. |
| 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 |
| 1924 .. | 39,588 | 16,976 | 1,037,144 | 418,291 | 26·20 | 24·64 | 25·73 |

During 1923-24, 1,731,903 bushels of barley were used locally in the production of 1,720,128 bushels of malt.

**Potatoes.** The area planted with potatoes in 1923-24 was 59,306 acres, and the production was 238,520 tons, which represented a yield of 4·02 tons per acre, as compared with 2·40 tons in the previous season and 2·72 tons in 1921-22. The following table shows the potato returns for the last thirty-four years :—

POTATO PRODUCTION, 1890 TO 1924.

| Period or Year (ending in June). | Annual Average. | | |
|---|---|---|---|
| | Area under Crop. | Produce. | Average per Acre. |
| | acres. | tons. | tons. |
| 1890–1900 .. .. .. | 47,738 | 155,432 | 3·26 |
| 1900–10 .. .. .. | 48,857 | 142,307 | 2·91 |
| 1910–20 .. .. .. | 60,127 | 166,677 | 2.77 |
| 1921 .. .. .. | 62,687 | 171,628 | 2·74 |
| 1922 .. .. .. | 63,895 | 173,660 | 2·72 |
| 1923 .. .. .. | 61,741 | 148,354 | 2·40 |
| 1924 .. .. .. | 59,306 | 238,520 | 4·02 |

The estimated value of the potatoes produced last season was £701,229, as against £1,040,662 in the preceding year, £555,111 in 1921-22, £586,458 in 1920-21, and £1,328,640 in 1919-20.

**Hay.** In 1924 the production of hay amounted to 1,541,287 tons, as against 1,665,089 tons in the previous year, 1,548,453 tons in 1922, and 1,984,854 tons in 1921. The quantity of straw returned for the season 1923-24 was 44,451 tons as against 51,096 tons for the previous year. The hay returns for decennial

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

HAY PRODUCTION, 1890 TO 1924.

| Period or Year (ending in March). | Annual Average. | | |
|---|---|---|---|
| | Area cut for Hay. | Produce. | Average per Acre. |
| | acres. | tons. | tons. |
| 1890–1900 .. .. .. | 467,668 | 576,618 | 1·23 |
| 1900–10 .. .. .. | 664,387 | 894,108 | 1·35 |
| 1910–20 .. .. .. | 984,797 | 1,269,767 | 1·29 |
| 1921 .. .. .. | 1,333,397 | 1,984,854 | 1·49 |
| 1922 .. .. .. | 1,159,135 | 1,548,453 | 1·34 |
| 1923 .. .. .. | 1,261,408 | 1,665,089 | 1·32 |
| 1924 .. .. .. | 1,277,606 | 1,541,287 | 1·21 |

The estimated value of the hay crop was £5,229,162 for 1924, as compared with £6,327,338 for 1923, £4,413,091 for 1922, and £5,259,863 for 1921. Of the total hay produced in 1924, 1,303,113 tons were oaten, 188,109 tons were wheaten, and 50,065 tons were made from lucerne and other crops; the yields per acre of these varieties of hay were 1·20, 1·15, and 1·69 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, 1915 TO 1924.

| 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. | |
| 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 | |
| 1924 .. | 4 3 | 3 1¼ | 3 9¼ | 3 2¼ | 72 0 | 111 0 | 53 0 | |

**Other Crops.** The area under other than principal crops and the production since March, 1921, are shown in the subjoined table:—

OTHER THAN PRINCIPAL CROPS, 1921-22 TO 1923-24.

| Crop. | Area. | Production. | Area. | Production. | Area. | Production. |
|---|---|---|---|---|---|---|
| | 1921–22. | | 1922–23. | | 1923–24. | |
| | acres. | bushels. | acres. | bushels. | acres. | bushels. |
| Maize.. .. | 23,227 | 951,960 | 25,846 | 879,915 | 29,104 | 1,464,731 |
| Rye .. .. | 1,320 | 14,442 | 1,291 | 15,718 | 899 | 11,151 |
| Peas .. .. | 8,659 | 166,474 | 11,149 | 214,544 | 11,216 | 233,047 |
| | | tons. | | tons. | | tons. |
| Mangel-wurzel .. | 560 | 7,768 | 684 | 8,120 | 854 | 13,569 |
| Beet, Carrots, Parsnips and Turnips | 401 | 2,134 | 433 | 1,878 | 538 | 4,222 |
| Onions .. | 6,158 | 31,586 | 6,954 | 44,409 | 4,714 | 31,683 |
| Green Forage .. | 89,410 | .. | 102,451 | .. | 107,371 | .. |
| | | bushels. | | bushels. | | bushels. |
| Grass and Clover Seeds .. | 1,800 | 12,226 | 1,468 | 7,859 | 1,306 | 6,466 |
| | | Cwt. | | Cwt. | | Cwt. |
| Hops .. | 104 | 1,812 | 194 | 2,071 | 224 | 2,481 |
| Tobacco .. | 604 | 3,735 | 890 | 4,151 | 1,047 | † |
| Vines—Grapes | 33,175 | 1,314,839 | 38,892 | 1,879,964 | 42,599 | 2,707,729 |
| | | 440 fibre | | 435 fibre | | .. |
| | | 4,187 seed | | 1,725 seed | | .. |
| Flax .. .. | 1,640 | 20 tow | 590 | 25 tow | Nil | .. |
| | | 960 tons | | .. | | .. |
| | | of straw | | | | .. |
| Gardens and Orchards .. | 89,491 | .. | 86,014 | .. | 85,570 | .. |
| Minor Crops .. | 7,145* | .. | 9,082* | .. | 12,237* | .. |
| Land in Fallow | 2,052,964 | .. | 2,186,881 | .. | 2,294,297 | .. |
| Artificial Grasses | 1,032,104 | .. | 957,454 | .. | 938,547 | .. |

* For details see page 502. † Not available.

**Maize.** The area under maize for grain in 1923–24 was 29,104 acres, and the production was 1,464,731 bushels, which represented a yield of 50·33 bushels per acre, as compared with 34·04 bushels in the preceding season, 40·99 bushels in 1921–22, and 44·14 bushels in 1920–21. Of the total production for last season 83 per cent. was obtained from the Gippsland district. The area, total production, and produce per acre are given in the next table for each of the last four seasons and for periods prior thereto back to 1890 :—

MAIZE PRODUCTION, 1890 TO 1924.

| Period or Year (ending in June). | Annual Average. | | |
|---|---|---|---|
| | Area under Maize for Grain. | Production. | Produce per Acre. |
| | acres. | bushels. | bushels. |
| 1890–1900 .. .. .. | 8,688 | 452,907 | 52·13 |
| 1900–10 .. .. .. | 12,082 | 716,158 | 59·27 |
| 1910–20 .. .. .. | 20,811 | 922,461 | 44·33 |
| 1921 .. .. .. | 24,149 | 1,065,880 | 44·14 |
| 1922 .. .. .. | 23,227 | 951,960 | 40·99 |
| 1923 .. .. .. | 25,846 | 879,915 | 34·04 |
| 1924 .. .. .. | 29,104 | 1,464,731 | 50·33 |

On the average of the last five seasons the yield per acre was 41·7 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 1923–24 was 899 acres, from which 11,151 bushels of grain were obtained. The production was 15,718 bushels in the previous season, 14,442 bushels in 1921–22, and 21,359 bushels in 1920–21. Rye was grown principally in the counties of Delatite and Talbot last season. The area under this crop in the two counties mentioned was about 60 per cent. of the total for the whole State.

**Peas.** The area under peas in 1923–24 was 11,216 acres, and the return, 233,047 bushels, there being a slight increase in each case on the figures for the previous year. Last season peas were grown to some extent in all districts with the exception of the Mallee. The counties from which the largest returns were obtained and the yields of these counties were as follows:—Grant, 84,732 bushels; Bourke, 28,228 bushels; Tanjil, 24,858 bushels; Buln Buln, 16,933 bushels; and Mornington, 14,556 bushels. The production of peas in the five counties mentioned was equal to 73 per cent. of the total for the whole State.

**Mangel-wurzel** In 1923–24 there were 854 acres under mangel-wurzel, as against 684 in the previous season, 560 in 1921–22, 524 in 1920–21, 547 in 1919–20, and 581 in 1918–19. The production last year was 13,569 tons, as compared with an annual average of 7,767 tons for the preceding five-year period. Mangolds are grown principally in the Gippsland, Western, and Central districts. The production during last season in the districts mentioned represented 98 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 1923–24 the extent of land sown was 538 acres, as against 433 in the preceding year, 401 in 1921–22, 410 in 1920–21, 460 in 1919–20, and 407 in 1918–19. The produce for last year was 4,222 tons, as compared with 1,878 in the previous season, 2,134 in 1921–22, and 2,289 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 7,983 tons from 1,115 acres; in Bourke, 5,039 tons from 680 acres; in Villiers, 4,428 tons from 600 acres; in Buln Buln, 4,401 tons from 673 acres; in Grant, 4,090 tons from 692 acres; in Polwarth, 3,209 tons from 452 acres; and in Mornington

2,395 tons from 458 acres. The following statement shows the area and yield for each of the last five years :—

ONION CULTIVATION, 1919-20 TO 1923-24.

| Year. | Area. | Produce. |
|---|---|---|
| | acres. | tons. |
| 1919-20 .. .. .. .. | 6,863 | 27,032 |
| 1920-21 .. .. .. .. | 8,000 | 42,985 |
| 1921-22 .. .. .. .. | 6,158 | 31,586 |
| 1922-23 .. .. .. .. | 6,954 | 44,409 |
| 1923-24 .. .. .. .. | 4,714 | 31,683 |

The value of onions grown was £215,444 in 1923-24, as compared with £139,888 in the previous season, £150,033 in 1921-22, £131,104 in 1920-21, and £274,375 in 1919-20.

**Green forage.** The area devoted to green forage in 1923-24 was 107,371 acres, as compared with 102,451 in the previous season, 89,410 in 1921-22, 79,524 in 1920-21, 89,802 in 1919-20, and 73,641 in 1918-19.

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

ENSILAGE RETURNS, 1919-20 TO 1923-24.

| Year ended March— | Number of Farms on which made. | Number of Silos (Pits and Stacks). | Materials used. |
|---|---|---|---|
| | | | tons. |
| 1920 .. .. .. | 74 | 117 | 6,072 |
| 1921 .. .. .. | 99 | 175 | 9,702 |
| 1922 .. .. .. | 107 | 141 | 5,873 |
| 1923 .. .. .. | 103 | 138 | 5,674 |
| 1924 .. .. .. | 61 | 88 | 3,649 |

**Grass and clover seed.** The area harvested for grass and clover seed last season was 1,306 acres, as compared with 1,468 in the previous year, 1,800 in 1921-22, 1,872 in 1920-21, 1,235 in 1919-20, and 2,152 in 1918-19. The production in 1923-24 was 6,466 bushels, as against 7,859 in the previous year, 12,226 in 1921-22, 11,555 in 1920-21, 8,625 in 1919-20, and 15,443 in 1918-19.

**Hops.** The hop-growing industry attained its maximum development in 1883-4, when 1,758 acres yielded 15,717 cwt. In 1923-24 the return from 224 acres was 2,481 cwt. Delatite, Bogong, Bourke, Polwarth, and Buln Buln were the only counties in which hops were grown last season.

**Flax.** No flax was sown during the year 1923–24, but the Commonwealth Flax Committee, which is now being wound up, supplied to Drysdale farmers sufficient seed for the sowing of approximately 200 acres in the 1924–25 season, and a private company has been formed to treat the harvest. Particulars of the crop for each of the last five years are given in the following statement :—

FLAX, 1919–20 TO 1923–24.

| Year. | Area under Crop. | Seed Produced. | Fibre Produced. | Tow Produced. | Straw awaiting Treatment. |
|---|---|---|---|---|---|
| | acres. | cwt. | cwt. | cwt. | tons. |
| 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 | .. |
| 1923–24 .. .. | Nil | .. | .. | .. | .. |

NOTE.—For particulars of New Zealand flax, not included in above statement, *vide* page 502.

In 1923–24 imports into Victoria from countries outside Australia included linseed to the value of £27,402, linseed oil worth £80,970, and fibre worth £185,450.

**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 1,047 acres, of which 465 were in Bogong, and 450 in Delatite. Particulars relating to the cultivation of tobacco for each of the last five years are as follows :—

CULTIVATION OF TOBACCO, 1919–20 TO 1923–24.

| Year. | Area. | Produce. |
|---|---|---|
| | acres. | cwt. (dry). |
| 1919–20 .. .. .. .. | 406 | 2,669 |
| 1920–21 .. .. .. .. | 95 | 908 |
| 1921–22 .. .. .. .. | 604 | 3,735 |
| 1922–23 .. .. .. .. | 890 | 4,151 |
| 1923–24 .. .. .. .. | 1,047 | † |

† Not available.

**Vine Production.**

During the period 1904–15 the area under vines decreased by 6,712 acres, or by nearly 24 per cent., and the number of growers decreased by 521, or by 23 per cent. Since 1915 there has been a fairly large increase in the area and the number of growers. Vineyards are distributed fairly well over the State, and there are certain districts where the principal industries are connected with vine-growing. The Shire of Mildura produced last season 2,110,981 cwt. of grapes; Swan Hill, 300,055 cwt.; Rutherglen, 128,629 cwt.; Chiltern, 22,559 cwt.; and Stawell, 20,088 cwt. At Mildura the crop is principally dried for raisins and currants. The results of five years' operations are given below :—

VINE PRODUCTION, 1920 TO 1924.

| Year ended June— | Number of Growers. | Area. | Produce. | | | | |
|---|---|---|---|---|---|---|---|
| | | | Grapes gathered. | Wine made. | Raisins made. | | Currants made. |
| | | | | | Lexias. | Sultanas. | |
| | | acres. | cwt. | gallons. | cwt. | cwt. | cwt. |
| 1920 .. | 1,919 | 27,441 | 1,324,437 | 1,634,680 | 54,470 | 156,837 | 55,661 |
| 1921 .. | 2,066 | 29,255 | 1,072,767 | 2,222,305 | 33,150 | 83,737 | 62,919 |
| 1922 .. | 2,422 | 33,175 | 1,314,839 | 1,335,066 | 49,080 | 141,371 | 75,042 |
| 1923 .. | 2,775 | 38,892 | 1,879,964 | 1,717,490 | 67,850 | 217,670 | 98,081 |
| 1924 .. | 3,047 | 42,599 | 2,707,729 | 2,177,127 | 71,993 | 366,834 | 150,867 |

Of the total quantity of grapes gathered in 1924, 386,929 cwt. were used for making wine and spirits, 2,266,271 cwt. for raisins and currants, and 54,529 cwt. for table consumption and export. Of the 366,834 cwt. of sultanas made, 313,044 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 88,000 cwt.; consequently, about 350,000 cwt. of the production in 1924 were available for interstate or oversea export. A year's consumption of currants is about 30,000 cwt., which would enable approximately 120,000 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 7,387 in 1923–24, as against 7,758 in the previous season, 8,286 in 1921–22, 7,705 in 1920–21, and 7,719 in 1919–20. The area under orchards in each of those years was 83,469, 83,880, 86,959, 84,718, and 83,574 acres respectively. The orchards are distributed fairly evenly over the whole State. The counties having

the largest areas last season were as follows:—Mornington, 14,964 acres; Evelyn, 13,794 acres; Bourke, 13,507 acres; Rodney, 9,953 acres; Moira, 7,244 acres; Talbot, 3,704 acres; and Bendigo, 3,276 acres.

The following is 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 1923-24—83,469 acres—showed a reduction of 411 acres as compared with the area for the previous year. Details of the produce from such orchards in the last five years are given in the subjoined statement :—

ORCHARDS GROWING FRUIT FOR SALE, 1919-20 TO 1923-24.

| Year ended March— | Number of Fruit-growers. | Area of Gardens and Orchards. | Large Fruits Gathered. | | | |
|---|---|---|---|---|---|---|
| | | | Apples. | Pears. | Quinces. | Plums. |
| | | acres. | bushels. | bushels. | bushels. | bushels. |
| 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 |
| 1924 .. | 7,387 | 83,469 | 1,663,308 | 858,611 | 76,167 | 241,818 |

| | Large Fruits Gathered—*continued.* | | | | | | |
|---|---|---|---|---|---|---|---|
| | Cherries. | Peaches. | Apricots. | Oranges. | Lemons. | Figs. | Other. |
| | bushels. | bushels. | bushels. | bushels. | bushels. | bushels. | bushels. |
| 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 |
| 1924 .. | 63,662 | 938,908 | 352,604 | 210,595 | 95,443 | 27,772 | 34,577 |

ORCHARDS GROWING FRUIT FOR SALE, 1919-20 TO 1923-24—*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. |
| 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 |
| 1924 .. | 2,160 | 3,831 | 3,657 | 283 | 3,046 | 76,905 | 29,665 | 964 | 6,190 |

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 1923-24:—Melons, 5,526 cwt.; rhubarb, 8,753 dozen bundles; and tomatoes, 209,963 bushels. There were also 2,101

acres laid down in gardens growing fruit for private use; the value of the produce from these was estimated at about £10,500.

**Value of fruit sold.**

According to prices received by growers the value of fruit which reaches market was estimated to be £1,248,500 in 1919–20, £1,029,700 in 1920–21, £1,184,100 in 1921–22, £1,172,300 in 1922–23, and £1,193,689 in 1923–24. 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 in the year 1923–24 was 16,212 acres. As these gardens are generally situated near large centres of population, the producers are able to dispose of the bulk of their goods with a minimum loss from waste, &c. An average return of £50 per acre is regarded as a fair estimate of their value, and on this basis the total value of the produce may be given as £810,600. 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 1923–24 the quantity produced was 926,162 lbs., which was 35 per cent. less than the quantity for the previous year. The production of the various kinds of dried fruit, with the exception of raisins and currants, the particulars of which appear on page 497, is shown in the following statement for each of the last five seasons :—

DRIED FRUIT, 1919–20 TO 1923–24.

| Year ended June— | Apples. | Prunes. | Peaches. | Apricots. | Figs. | Pears. | Total.* |
|---|---|---|---|---|---|---|---|
| | lbs. | lbs. | lbs. | lbs. | lbs. | lbs. | lbs. |
| 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 |
| 1924 .. | 3,104 | 395,090 | 168,948 | 217,624 | 6,226 | 132,217 | 926,162 |

* Including nectarines, of which there were 4,414 lbs. in 1922, 14,041 lbs. in 1923, and 2,953 lbs. in 1924.

A striking feature of the returns for the season 1923–24, as compared with those for the previous year, is the decrease in all fruits except prunes and pears.

**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, 1922-23 AND 1923-24.

| Crop. | 1922-23. | | 1923-24. | |
|---|---|---|---|---|
| | Area. | Produce. | Area. | Produce. |
| | acres. | | acres. | |
| Beans .. .. | 1,138 | 24,008 bushels | 979 | 20,861 bushels |
| Chicory .. .. | 739 | 640 tons (dry) | 608 | 690 (dry) |
| Flowers .. .. | 263 | .. | 368 | .. |
| Garlic .. .. | 17 | 68 tons | 3 | 9 tons |
| Herbs .. .. | 25 | .. | 6 | .. |
| Flax—New Zealand .. | 90 | 63 tons fibre | 90 | * |
| Millet—Broom .. | 1,304 | 4,200 cwt. fibre<br>3,200 cwt. seed | 2,626 | 14,480 cwt. fibre<br>15,340 cwt. seed |
| „ Japanese .. | 756 | 4,660 cwt. seed | 2,142 | 15,100 „ „ |
| Nurseries .. .. | 996 | .. | 985 | .. |
| Pumpkins .. .. | 1,549 | 4,551 tons | 2,163 | 11,211 tons |
| Seeds—Agricultural and Garden .. | 47 | .. | 88 | .. |
| Sugar Beet .. .. | 2,045 | 20,444 tons clean beet, producing 2,784 tons marketable sugar | 1,937 | 29,512 tons clean beet, producing 3,499 tons marketable sugar. |
| Sunflowers .. .. | 113 | 739 cwt. | 231 | 2,263 cwt. |
| Others .. .. | .. | .. | 11 | .. |
| Total .. .. | 9,082 | .. | 12,237 | .. |

* 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 nine 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 | 1924 .. .. | 2,294,297 |

Nearly all of the fallowed area is devoted to wheat production. Of the 2,294,297 acres in fallow last season, 739,480 were in the Wimmera, 713,072 in the Mallee, and 594,472 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 39,749, 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, 1911, and 1916, and each of the last three years:—

MANURE USED FOR FERTILIZATION, 1901 TO 1923.

| 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 |
| 1921 .. .. | 37,835 | 3,848,184 | 161,683 | 150,012 |
| 1922 .. .. | 40,037 | 4,148,780 | 173,343 | 172,897 |
| 1923 .. .. | 39,749 | 4,113,640 | 163,843 | 178,621 |

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 1923, 88 per cent. During 1923-24 the quantity of fertilizers imported into Victoria from oversea countries was 130,618 tons valued at £339,858. This included 84,979 tons of rock phosphates valued at £197,079, and 41,097 tons of guano valued at £90,414, 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, 1919 TO 1923.

| Year. | Males. | Females. | Total. |
|---|---|---|---|
| 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 |
| 1923 .. .. | 105,933 | 46,218 | 152,151 |

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 1923-24. The information has been furnished by the occupiers of holdings.

WAGES, AGRICULTURAL AND PASTORAL, 1923-24.

| 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 80s. per week .. | 60s. per week |
| Female servants .. .. | 15s. to 35s. per week .. | 25s. per week |
| Men cooks .. .. .. | 40s. to 70s. per week .. | 50s. per week |
| Shearers, hand (without rations) | 35s. to 40s. per 100 sheep | 38s. per 100 sheep |
| „ machine (without rations) .. .. | 35s. to 40s. per 100 sheep | 38s. per 100 sheep |
| Gardeners, market .. .. | 30s. to 60s. per week .. | 40s. per week |
| „ orchard .. .. | 30s. to 60s. per week .. | 40s. per week |
| Vineyard hands .. .. | 30s. to 60s. per week .. | 40s. per week |

## PASTORAL AND DAIRYING INDUSTRIES.

**Live Stock.**

The pastoral and dairying industries have always been important sources of wealth to the State, and their increasing value in recent years, despite the larger areas devoted to cultivation, indicates that both pastures and stock are, on the whole, steadily improving. The progress of stock breeding is shown in the next table, which gives the numbers of horses, dairy cows, other cattle, sheep and pigs, and their numbers per head of population and per square mile, in each of the last seven census years, also in the year 1924.

LIVE STOCK IN VICTORIA, 1861 TO 1924.

| 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 |
| 1924 .. .. | 486,075 | 738,149 | 853,218 | 11,059,761 | 259,795 |
| | *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 |
| 1924 .. .. | ·30 | ·45 | ·52 | 6·80 | ·16 |
| | *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 |
| 1924 .. .. | 5·53 | 8·40 | 9·71 | 125·84 | 2·96 |

By reducing horses and cattle to an equivalent in sheep on the assumption that one of the former will eat as much as ten, and one of

the latter as much as six sheep, interesting comparisons of the stock carried on the land at different periods may be instituted. Calculations made on this basis show that each square mile carried an equivalent of 290 sheep in 1924, as compared with 302 in 1921, 306 in 1911, and 237 in 1881.

**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.

| Privately-owned Land. | | | | Crown Land held in conjunction with that privately owned. | Total Area Occupied. | Area under— | |
|---|---|---|---|---|---|---|---|
| Size of Holdings. (In acres.) | Year. | Number of Holdings. | Area Occupied. | | | Cultivation. | Pasture, &c. |
| | | | acres. | acres. | acres. | acres. | acres. |
| 1 and under 100 | 1913 | 26,113 | 915,493 | 374,511 | 1,290,004 | 245,498 | 1,044,506 |
| | 1919 | 28,902 | 942,775 | 347,377 | 1,290,152 | 241,794 | 1,048,358 |
| 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.

**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 100 Acres used for Grazing, &c. |
| 1 and under 100 | 1913 | 3·57 | 4·33 | 3·43 | 7·08 | 1,766,873 | 169 |
| | 1919 | 3·46 | 4·47 | 3·29 | 6·50 | 1,909,552 | 182 |
| 100 „ 321 | 1913 | 13·94 | 15·44 | 13·66 | 17·67 | 4,410,283 | 106 |
| | 1919 | 12·91 | 14·91 | 12·57 | 17·40 | 5,107,256 | 128 |
| 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.

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, 1924, in districts, and the uses to which the land was applied :—

## LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1924.

(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 .. | 18,207 | 528,020 | 134,981 | 2,016,123 | 139,876 | 2,819,000 |
| North-Central | 5,874 | 143,468 | 42,129 | 1,907,450 | 62,566 | 2,155,613 |
| Western .. | 13,234 | 396,106 | 255,337 | 5,812,250 | 323,004 | 6,786,697 |
| Wimmera .. | 6,736 | 1,707,468 | 1,150 | 3,987,602 | 260,315 | 5,956,535 |
| Mallee .. | 8,277 | 2,320,765 | 3,969 | 2,518,862 | 601,449 | 5,445,045 |
| Northern .. | 12,873 | 1,520,728 | 75,656 | 3,657,486 | 36,250 | 5,290,120 |
| North-Eastern | 5,661 | 173,416 | 3,895 | 3,844,672 | 196,958 | 4,218,941 |
| Gippsland .. | 9,524 | 186,470 | 507,474 | 3,605,534 | 703,960 | 5,003,438 |
| Total .. | 80,386 | 6,976,441 | 1,024,591 | 27,349,979 | 2,324,378 | 37,675,389 |
| | Percentage of Total Occupied in each District. | | | | | |
| Central .. | .. | 18·73 | 4·79 | 71·52 | 4·96 | 100·00 |
| North-Central | .. | 6·66 | 1·95 | 88·49 | 2·90 | 100·00 |
| Western .. | .. | 5·84 | 3·76 | 85·64 | 4·76 | 100·00 |
| Wimmera .. | .. | 28·66 | 0·02 | 66·95 | 4·37 | 100·00 |
| Mallee .. | .. | 42·62 | 0·07 | 46·26 | 11·05 | 100·00 |
| Northern .. | .. | 28·74 | 1·43 | 69·14 | 0·69 | 100·00 |
| North-Eastern | .. | 4·11 | 0·09 | 91·13 | 4·67 | 100·00 |
| Gippsland .. | .. | 3·72 | 10·14 | 72·07 | 14·07 | 100·00 |
| Total .. | .. | 18·52 | 2·72 | 72·59 | 6·17 | 100·00 |
| | Percentage in each District of Total in State. | | | | | |
| Central .. | 22·65 | 7·57 | 13·17 | 7·37 | 6·02 | 7·48 |
| North-Central | 7·31 | 2·06 | 4·11 | 6·98 | 2·69 | 5·72 |
| Western .. | 16·46 | 5·68 | 24·92 | 21·25 | 13·90 | 18·01 |
| Wimmera .. | 8·38 | 24·47 | 0·11 | 14·58 | 11·20 | 15·81 |
| Mallee .. | 10·30 | 33·27 | 0·39 | 9·21 | 25·88 | 14·45 |
| Northern .. | 16·01 | 21·79 | 7·39 | 13·37 | 1·56 | 14·05 |
| North-Eastern | 7·04 | 2·49 | 0·38 | 14·06 | 8·47 | 11·20 |
| Gippsland .. | 11·85 | 2·67 | 49·53 | 13·18 | 30·28 | 13·28 |
| 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 29 per cent. in the Northern, 43 per cent. in the Mallee, and 29 per cent. in the Wimmera district are devoted to agriculture, and these divisions supply nearly 80 per cent. of the cultivation in Victoria. In the North-Central, Western, and North-Eastern districts the land occupied is largely devoted to grazing; in Gippsland considerable attention is given to the cultivation of grasses, nearly 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, 1924.

AREA OCCUPIED AND STOCK THEREON, 1924.

| District. | Area Occupied for— | | Number of— | | |
|---|---|---|---|---|---|
| | Agriculture. | Pasture. | Horses. | Cattle. | Sheep. |
| | acres. | acres. | | | |
| Central .. .. | 528,020 | 2,151,104 | 99,083 | 268,541 | 936,207 |
| North-Central .. | 143,468 | 1,949,579 | 23,361 | 96,507 | 991,912 |
| Western .. .. | 396,106 | 6,067,587 | 63,750 | 368,321 | 3,789,393 |
| Wimmera .. | 1,707,468 | 3,988,752 | 69,792 | 57,106 | 1,882,879 |
| Mallee .. .. | 2,320,765 | 2,522,831 | 65,471 | 48,798 | 549,681 |
| Northern .. .. | 1,520,728 | 3,733,142 | 91,040 | 216,803 | 1,592,098 |
| North-Eastern .. | 173,416 | 3,848,567 | 32,088 | 207,600 | 700,038 |
| Gippsland .. | 186,470 | 4,113,008 | 41,490 | 327,691 | 617,553 |
| Total .. | 6,976,441 | 28,374,570 | 486,075 | 1,591,367 | 11,059,761 |

The area occupied does not include 2,324,378 acres which are mostly in an unproductive state. Compared with 1923, cattle decreased by 11 per cent., sheep by 6 per cent., and horses by nearly 2 per cent.

**Live stock in Victoria, 1920 to 1924.**

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 518 of this volume.

LIVE STOCK IN VICTORIA, 1920 TO 1924.

| Live Stock. | 1920. | 1921. | 1922. | 1923. | 1924. |
|---|---|---|---|---|---|
| Horses (including foals) .. .. | 513,500 | 487,503 | 496,124 | 494,947 | 486,075 |
| Cattle— | | | | | |
| Dairy Cows .. | 623,652 | 620,005 | 719,473 | 794,898 | 738,149 |
| Other (including calves) .. | 1,007,468 | 955,154 | 1,030,896 | 990,762 | 853,218 |
| Sheep .. .. | 14,422,745 | 12,171,084 | 12,325,818 | 11,765,520 | 11,059,761 |
| Pigs .. .. | 186,810 | 175,275 | 230,770 | 294,962 | 259,795 |

**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 1922-23 and 1923-24 for live stock. The information has been extracted from the Melbourne *Stock and Station Journal*:—

## PRICES IN MELBOURNE OF LIVE STOCK, 1922-23 AND 1923-24.

| Stock. | Prices in 1922-23. | | | | Prices in 1923-24. | | | |
|---|---|---|---|---|---|---|---|---|
| | Average. | Range. | | | Average. | Range. | | |
| | £ s. d. | £ s. d. | | £ s. d. | £ s. d. | £ s. d. | | £ s. d. |
| *Horses.* | | | | | | | | |
| Extra heavy draught | 33 7 6 | 30 0 0 | to | 40 0 0 | 34 17 6 | 33 0 0 | to | 37 0 0 |
| Medium draught .. | 25 19 0 | 25 0 0 | to | 27 0 0 | 26 7 6 | 25 10 0 | to | 27 0 0 |
| Delivery cart .. | 20 6 0 | 18 0 0 | to | 22 0 0 | 18 2 6 | 17 0 0 | to | 20 0 0 |
| Saddle and harness | 5 4 0 | 4 10 0 | to | 6 0 0 | 5 0 0 | 4 10 0 | to | 6 0 0 |
| Ponies .. .. | 8 7 0 | 7 15 0 | to | 9 0 0 | 7 15 0 | 7 0 0 | to | 9 0 0 |
| Order cart .. | 10 15 0 | 10 0 0 | to | 12 0 0 | 9 10 0 | 9 0 0 | to | 10 10 0 |
| *Fat Cattle.* | | | | | | | | |
| Bullocks— | | | | | | | | |
| Extra prime .. | 17 14 0 | 14 9 0 | to | 27 15 0 | 21 15 0 | 15 17 0 | to | 33 12 0 |
| Prime .. .. | 15 3 0 | 12 16 0 | to | 23 15 0 | 18 15 0 | 14 1 0 | to | 28 17 6 |
| Good .. .. | 12 8 0 | 10 7 0 | to | 18 12 6 | 15 8 0 | 11 19 0 | to | 22 14 0 |
| Good light and handy weights | 10 4 0 | 8 2 6 | to | 14 2 0 | 11 12 0 | 9 7 6 | to | 16 5 0 |
| Second .. | 7 2 0 | 5 11 0 | to | 10 11 0 | 9 2 0 | 7 15 0 | to | 11 15 0 |
| Cows— | | | | | | | | |
| Best .. .. | 10 10 0 | 8 2 0 | to | 17 17 0 | 12 2 0 | 9 12 6 | to | 19 11 0 |
| Others .. .. | 5 16 0 | 4 12 6 | to | 9 5 0 | 6 10 0 | 5 8 0 | to | 9 19 0 |
| *Dairy Cattle.* | | | | | | | | |
| Best milkers .. | 11 2 6 | 8 12 0 | to | 14 0 0 | 13 17 0 | 12 12 0 | to | 15 14 0 |
| Springers, best .. | 10 10 0 | 8 8 0 | to | 14 5 0 | 10 10 6 | 8 15 0 | to | 14 0 0 |
| *Fat Sheep.* | | | | | | | | |
| Wethers (cross)— | | | | | | | | |
| Extra prime .. | 1 16 6 | 1 7 5 | to | 2 19 6 | 2 6 5 | 1 14 4 | to | 3 4 3 |
| Prime .. .. | 1 12 3 | 1 4 3 | to | 2 13 1 | 2 2 3 | 1 11 6 | to | 2 16 10 |
| Good .. .. | 1 7 8 | 1 1 1 | to | 2 5 10 | 1 17 6 | 1 8 2 | to | 2 8 8 |
| Ewes (cross)— | | | | | | | | |
| Extra prime .. | 1 7 1 | 0 19 1 | to | 2 7 9 | 1 18 9 | 1 8 3 | to | 2 14 2 |
| Prime .. .. | 1 3 2 | 0 16 1 | to | 2 2 3 | 1 14 5 | 1 5 2 | to | 2 6 1 |
| Good .. .. | 0 18 11 | 0 13 0 | to | 1 15 4 | 1 9 4 | 1 1 2 | to | 1 16 10 |
| Wethers (merino)— | | | | | | | | |
| Extra prime .. | 1 14 3 | 1 3 6 | to | 2 18 8 | 2 5 4 | 1 10 2 | to | 3 7 5 |
| Prime .. .. | 1 10 2 | 1 1 7 | to | 2 10 0 | 2 0 7 | 1 9 2 | to | 2 14 6 |
| Good .. .. | 1 5 3 | 0 17 7 | to | 2 2 6 | 1 14 9 | 1 5 10 | to | 2 1 0 |
| Ewes (merino) best | 1 2 3 | 0 14 2 | to | 2 1 1 | 1 13 2 | 1 4 0 | to | 2 0 2 |
| *Fat Lambs.* | | | | | | | | |
| Extra prime .. | 1 9 9 | 1 4 9 | to | 2 6 0 | 1 16 4 | 1 9 5 | to | 2 15 1 |
| Prime .. .. | 1 5 4 | 1 2 0 | to | 1 18 7 | 1 11 7 | 1 6 8 | to | 1 18 11 |
| Good .. .. | 1 0 6 | 0 17 0 | to | 1 13 0 | 1 7 11 | 1 3 6 | to | 1 12 6 |
| Second .. .. | 0 14 10 | 0 12 0 | to | 1 4 1 | 1 3 10 | 0 19 8 | to | 1 9 0 |
| *Pigs.* | | | | | | | | |
| Back Fatters— | | | | | | | | |
| Extra heavy prime | 9 4 0 | 8 0 0 | to | 10 5 0 | 11 2 6 | 9 19 0 | to | 12 7 0 |
| Extra prime and weighty .. | 6 0 0 | 5 0 0 | to | 6 16 0 | 8 0 0 | 6 7 0 | to | 9 7 6 |
| Baconers— | | | | | | | | |
| Extra prime .. | 4 13 0 | 4 3 0 | to | 5 12 0 | 6 3 0 | 5 10 0 | to | 6 18 0 |
| Prime .. .. | 4 1 0 | 3 12 0 | to | 4 16 0 | 5 4 0 | 4 14 0 | to | 5 17 0 |
| Porkers .. .. | 2 7 0 | 2 1 0 | to | 2 13 0 | 2 19 6 | 2 15 3 | to | 3 5 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, 1919 TO 1923.

| Year. | Number Slaughtered. | | |
|---|---|---|---|
| | Sheep and Lambs. | Cattle. | Pigs. |
| 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 |
| 1923 .. .. | 4,078,273 | 461,958 | 373,609 |

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

PURPOSES FOR WHICH STOCK WERE SLAUGHTERED, 1919 TO 1923.

| Year. | For Butcher and Private Use.* | | | For Export. | | |
|---|---|---|---|---|---|---|
| | Sheep. | Cattle. | Pigs. | Sheep. | Cattle. | Pigs. |
| 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 | .. |
| 1923 .. .. | 3,372,722 | 449,101 | 139,405 | 691,630 | 4,011 | .. |

| Year. | For Preserving and Salting. | | | For Boiling Down. | | |
|---|---|---|---|---|---|---|
| | Sheep. | Cattle. | Pigs. | Sheep. | Cattle. | Pigs. |
| 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 |
| 1923 .. .. | 2,632 | 2,519 | 232,914 | 11,289 | 6,327 | 290 |

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

Of the 4,078,273 sheep and lambs slaughtered in Victoria in 1923, 691,630, or 17 per cent., were frozen, as compared with 2,657,515, or 45 per cent., in 1922. In 1923-24 the oversea exports included 22,386,640 lbs. of mutton and lamb, valued at £670,195.

**Mutton and Lamb frozen for Export.**

The soil and climate of Victoria are well suited to the economical production of both mutton and lamb, and, as there is practically no limit to the demand for these products in Europe, the possibilities for those engaged in raising sheep for export are very great, especially as the number of sheep in the world is not keeping pace with the increase in population. The importance of this export trade to Victorian sheep owners is evidenced by the figures in the appended statement showing the numbers of carcasses exported in each of the last 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, the season 1922-23 was marked by exceptionally heavy exports of both mutton and lamb at improved prices. In the 1923-24 season the export of mutton practically ceased, while the number of lambs exported was only about 40 per cent. of that for the previous year. The abnormal activity in 1922-23 was, to some extent, responsible for the great reduction in exports in 1923-24. Other reasons were a tendency among owners to retain their flocks in expectation of high prices for wool, and the demand for breeding ewes from New South Wales, where a drought had depleted the flocks.

FROZEN MUTTON AND LAMB EXPORTED.

| Year (ending in June). | Number of Carcasses Exported. | | |
|---|---|---|---|
| | Mutton. | Lamb. | Total. |
| 1914-15 .. .. | 653,329 | 1,056,823 | 1,710,152 |
| 1915-16 .. .. | .. | 47,546 | 47,546 |
| 1916-17 .. .. | 52,724 | 365,694 | 418,418 |
| 1917-18 .. .. | 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 |
| 1923-24 .. .. | 12,945 | 678,685 | 691,630 |

**Dairying.**

The dairying industry is one of the principal sources of the wealth of the community. The value of dairy produce in 1924 was £10,561,940, as compared with £10,381,310 in the previous year, £9,512,980 in 1922, £11,816,670 in 1921, and £9,262,710 in 1920. 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, 1919–20 TO 1923–24.

| Year ended March— | Number of Cow-keepers. | Number of Dairy Cows. | Butter made.* | Cheese made.* |
|---|---|---|---|---|
| | | | lbs. | lbs. |
| 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 |
| 1924 .. .. | 61,685 | 738,149 | 86,888,723 | 7,216,938 |

* Year ended 30th June.

**Dairy Cow's Record.**

An interesting example of the possibilities of dairying and of the value of selective breeding, combined with scientific feeding, is furnished by the following authenticated record (supplied by the Department of Agriculture), over a period of three years, of a Jersey cow.

Jersey cow, born 27th August, 1919.

| Calved. | Days in Milk. | Total Milk. | Average Test. | Total Butter-fat. | Milk Yield on last day of Test. |
|---|---|---|---|---|---|
| | | lbs. | per cent. | lbs. | lbs. |
| 22nd September, 1921 | 273 | 6,827 | 5·08 | 347 | 19½ |
| 8th February, 1923 | 273 | 11,185 | 5·16 | 578 | 40½ |
| 25th March, 1924 .. | 273 | 15,799 | 5·34 | 843¼ | 42 |

| | £ | s. | d. |
|---|---|---|---|
| 1924.—15,799 lbs. of milk=843¼ lbs. of butter-fat at 1s. 5d. | 59 | 14 | 7 |
| 1,495 gallons of skim milk at 2d. .. .. | 12 | 9 | 2 |
| Total return (excluding value of offspring) .. | 72 | 3 | 9 |
| Cost of feeding (including grazing) .. .. | 21 | 16 | 6 |
| Credit balance for nine months .. .. | 50 | 7 | 3 |

**Butter and cheese made on farms.**

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

## BUTTER AND CHEESE MADE ON FARMS.

| Year ended June— | Butter. | Cheese. |
|---|---|---|
| | lbs. | lbs. |
| 1920 .. .. .. .. | 4,743,906 | 937,030 |
| 1921 .. .. .. .. | 5,086,723 | 492,952 |
| 1922 .. .. .. .. | 5,480,421 | 316,249 |
| 1923 .. .. .. .. | 5,582,469 | 418,873 |
| 1924 .. .. .. .. | 5,597,128 | 420,552 |

**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, 1919–20 TO 1923–24.

| Year ended June— | Butter made. | Cream sold. | Cheese made. | Concentrated, Condensed, and Powdered Milk made. |
|---|---|---|---|---|
| | lbs. | gallons. | lbs. | lbs. |
| 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 |
| 1924 .. .. | 81,291,595 | 373,236 | 6,796,386 | 49,909,632 |

NOTE.—In addition, 2,946,346 lbs. of casein and 445,430 lbs. of milk sugar were made in 1923–24.

The quantities of milk, in gallons, received at factories and creameries were 1147,455,930 in 1919–20, 154,042,550 in 1920–21, 193,507,110 in 1921–22, 196,171,380 in 1922–23, and 206,915,177 in 1923–24.

**Exports of butter and cheese.**

In 1923-24 there were exported from Victoria to countries outside Australia 35,578,812 lbs. of butter, valued at £2,751,312, all of which, except 236,284 lbs., was Australian produce. The quantity sent to the United Kingdom was 27,295,805 lbs., valued at £2,055,754. The quantity of cheese exported to oversea countries was 753,856 lbs., and the value thereof, £31,071.

**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 1923-24 and earlier seasons was as follows :—

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION.

| District. | Wool Clip, 1923-24. | | |
|---|---|---|---|
| | Sheep. | Lambs. | Total. |
| | lbs. | lbs. | lbs. |
| Central .. .. | 4,353,047 | 343,263 | 4,696,310 |
| North-Central .. | 5,213,078 | 307,499 | 5,520,577 |
| Western .. .. | 22,878,948 | 1,213,846 | 24,092,794 |
| Wimmera .. .. | 12,408,007 | 633,463 | 13,041,470 |
| Mallee .. .. | 3,732,174 | 137,360 | 3,869,534 |
| Northern .. .. | 8,708,993 | 509,484 | 9,218,477 |
| North-Eastern .. | 3,490,525 | 202,786 | 3,693,311 |
| Gippsland .. .. | 3,022,048 | 172,034 | 3,194,082 |
| Total Clip 1923-24 | 63,806,820 | 3,519,735 | 67,326,555 |
| 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 |

| —— | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
|---|---|---|---|---|
| | lbs. | lbs. | lbs. | lbs. |
| Wool clip .. .. | 71,149,941 | 78,195,346 | 76,193,950 | 67,326,555 |
| Wool stripped from Victorian skins and on Victorian skins exported (estimated) .. | 19,100,630 | 25,317,431 | 26,274,000 | 15,186,806 |
| Total production .. | 90,250,571 | 103,512,777 | 102,467,950 | 82,513,361 |
| Total value .. | £4,729,400 | £4,662,750 | £6,380,600 | £7,695,000 |

In 1923–24 there were 9,463,675 sheep and 1,614,147 lambs shorn, as compared with 9,920,239 sheep and 2,278,303 lambs in 1922–23, 10,072,358 sheep and 2,471,431 lambs in 1921–22, and 10,595,458 sheep and 1,725,305 lambs in 1920–21.

**Weight of a fleece.**

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

WEIGHT OF A FLEECE, 1919–20 TO 1923–24.

| Year. | Weight of a Fleece. | | |
|---|---|---|---|
| | Sheep. | Lambs. | Sheep and Lambs combined. |
| | lbs. | lbs. | lbs. |
| 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 |
| 1923–24 .. .. .. .. | 6·74 | 2·18 | 6·08 |

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, 1919–20 TO 1923–24.

| Year. | Production. | | Used in Manufactures. | | Available for Export. | |
|---|---|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. |
| | lbs. | £ | lbs. | £ | lbs. | £ |
| 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 |
| 1923–24 | 82,513,361 | 7,695,000 | 13,068,648 | 1,218,500 | 69,444,713 | 6,476,500 |

Prices of wool.

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

PRICES OF WOOL, 1921-22 TO 1923-24.

| Class of Wool. | Average Price per lb. in— | | |
|---|---|---|---|
| | 1921-22. | 1922-23. | 1923-24. |
| GREASY MERINO. | | | |
| Extra Super (Western District) | 28d. to 36d. | 34d. to 36d. | 43d. to 44d. |
| Super .. .. .. | 22d. to 24d. | 27d. to 30d. | 34d. to 38d. |
| Good .. .. .. | 16d. to 18d. | 23d. to 25d. | 27d. to 28d. |
| Average .. .. .. | 12d. to 14d. | 18d. to 20d. | 24d. to 26d. |
| Wasty and Inferior .. .. | 8d. to 10d. | 14d. to 16d. | 19d. to 21d. |
| Extra Super Lambs .. .. | 24d. to 26d. | 28d. to 30d. | 32d. to 34d. |
| Super Lambs .. .. | 16d. to 18d. | 20d. to 22d. | 24d. to 27d. |
| Good Lambs .. .. | 11d. to 12d. | 16d. to 17d. | 18d. to 20d. |
| Average Lambs .. .. | 7d. to 8d. | 13d. to 14d. | 15d. to 18d. |
| Inferior Lambs .. .. | 3d. to 5d. | 6d. to 9d. | 10d. to 12d. |
| GREASY CROSSBRED. | | | |
| Extra Super Comebacks .. | 22d. to 24d. | 29d. to 31d. | 37d. to 40d. |
| Super Comebacks .. .. | 17d. to 19d. | 24d. to 26d. | 30d. to 34d. |
| Fine Crossbred .. .. | 13d. to 15d. | 18d. to 20d. | 24d. to 26d. |
| Medium Crossbred .. .. | 8d to 10d. | 14d. to 16d. | 18d. to 19d. |
| Coarse Crossbred and Lincoln | 3d. to 5d. | 7d. to 9d. | 11d. to 13d. |
| Super Fine Crossbred Lambs .. | 14d. to 16d. | 20d. to 22d. | 22d. to 24d. |
| Good Crossbred Lambs .. | 8d. to 10d. | 12d. to 14d. | 16d. to 18d. |
| Coarse and Lincoln Lambs .. | 4d. to 5d. | 8d. to 10d. | 10d. to 12d. |
| SCOURED. | | | |
| Extra Super Fleece .. .. | 42d. to 46d. | 46d. to 50d. | 58d. to 62d. |
| Super Fleece .. .. | 34d. to 38d. | 40d. to 44d. | 54d. to 56d. |
| Good Fleece .. .. | 26d. to 30d. | 32d. to 36d. | 46d. to 50d. |
| Average Fleece .. .. | 18d. to 22d. | 24d. to 26d. | 36d. to 44d. |
| RECORD PRICES FOR THE SEASON. | | | |
| Greasy Merino Fleece .. | 42½d. | 40½d. | 46½d. |
| „ Comeback Fleece .. | 31d. | 38½d. | 42¼d. |
| „ Merino Lambs .. | 32¼d. | 41½d. | 43¼d. |
| „ Comeback Lambs .. | 24¼d. | 28d. | 37d. |
| Scoured Fleece .. .. | 51d. | 57¾d. | 64d. |

**Flocks of sheep in districts.**

The following statement, which is based on returns received in March, 1919, contains information in regard to the numbers of flocks and of sheep in the different districts of the State :—

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. A comparison with figures based on collections made in 1913 and earlier years appears on page 464 of the *Year-Book* for 1918–19.

**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 |

The above figures are compared with the corresponding ones for 1913 on page 465 of the *Year-Book* for 1918–19. 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 the Federal Capital Territory; June, 1924, for New South Wales and South Australia; March, 1924, for Victoria and Tasmania; January, 1924, for New Zealand; and December, 1923, for Queensland, Western Australia, and the Northern Territory:—

LIVE STOCK IN AUSTRALASIA.

| State, &c. | Horses. | Cattle. | | Sheep. | Pigs. |
|---|---|---|---|---|---|
| | | Dairy Cows. | Other. | | |
| Victoria .. .. | 486,075 | 738,149 | 853,218 | 11,059,761 | 259,795 |
| New South Wales .. | 658,372 | 864,455 | 2,074,067 | 37,539,413 | 323,196 |
| Federal Capital Territory .. .. | 1,345 | 6,275 | | 139,063 | 274 |
| Queensland .. | 661,593 | 512,529 | 5,883,985 | 16,756,101 | 132,243 |
| South Australia .. | 258,489 | 136,438 | 276,834 | 6,596,875 | 73,414 |
| Northern Territory .. | 44,603 | 843,718 | | 4,728 | 649 |
| Western Australia .. | 181,944 | 61,832 | 891,932 | 6,595,867 | 61,478 |
| Tasmania .. .. | 37,570 | 70,497 | 149,854 | 1,557,716 | 47,101 |
| New Zealand .. | 330,430 | 1,312,588 | 2,250,909 | 23,775,776 | 414,271 |

**Bee-keeping.**

The returns for 1923-24 show that there were in that year 3,535 bee-keepers, who owned 54,521 frame and 6,239 box hives, producing 2,066,167 lbs. and 44,546 lbs. of honey respectively, and 25,371 lbs. of beeswax. The number of bee-keepers owning 20 hives and upwards was 668, as compared with 584 in the previous season. The quantity of honey produced in the Wimmera, the chief producing district, was 1,154,591 lbs. in 1923-24, as compared with 855,364 lbs. in the previous season. The more important particulars of the industry for the last five years are given below :—

BEE-KEEPING, 1919-20 TO 1923-24.

| Season ended May— | Number of Bee-keepers. | Number of Hives. | Honey produced. | Beeswax produced. |
|---|---|---|---|---|
| | | | lbs. | lbs. |
| 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 |
| 1924 .. .. | 3,535 | 60,760 | 2,110,713 | 25,371 |

**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, 1924, sums amounting to £1,051,839 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 | 1920–21 .. .. .. | 36,158 |
| 1889–90 to 1898–9 .. | 208,638 | 1921–22 .. .. .. | 40,766 |
| 1899–1900 to 1908–9 .. | 170,050 | 1922–23 .. .. .. | 47,410 |
| 1909–10 to 1919–20 .. | 320,365 | 1923–24 .. .. .. | 85,489 |

In addition to the expenditure of £1,051,839 referred to above, sums have frequently been advanced from Loan Funds for the purchase of wire netting for supply to municipalities and land owners. The amounts of these advances in the last five years were as follows :— £13,540 in 1919–20, £44,380 in 1920–21, £15,447 in 1921–22, £23,731 in 1922–23, and £26,275 in 1923–24. A complete system, administered by an officer called the Chief Inspector under the Vermin Destruction Act, exists for effectually keeping the rabbits under control.

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

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

RABBITS, HARES, AND WILD-FOWL SOLD AT THE MELBOURNE FISH MARKET, 1919–20 TO 1923–24.

| Year (ending in June). | Rabbits. | Hares. | Wild-fowl. |
|---|---|---|---|
| | pairs. | brace. | brace. |
| 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 |
| 1923–24 .. .. .. | 448,656 | 42 | 8,148 |

**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, 1919–20 TO 1923–24.

| Year (ending in June). | Frozen Rabbits and Hares. | | Rabbit and Hare Skins. | |
|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. |
| | pairs. | £ | lbs. | £ |
| 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 |
| 1923–24 .. .. | 80,499 | 8,477 | 2,073,613 | 282,266 |

## 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 1923–24 :—

### VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED, 1923–24.

| Fishing Stations. | Number of Men. | Boats. | | Value of Nets and other Plant. |
|---|---|---|---|---|
| | | Number. | Value. | |
| | | | £ | £ |
| Anderson's Inlet .. .. .. | 8 | 6 | 189 | 92 |
| Anglesea River .. .. .. | 2 | 2 | 40 | 27 |
| Barwon Heads and Ocean Grove .. | 7 | 4 | 670 | 67 |
| Brighton .. .. .. .. | 8 | 5 | 79 | 137 |
| Corner Inlet, Welshpool, Toora, and Port Franklin .. .. .. | 75 | 55 | 7,277 | 2,795 |
| Dromana .. .. .. .. | 28 | 21 | 1,004 | 319 |
| Frankston .. .. .. .. | 9 | 7 | 216 | 178 |
| Geelong .. .. .. .. | 75 | 44 | 4,444 | 1,116 |
| Gippsland Lakes .. .. .. | 195 | 133 | 8,391 | 5,785 |
| Kerang .. .. .. .. | 2 | 2 | 6 | 20 |
| Lorne .. .. .. .. | 3 | 2 | 140 | 65 |
| Mallacoota .. .. .. .. | 2 | 2 | 34 | 40 |
| Mentone .. .. .. .. | 15 | 9 | 350 | 159 |
| Mordialloc, Chelsea, and Carrum .. | 34 | 28 | 1,118 | 296 |
| Mornington .. .. .. .. | 39 | 25 | 2,752 | 683 |
| Portarlington and St. Leonards .. | 88 | 58 | 4,126 | 1,703 |
| Portland .. .. .. .. | 47 | 31 | 4,468 | 594 |
| Port Albert .. .. .. .. | 39 | 23 | 2,540 | 962 |
| Port Campbell .. .. .. | 2 | 2 | 120 | 24 |
| Port Fairy .. .. .. .. | 40 | 31 | 6,640 | 573 |
| Port Melbourne .. .. .. | 48 | 29 | 2,672 | 844 |
| Queenscliff .. .. .. .. | 123 | 64 | 13,272 | 879 |
| Rainbow .. .. .. .. | 3 | 3 | 60 | 20 |
| Sandringham .. .. .. | 51 | 30 | 3,094 | 484 |
| Sorrento, Portsea, and Rye .. .. | 50 | 28 | 2,183 | 488 |
| St. Kilda .. .. .. .. | 18 | 10 | 334 | 130 |
| Torquay .. .. .. .. | 10 | 5 | 195 | 90 |
| Warrnambool .. .. .. | 18 | 14 | 760 | 174 |
| Werribee .. .. .. .. | 7 | 5 | 386 | 280 |
| Waranga Basin .. .. .. | 22 | 16 | 208 | 244 |
| Western Port (Cowes, Hastings, Grantville, Flinders, San Remo, and Tooradin) | 123 | 92 | 9,457 | 2,836 |
| Williamstown .. .. .. | 35 | 21 | 1,710 | 733 |
| Wonthaggi .. .. .. .. | 8 | 5 | 82 | 67 |
| Total .. .. .. .. | 1,234 | 812 | 79,017 | 22,904 |

**Melbourne Fish Market.**

The quantities and values of fish sold in the Melbourne Fish Market during each of the years 1922-23 and 1923–24 were as shown in the next table.

## FISH SOLD IN THE MELBOURNE FISH MARKET, 1922-23 AND 1923-24.

| | | 1922-23. | | 1923-24. | |
|---|---|---|---|---|---|
| | | Quantity. | Value. | Quantity. | Value. |
| | | | £ | | £ |
| Fresh Fish (Victorian) | lbs. | 9,458,170 | 135,170 | 8,174,520 | 133,517 |
| Crayfish .. .. | doz. | 32,729 | 30,274 | 33,105 | 29,795 |
| Imported Fish (fresh or frozen) .. | lbs. | 2,726,958 | 68,174 | 3,382,348 | 84,558 |
| Oysters .. .. | bags | 8,876 | 36,563 | 9,803 | 37,606 |
| Total .. .. | | .. | 270,181 | .. | 285,476 |

In addition to the above, 9,726 cwt. of smoked fish, and 723 baskets of prawns were sold in this market in 1923-24.

**Victorian fish sold.** The quantity and value of fish caught in Victorian waters and sold in the Melbourne and Ballarat markets and elsewhere in 1923-24 were as follows :—

## VICTORIAN FISH SOLD IN 1923-24.

| Markets. | Quantity. | | Value. | |
|---|---|---|---|---|
| | Fish. | Crayfish. | Fish. | Crayfish. |
| | lbs. | doz. | £ | £ |
| Melbourne .. .. | 8,174,520 | 14,325 | 133,517 | 12,893 |
| Ballarat .. .. .. | 566,064 | 2,436 | 8,440 | 1,646 |
| Other .. .. .. | 220,225 | 624 | 3,597 | 562 |
| Total .. .. | 8,960,809 | 17,385 | 145,554 | 15,101 |

**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, 1922-23 AND 1923-24.

| | | 1922-23. | | 1923-24. | |
|---|---|---|---|---|---|
| | | Quantity. | Value. | Quantity. | Value. |
| Fish— | | | £ | | £ |
| Fresh or Frozen .. .. | lbs. | 1,679,684 | 50,216 | 2,169,942 | 61,739 |
| Smoked .. .. .. | „ | 30,564 | 2,569 | 54,681 | 3,862 |
| Fresh Oysters .. .. | cwt. | 2,924 | 4,081 | 368 | 269 |
| Potted or Concentrated, &c. .. | | .. | 10,281 | .. | 17,264 |
| Preserved in tins, &c. .. | lbs. | 6,090,118 | 256,514 | 7,229,629 | 317,182 |
| N.E.I. .. .. .. | cwt. | 3,835 | 13,455 | 2,516 | 7,934 |
| Total .. .. .. | | .. | 337,116 | .. | 408,250 |

The most important item in this table is fish preserved in tins and other air-tight vessels, of which 1,276,259 lbs. came from the United Kingdom and 3,249,964 lbs. from Canada, in 1923-24.

**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 1921, 1922, and 1923:—

IMPORTS OF CERTAIN ARTICLES INTO UNITED KINGDOM FROM AUSTRALIA, OTHER BRITISH POSSESSIONS, AND FOREIGN COUNTRIES, 1921, 1922, AND 1923.

| Articles. | Year. | Value of Imports into United Kingdom from— | | | |
|---|---|---|---|---|---|
| | | Australia. | Other British Possessions. | Foreign Countries. | All Countries. |
| | | £ | £ | £ | £ |
| Butter .. .. .. | 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 |
| | 1923 | 4,726,340 | 14,340,028 | 25,168,166 | 44,234,534 |
| Cheese .. .. .. | 1921 | 501,912 | 15,408,725 | 1,314,320 | 17,224,957 |
| | 1922 | 434,118 | 10,364,632 | 1,236,855 | 12,035,605 |
| | 1923 | 246,568 | 12,799,489 | 1,934,636 | 14,980,693 |
| Wheat .. .. .. | 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 |
| | 1923 | 2,597,083 | 22,580,958 | 28,389,827 | 53,567,868 |
| Wheatmeal and Flour .. | 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 |
| | 1923 | 1,215,869 | 3,998,175 | 2,993,912 | 8,207,956 |
| Meat .. .. .. | 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 |
| | 1923 | 7,024,600 | 19,562,073 | 82,517,807 | 109,104,480 |
| Fruit—Fresh, Dried, etc. .. | 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 |
| | 1923 | 2,712,896 | 6,118,175 | 33,141,409 | 41,972,480 |
| Wine .. .. .. | 1921 | 183,370 | 56,836 | 5,077,769 | 5,317,975 |
| | 1922 | 147,913 | 46,485 | 5,437,293 | 5,631,691 |
| | 1923 | 178,708 | 76,104 | 5,487,909 | 5,742,721 |
| Wool .. .. .. | 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 |
| | 1923 | 21,267,968 | 19,665,317 | 5,743,570 | 46,676,855 |
| Hides and Skins, Undressed .. | 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 |
| | 1923 | 2,632,027 | 6,190,591 | 8,035,986 | 16,858,604 |
| Tallow and Stearine .. | 1921 | 509,408 | 907,119 | 793,281 | 2,209,808 |
| | 1922 | 718,445 | 880,617 | 735,393 | 2,334,455 |
| | 1923 | 504,640 | 796,361 | 1,136,284 | 2,437,285 |
| Leather .. .. .. | 1921 | 336,236 | 2,166,417 | 5,842,849 | 8,345,502 |
| | 1922 | 386,075 | 2,682,734 | 7,658,216 | 10,727,025 |
| | 1923 | 340,534 | 3,401,441 | 7,241,926 | 11,073,901 |
| Total—Eleven Articles .. | 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 |
| | 1923 | 43,447,233 | 109,618,712 | 201,791,432 | 354,857,377 |

**Agriculture in Victoria and Great Britain.**

The figures relating to agriculture and live stock in Victoria and Great Britain in 1923 are, for comparative purposes, placed side by side in the table which follows :—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1923.

| | | Victoria. | Great Britain. |
|---|---|---|---|
| Area | acres | 56,245,760 | 56,208,959 |
| Wheat | bushels | 37,795,704 | 59,210,667 |
| Oats | ,, | 9,366,204 | 113,400,000 |
| Barley | ,, | 1,455,435 | 49,235,200 |
| Peas | ,, | 233,047 | 2,523,920 |
| Potatoes | tons | 238,520 | 3,579,000 |
| Turnips and swedes | ,, | 4,222* | 17,440,000 |
| Mangolds | ,, | 13,569 | 6,969,200 |
| Hay | ,, | 1,541,287 | 8,597,000 |
| Horses | No. | 486,075 | 1,252,704 |
| Cattle | ,, | 1,591,367 | 7,016,582 |
| Sheep | ,, | 11,059,761 | 26,621,256 |
| Pigs | ,, | 259,795 | 2,797,633 |

* 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 1923–24 from miners' rights was £2,164.

**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 1923–24 was £4,572.

**Area occupied for Mining.**

The area of Crown and private lands under occupation for mining purposes on 31st December, 1923, was 47,361 acres. The subjoined table shows the area being worked for different minerals :—

AREA UNDER OCCUPATION FOR MINING PURPOSES, 31ST DECEMBER, 1923 (CROWN LAND AND PRIVATE LAND).

| Nature of Mineral, &c. | Area. |
|---|---|
| | acres. |
| Gold | 32,600 |
| Coal (ordinary) | 4,716 |
| Coal (brown) | 887 |
| Aluminium | 37 |
| Bluestone | 22 |
| Clay Slum | 143 |
| Copper | 99 |
| Copper and Silver | 71 |
| Dolomite and Clay | 1 |
| Eurite and Gold | 11 |
| Granite | 16 |
| Gypsum | 1,190 |
| Hematite and Iron Ores | 8 |
| Infusorial Earth | 9 |
| Iron | 335 |
| Iron Oxides | 24 |
| Kaolin | 64 |
| Limestone | 219 |
| Limestone and Clay | 27 |
| Magnesite | 114 |
| Manganese | 2,068 |
| Manganese and Cobalt | 19 |
| Marble | 106 |
| Molybdenite | 431 |
| Molybdenite, Copper, and Silver | 29 |
| Ochre | 3 |
| Oil | 238 |
| Oil and Gas | 108 |
| Oxide | 3 |
| Pigments | 5 |
| Pigments and Clay | 21 |
| Pigments and Limestone | 43 |
| Quicksilver | 55 |
| Salt | 45 |
| Sand | 49 |
| Silicate of Alumina | 79 |
| Silver and Gold | 129 |
| Silver and Lead | 187 |
| Slate | 71 |
| Sulphates and Oil | 224 |
| Tin | 1,829 |
| Wolfram | 9 |
| Wolfram and Tin | 454 |
| Water-right Licences | 563 |
| Total | 47,361 |

**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, had been expended or advanced for developmental purposes from 1st July, 1899, to 30th June, 1924.

STATE EXPENDITURE ON MINING, 1919-20 TO 1923-24.

| Item. | Expenditure from Consolidated Revenue. | | | | |
|---|---|---|---|---|---|
| | 1919-20. | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
| | £ | £ | £ | £ | £ |
| Mines Department .. .. | 24,423 | 27,359 | 26,785 | 27,085 | 26,176 |
| State Coal Mine .. .. | 367,733 | 385,105 | 499,076 | 436,753 | 519,536 |
| Brown Coal Mine .. .. | 98,053 | 75,186 | 44,426 | 48,886 | 45,830 |
| Coal Mines Regulation—Sinking Fund and Depreciation Fund | 56,613 | 22,419 | 82,786 | 22,342 | 39,628 |
| Diamond drills for prospecting .. | 11,703 | 10,992 | 9,809 | 9,411 | 10,597 |
| Testing plants .. .. | 4,028 | 4,643 | 3,212 | 3,148 | 3,499 |
| Geological and underground surveys of mines .. .. | 2,138 | 2,443 | 2,506 | 3,071 | 3,436 |
| Mining Development— | | | | | |
| Advances to companies, &c., boring for gold, coal, &c. .. | 16,993 | 9,006 | 8,161 | 6,963 | 6,711 |
| Miscellaneous .. .. | 5,347 | 1,702 | 2,024 | 1,806 | 2,107 |
| Total .. .. | 587,031 | 538,855 | 678,785 | 559,465 | 657,520 |

Yearly grants are also made to Schools of Mines, particulars of which will be found on page 331 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 purposes .. | 57,579 |
| Plant for testing metalliferous material .. .. | 12,357 |
| Construction of races and dams .. .. .. | 8,260 |
| Advances to miners for prospecting .. .. .. | 27,839 |
| Purchase of cyanide process patent rights .. .. | 20,000 |
| Equipping Schools of Mines with mining appliances .. | 9,975 |
| State Coal Mine .. .. .. .. .. | 239,432 |
| Miscellaneous .. .. .. .. .. | 9,740 |
| Total .. .. .. .. | 510,454 |

The advances from loan moneys and revenue to mining companies to 30th June, 1924, for the development of mining, totalled £255,917, of which sum £39,975 had up to that date been repaid, £47,790 realized, and £133,837 written off, leaving £34,315 outstanding. Interest received during 1923-24 amounted to £410, and interest outstanding on 30th June, 1924, to £3,691.

**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 1923.

## TOTAL MINERAL PRODUCTION TO 31ST DECEMBER 1923.

| Metals and Minerals. | Recorded prior to 1923. | | Recorded during 1923. | | Total Recorded to end of 1923. | |
|---|---|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. | Quantity. | Value. |
| | Fine ozs. | £ | Fine ozs. | £ | Fine ozs. | £ |
| Gold .. .. | 70,967,131 | 301,448,435 | 95,403 | 405,245 | 71,062,534 | 301,853,680 |
| Silver .. | 1,448,333 | 220,386 | 6,304 | 963 | 1,455,137* | 221,349 |
| | 30,577 | 7,880 | .. | .. | 30,577 | 7,880 |
| Platinum .. | 311 | 1,671 | .. | .. | 311 | 1,671 |
| | tons. | | tons. | | tons. | |
| Coal, black .. | 9,729,912 | 6,279,328 | 476,823 | 525,270 | 10,206,735 | 6,804,598 |
| „ brown .. | 633,9 3 | 218 153 | 116,888 | 38,019 | 750,831 | 256,172 |
| Ore—copper .. | 18,730 | 218,590 | .. | .. | 18,730 | 218,590 |
| „ tin .. | 16,710 | 915,594 | 78 | 10,371 | 16,788 | 925,965 |
| „ antimony .. | 102,994 | 578,021 | 1,760 | 14,112 | 104,754 | 592,133 |
| „ silver-lead .. | 793 | 5,760 | .. | .. | 793 | 5,760 |
| „ iron .. | 5,434 | 12,540 | .. | .. | 5,434 | 12,540 |
| „ manganese .. | 407 | 1,949 | .. | .. | 407 | 1,949 |
| Wolfram .. | 118 | 11,785 | .. | .. | 118 | 11,785 |
| Diamonds .. | .. | 128 | .. | .. | .. | 128 |
| Sapphires, &c. .. | .. | 630 | .. | .. | .. | 630 |
| Gypsum .. | 50,709 | 35,757 | 12,761 | 10,176 | 63,470 | 45,933 |
| Magnesite .. | 1,481 | 4,491 | 75 | 225 | 1,556 | 4,716 |
| Kaolin .. .. | 22,558 | 29,233 | 2,307 | 2,384 | 24,865 | 31,617 |
| Diatomaceous earth | 8,057 | 33,137 | .. | .. | 8,057 | 33,137 |
| Pigment clays .. | 1,6 7 | 2,059 | 123 | 635 | 1,770 | 2,694 |
| Phosphate rock .. | 12,168 | 12,918 | 480 | 713 | 12,648 | 13,631 |
| Molybdenite .. | 700 | 6,916 | 50 | 6,250 | 750 | 13,166 |
| Fluorspar .. | 623 | 1,888 | .. | .. | 623 | 1,888 |
| Bluestone, freestone, granite, &c.† .. Limestone, &c.‡ .. | .. | 6,917,597 | .. | 518,064 | .. | 7,435,661 |
| Total .. | .. | 316,964,846 | .. | 1,532,427 | .. | 318,497,273 |

* 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 the gold produced from 1851 to 1923 was £301,853,680, 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 1923.

| Period. | Quantity (Fine ozs.). | Period. | Quantity (Fine ozs.). |
|---|---|---|---|
| 1851-60 .. .. | 23,334,263* | 1911-15 .. | 2,161,349 |
| 1861-70 .. .. | 16,276,566* | 1916-20 .. | 905,561 |
| 1871-80 .. .. | 10,156,297* | 1921 .. .. | 104,512 |
| 1881-90 .. .. | 7,103,448* | 1922 .. .. | 106,872 |
| 1891-1900 .. | 7,476,038* | 1923 .. .. | 95,403 |
| 1901-10 .. .. | 7,095,061 | | |

* Gross ozs.

The yield has been on the down grade since 1906, the return for the State for 1923 having been the lowest since 1851. The quantities raised in the other principal gold-producing States in 1923 were 504,511 ounces in Western Australia, 88,726 ounces in Queensland, and 18,833 ounces in New South Wales. The total production of gold in the world in 1922, as shown in the United States Mint Report, was 15,440,243 ounces.

**Mining district gold yields.** The yield of gold for the last two years in each mining district of the State, as estimated by the mining registrars, is shown in the following table. The quantities represented by the aggregate figures, which are given in gross

ounces, exceed the total output of 1922 by 3 ounces, and that of 1923 by 84 ounces :—

## DISTRICT YIELDS OF GOLD, ALLUVIAL AND QUARTZ, 1922 AND 1923.

| Mining District. | 1922. | | | 1923. | | |
|---|---|---|---|---|---|---|
| | Alluvial. | Quartz. | Total. | Alluvial. | Quartz. | Total. |
| | ozs. | ozs. | ozs. | ozs. | ozs. | ozs. |
| Ararat and Stawell .. | 4,370 | 460 | 4,830 | 4,647 | 516 | 5,163 |
| Ballarat .. .. | 1,378 | 1,434 | 2,812 | 1,007 | 785 | 1,792 |
| Beechworth .. | 11,438 | 22,628 | 34,066 | 7,871 | 25,067 | 32,938 |
| Bendigo .. .. | 914 | 52,537 | 53,451 | 361 | 44,896 | 45,257 |
| Castlemaine .. | 3,105 | 15,582 | 18,687 | 1,763 | 15,751 | 17,514 |
| Gippsland .. .. | 2,231 | 463 | 2,694 | 1,198 | 469 | 1,667 |
| Maryborough .. | 510 | 897 | 1,407 | 387 | 477 | 864 |
| Total .. .. | 23,946 | 94,001 | 117,947 | 17,234 | 87,961 | 105,195 |

**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, 1919 TO 1923.

| Mining District. | Amount Distributed. | | | | |
|---|---|---|---|---|---|
| | 1919. | 1920. | 1921. | 1922. | 1923. |
| | £ | £ | £ | £ | £ |
| Ararat and Stawell .. .. | .. | .. | .. | .. | .. |
| Ballarat .. .. .. | .. | .. | 13 | .. | 1,635 |
| Beechworth .. .. .. | 19,220 | 36,690 | 13,455 | 18,450 | 9,000 |
| Bendigo .. .. .. | .. | 44,226 | 6,750 | 20,250 | 37,872 |
| Castlemaine .. .. .. | 5,800 | 11,595 | 5,830 | 17,883 | 12,459 |
| Gippsland .. .. .. | 160 | 2,668 | 1,096 | .. | .. |
| Maryborough .. .. | .. | .. | .. | .. | .. |
| Total .. .. | 25,180 | 95,179 | 27,144 | 56,583 | 60,966 |

**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, 1919 TO 1923.

| Year. | Alluvial Miners. | Quartz Miners. | Total. |
|---|---|---|---|
| 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 |
| 1923 .. .. .. | 770 | 2,212 | 2,982 |

The number of men employed in each mining district in 1923 was as follows :—Ararat and Stawell, 154 ; Ballarat, 63 ; Bendigo, 1,479 ; Beechworth, 716; Castlemaine, 344; Gippsland, 100 ; and Maryborough, 126.

**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, 1919 TO 1923.

| Year. | Approximate Value of Machinery Employed in— | | |
|---|---|---|---|
| | Alluvial Mining. | Quartz Mining. | Total. |
| | £ | £ | £ |
| 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 |
| 1923 .. .. .. | 133,200 | 486,300 | 619,500 |

**Dredging and sluicing.** A feature of alluvial mining in Victoria for the last twenty-two 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 1923 the

number of bucket dredges at work was 3, and the number of pump hydraulic sluices 1, in addition to which 16 jet elevators and 4 gravitation plants were operating. Particulars relating to these dredging and sluicing plants for the last five years are as follows :—

DREDGING AND SLUICING, 1919 TO 1923.

| Year. | Number of Plants. | Area Worked. | Quantity of Material Treated. | Gold Obtained. | Tin Obtained. |
|---|---|---|---|---|---|
| | | acres. | cub. yds. | ozs. | tons. |
| 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 |
| 1923 .. .. | 24 | 27 | 1,294,300 | 9,017 | 77 |

These plants employed 44 men in 1923. The yield of gold in that year per cubic yard of material was 3·3 grains. Since the inception of dredge mining 1,875,097 ounces of gold and 1,541 tons of tin have been won by this system.

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

CYANIDATION, 1919 TO 1923.

| Year. | Number of Plants. | Quantity of Tailings Treated. | Yield of Gold. | Value of Yield. |
|---|---|---|---|---|
| | | tons. | ozs. | £ |
| 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 |
| 1923 .. .. .. | 14 | 18,644 | 3,415 | 13,445 |

Records show that the total amount of tailings which have been treated by the cyanide and other processes is 15,982,431 tons, and that the gold which has been won thereby amounts to 1,278,706 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 debris.

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

GOVERNMENT BATTERIES, 1919 TO 1923.

| Year. | Number of Batteries. | Quantity of Ore Treated. | Yield of Gold. |
|---|---|---|---|
| | | tons. | ozs. |
| 1919 .. .. .. .. | 34 | 2,941 | 3,778 |
| 1920 .. .. .. .. | 33 | 2,664 | 2,849 |
| 1921 .. .. .. .. | 34 | 1,748 | 1,367 |
| 1922 .. .. .. .. | 34 | 1,286 | 1,424 |
| 1923 .. .. .. .. | 34 | 1,000 | 649 |

Since 1897, the year in which the first battery was erected, 73,190 tons of ore have been crushed for 50,799 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 750,831 tons (valued at £256,172), of which 116,888 tons were obtained in 1923. Of the total output for that year 115,045 tons valued at £37,424 were obtained from the State Brown Coal Mine at Morwell.

**The State coal-field.** The State coal mine at Wonthaggi, on the Powlett River, was opened in November, 1909. In June, 1911, the control of the mine was transferred to the Railways Commissioners. The area reserved for mining is about 17 square miles. Boring has

proved that about 28,000,000 tons of coal existed in the central area of 5 square miles. The output of coal for the year ended 31st December, 1923, was 418,394 tons, valued at £460,234. The total output up to the end of 1923 was 5,999,403 tons, valued at £4,208,726. The average number of men employed at the mine throughout the year ended 30th June, 1923, was 1,556.

**Victorian coal production and value.**

The quantity of coal, exclusive of brown coal, raised in Victoria up to the end of 1923 was 10,206,735 tons, valued at £6,804,598. 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, 1922, and 1923, together with the value per ton at the pit's mouth, are given in the following table :—

COAL PRODUCTION AND VALUE PER TON.

| Period. | Average Annual Production. | Average Annual Value per ton at pit's mouth. |
|---|---|---|
| | tons. | *s. d.* |
| Prior to 1892 .. .. | *77,914 | 18 8 |
| 1892–1900 .. .. .. | 184,517 | 9 11 |
| 1901–10 .. .. .. | 168,548 | 11 8 |
| 1911–15 .. .. .. | 608,512 | 9 2 |
| 1916–20 .. .. .. | 437,833 | 15 11 |
| 1921 .. .. .. | 514,859 | 23 5 |
| 1922 .. .. .. | 559,284 | 23 9 |
| 1923 .. .. .. | 476,823 | 22 0 |

* Total production up to date mentioned.

The quantities of coal produced in the other States in 1923 were as follows :—New South Wales, 10,478,513 tons; Queensland, 1,136,883 tons; Western Australia, 420,714 tons; and Tasmania, 80,718 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, 1919 TO 1923

| Year. | Gold Mines. | | | Coal Mines. | | |
|---|---|---|---|---|---|---|
| | Miners Employed. | Persons Killed. | Persons Injured. | Miners Employed. | Persons Killed. | Persons Injured. |
| 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 |
| 1923 .. .. | 2,982 | 1 | 6 | 2,131 | 1 | 11 |

As a result of gold mining accidents during the last five years 13 persons were killed and 34 were injured and rendered unfit for work for a period of at least fourteen days. These numbers were equivalent to annual rates of 0·81 and 2·11 respectively per 1,000 employed. Coal mining accidents during the same period accounted for 12 deaths and 51 injuries resulting in disablement for at least fourteen days, these being equal to yearly rates of 1·17 and 4·96 respectively per 1,000 employees.

**Boring for gold and coal.**

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

GOVERNMENT BORING OPERATIONS, 1919 TO 1923.

| Year. | Drills worked by— | | Bores put down for— | | | Total Depth Bored. |
|---|---|---|---|---|---|---|
| | Steam. | Other Power. | Gold. | Coal. | Total. | |
| | | | | | | feet. |
| 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 |
| 1923 .. .. | .. | 12 | 4 | 67 | 71 | 19,270 |

**Antimony.** Up to the end of 1923 the quantity of antimony ore produced in Victoria was 104,754 tons valued at £592,133. Nearly the whole of it was obtained at Costerfield. The production for 1923 yielded 822 tons of concentrates valued at £14,112. For the previous year the yield was 1,283 tons of concentrates valued at £22,966.

**Tin.** The production of tin ore in the State up to the end of 1923 was 16,788 tons, valued at £925,965. In the year 1923 the quantity produced was 78 tons, as against 115 tons in the preceding year, and 80 tons in 1921. Of the tin won during the last five years nearly the whole was obtained in the Beechworth district.

**Gypsum.** The quantity of gypsum produced in the State in 1923 was 12,761 tons, nearly all of which was obtained at Waitchie, Lake Boga, and Bolton. The output for the previous year was 6,945 tons, which was obtained almost entirely at Lake Boga, Bolton, and Cowangie. Up to the end of 1923 the quantity raised in Victoria was 63,470 tons, valued at £45,933.

**Kaolin.** The quantity of kaolin produced in 1923 was 2,307 tons, and in the previous year, 2,340 tons. Up to the end of 1923 the total output was 24,865 tons, valued at £31,617.

**Molybdenite.** The total value of molybdenite produced in the State up to the end of 1923 was £13,166. In the year 1923 the output was valued at £6,250, as against £2,550 in 1922. The whole of the output was obtained at Everton, near Beechworth.

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

QUARRIES, 1919–20 TO 1923–24.

| 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. | £ |
| 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 |
| 1924 .. | 105 | 1,429,719 | 2,536 | 2,242 | 74,474 | 436,175 |

In 1923-24 the number of persons employed in quarries was 1,781, and the wages paid amounted to £366,184. These figures include the employees and wages connected with stone-breaking and tar-paving works, most of which are carried on in conjunction with quarries and cannot be separated therefrom.

## MANUFACTURING INDUSTRIES.

**Industrial progress.**

The earliest year for which there are statistical records of the factories of the State is 1850, at which date the number of manufacturing establishments is shown to have been 68. Subsequently fair and regular progress was made in the industry until in 1900, the year before Federation, there were 3,097 factories working. The years immediately following Federation were marked by increased industrial activity, which was well maintained in later years. During the last ten years nearly all existing lines of manufacture have shown a notable expansion, and many industries new to the State have been firmly established. Since 1914 the number of factories has increased by 29 per cent., the number of persons employed by 32 per cent., the amount of salaries and wages paid by 147 per cent., the value of output by 130 per cent., the value of machinery and plant and premises by 142 per cent., and the engine power of factories by 186 per cent. The difference between the cost of materials used and the value of the output was equivalent to an added value of £331 1s. 10d. per person employed in 1923–24, as compared with £172 15s. 0d. in 1914. This favorable economic result coincides with a larger proportion of establishments using mechanical power in 1923–24, when 83 per cent. were so equipped, as against 73 per cent. in 1914, 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 increased from 4·18 per cent. in 1914 to 5·03 per cent. in 1923–24.

Since 1914 the number of factories employing over 100 hands has increased by 22 per cent., and the number of hands employed by such factories has increased by 31 per cent. While factories of this size formed only 3·3 per cent. of the total number in the State in 1923–24, they employed 41·3 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 1923–24, 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 |
| 1923–24 .. | 7,289 | 156,162 | 27,472,084 | 53,196,475 | 113,921,927 |

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

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

**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, 1923-24.**

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 1923-24 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, 1923-24.

| 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 | 195 | 7 | 170 | .. | .. | 39,385 | 10,760 | 164,730 | 206,869 |
| Bone milling .. .. .. | 14 | 797 | 14 | 110 | .. | 2 | 23,809 | 14,459 | 51,940 | 112,289 |
| Tanning .. .. .. | 51 | 4,217 | 77 | 2,386 | .. | 17 | 550,153 | 47,132 | 1,795,692 | 2,794,944 |
| Fellmongering .. .. .. | 29 | 1,633 | 31 | 416 | .. | 2 | 95,862 | 24,809 | 1,616,588 | 1,880,967 |
| Chaffcutting and grain crushing .. | 173 | 2,503 | 186 | 673 | .. | 12 | 78,973 | 12,641 | 871,167 | 1,034,083 |
| Other .. .. .. .. | 8 | 53 | 4 | 169 | .. | .. | 39,637 | 387 | 91,856 | 167,427 |
| Total .. .. | 288 | 9,398 | 319 | 3,924 | .. | 33 | 827,819 | 110,188 | 4,591,973 | 6,196,579 |
| *Class II.—Oils and Fats, Animal and Vegetable.* | | | | | | | | | | |
| Oil, grease, glue .. .. .. | 11 | 215 | 7 | 154 | .. | 18 | 41,187 | 9,558 | 229,827 | 352,471 |
| Soap and candle .. .. .. | 17 | 667 | 11 | 587 | .. | 143 | 147,124 | 31,635 | 568,001 | 937,148 |
| Total .. .. | 28 | 882 | 18 | 741 | .. | 161 | 188,311 | 41,193 | 797,828 | 1,289,619 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Class III.—Processes relating to Stone, Clay, Glass, &c.* | | | | | | | | | | |
| Brick, pottery, &c. .. .. | 104 | 8,172 | 72 | 3,303 | 1 | 164 | 735,719 | 282,681 | 94,787 | 1,568,362 |
| Cement, including cement pipes .. | 24 | 3,451 | 13 | 783 | .. | 7 | 196,611 | 105,691 | 188,322 | 769,692 |
| Glass, including bottles .. .. | 4 | 431 | 11 | 776 | .. | 11 | 206,429 | 70,453 | 72,512 | 496,007 |
| Glass bevelling .. .. .. | 26 | 101 | 21 | 253 | .. | 7 | 56,773 | 1,242 | 95,934 | 197,091 |
| Marble and stone dressing .. | 43 | 474 | 60 | 381 | .. | 6 | 93,232 | 3,143 | 76,174 | 226,820 |
| Modelling .. .. .. | 34 | 390 | 42 | 454 | 1 | 11 | 104,969 | 4,252 | 152,280 | 349,843 |
| Other .. .. .. .. | 17 | 313 | 12 | 271 | .. | 1 | 59,615 | 26,757 | 18,668 | 131,541 |
| Total .. .. | 252 | 13,332 | 231 | 6,221 | 2 | 207 | 1,453,348 | 494,219 | 698,677 | 3,739,356 |
| *Class IV.—Working in Wood.* | | | | | | | | | | |
| Cooperage .. .. .. | 9 | 297 | 8 | 191 | .. | .. | 55,292 | 1,419 | 31,169 | 110,361 |
| Saw-milling (forest) .. .. | 241 | 5,004 | 315 | 3,261 | .. | 11 | 686,419 | 1,011 | 24,331 | 1,374,581 |
| Saw-milling, moulding, &c. .. | 402 | 12,069 | 441 | 5,787 | 2 | 84 | 1,272,151 | 39,064 | 2,419,376 | 4,388,991 |
| Mantelpiece .. .. .. | 9 | 73 | 8 | 210 | .. | 6 | 45,166 | 503 | 40,271 | 102,289 |
| Wood carving, turning .. .. | 21 | 469 | 23 | 269 | .. | 8 | 65,826 | 2,405 | 59,351 | 167,833 |
| Other .. .. .. .. | 9 | 155 | 11 | 153 | .. | 37 | 39,354 | 1,304 | 68,937 | 132,449 |
| Total .. .. | 691 | 18,067 | 806 | 9,871 | 2 | 146 | 2,164,208 | 45,706 | 2,643,435 | 6,276,504 |
| *Class V.—Metal Works, Machinery, &c.* | | | | | | | | | | |
| Agricultural implement .. .. | 61 | 1,952 | 65 | 3,049 | 2 | 95 | 688,229 | 44,171 | 713,637 | 1,690,645 |
| Engineering, iron foundry, &c. .. | 516 | 12,917 | 592 | 10,132 | 5 | 173 | 2,288,499 | 183,953 | 2,501,025 | 6,087,049 |
| Railway workshop .. .. | 18 | 3,388 | .. | 5,883 | .. | 7 | 1,300,137 | 33,377 | 1,596,236 | 3,222,714 |
| Nail .. .. .. .. | 9 | 375 | 6 | 162 | .. | 4 | 33,588 | 2,379 | 148,572 | 212,243 |
| Sheet-iron, tin, &c. .. .. | 108 | 843 | 89 | 1,880 | 1 | 263 | 381,224 | 14,430 | 737,387 | 1,364,693 |
| Brass, copper smithing .. .. | 97 | 834 | 118 | 1,184 | 1 | 58 | 257,790 | 14,602 | 259,476 | 656,370 |
| Wireworking .. .. .. | 24 | 437 | 32 | 314 | .. | 19 | 67,079 | 2,976 | 225,406 | 374,189 |
| Metallurgical, &c., cyanide .. | 8 | 93 | 11 | 61 | .. | .. | 13,630 | 3,029 | 102,184 | 135,661 |
| Oven, range .. .. .. | 19 | 134 | 22 | 177 | .. | 1 | 40,288 | 1,734 | 53,592 | 121,564 |
| Other .. .. .. .. | 48 | 706 | 48 | 508 | 1 | 15 | 108,346 | 10,665 | 194,111 | 404,437 |
| Total .. .. | 908 | 21,679 | 983 | 23,350 | 10 | 635 | 5,178,810 | 311,316 | 6,531,626 | 14,269,565 |

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1923-24—*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 VI.—Connected with Food and Drink, &c.* | | | | | | | £ | £ | £ | £ |
| Bacon curing .. .. .. | 24 | 1,647 | 32 | 483 | .. | 19 | 118,751 | 17,549 | 1,313,895 | 1,602,615 |
| Butter, cheese, butterine .. .. | 190 | 5,320 | 34 | 2,089 | .. | 214 | 529,686 | 128,206 | 6,984,383 | 8,184,522 |
| Meat freezing, preserving .. .. | 13 | 5,906 | 8 | 848 | .. | 37 | 161,643 | 21,972 | 841,788 | 1,143,920 |
| Biscuit .. .. .. .. | 9 | 540 | 6 | 861 | 1 | 608 | 213,307 | 24,062 | 658,638 | 1,135,114 |
| Flourmilling .. .. .. | 47 | 5,647 | 32 | 1,063 | .. | 19 | 266,540 | 58,015 | 4,483,925 | 5,495,110 |
| Jam, sauce, &c. .. .. .. | 47 | 1,036 | 30 | 1,491 | 4 | 1,048 | 397,750 | 25,992 | 1,105,650 | 1,930,258 |
| Oatmeal, starch, &c. .. .. | 37 | 2,049 | 26 | 383 | .. | 323 | 120,674 | 19,746 | 752,733 | 1,121,412 |
| Sugar, confectionery, &c. .. .. | 115 | 8,601 | 98 | 2,222 | 19 | 1,995 | 736,548 | 125,997 | 4,520,659 | 6,221,331 |
| Aerated water, cordial, &c. .. | 121 | 670 | 132 | 782 | 10 | 83 | 179,255 | 6,406 | 300,777 | 698,770 |
| Malt .. .. .. .. | 21 | 461 | 14 | 257 | .. | 6 | 69,894 | 18,778 | 368,785 | 601,433 |
| Brewing .. .. .. | 14 | 5,058 | 6 | 1,179 | .. | 1 | 323,806 | 61,211 | 961,038 | 2,412,387 |
| Distilling .. .. .. | 10 | 316 | 4 | 122 | .. | 3 | 26,632 | 10,560 | 80,292 | 173,557 |
| Condiments, coffee, cocoa, &c. .. | 15 | 755 | 8 | 224 | .. | 122 | 67,916 | 7,678 | 445,218 | 620,243 |
| Tobacco, &c. .. .. .. | 14 | 690 | 16 | 1,173 | 1 | 630 | 332,930 | 7,185 | 1,302,018 | 2,126,625 |
| Other .. .. .. .. | 43 | 3,768 | 34 | 362 | 3 | 34 | 87,093 | 32,483 | 87,943 | 293,214 |
| Total .. .. | 720 | 42,464 | 480 | 13,539 | 38 | 5,142 | 3,633,025 | 565,840 | 24,207,742 | 33,760,511 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Class VII.—Clothing and Textile Fabrics, and Fibrous Material.* | | | | | | | | | | |
| Woollen mill | 27 | 10,412 | 22 | 2,196 | .. | 2,696 | 713,411 | 92,187 | 2,086,136 | 3,561,480 |
| Clothing, tailoring, &c. | 525 | 561 | 501 | 1,770 | 42 | 7,533 | 1,206,472 | 22,361 | 2,059,904 | 3,908,514 |
| Dressmaking and millinery | 509 | 499 | 147 | 263 | 336 | 7,975 | 849,306 | 12,458 | 1,739,847 | 3,135,160 |
| Underclothing, shirt | 188 | 985 | 92 | 328 | 97 | 5,572 | 666,462 | 13,282 | 1,527,555 | 2,601,053 |
| Hat, cap | 53 | 783 | 48 | 645 | 4 | 965 | 269,946 | 14,830 | 437,302 | 880,143 |
| Hosiery | 158 | 1,054 | 92 | 472 | 83 | 3,377 | 429,215 | 14,533 | 1,012,448 | 1,892,662 |
| Oilskin, waterproof clothing | 5 | 32 | 4 | 48 | .. | 130 | 29,395 | 1,085 | 81,880 | 144,581 |
| Boot, shoe | 400 | 3,157 | 471 | 6,629 | 18 | 5,316 | 1,941,075 | 38,607 | 2,879,194 | 5,888,699 |
| Fur | 40 | 98 | 38 | 154 | 14 | 317 | 61,971 | 1,656 | 277,060 | 404,573 |
| Rope, twine, &c. | 9 | 1,586 | 11 | 558 | .. | 375 | 140,081 | 12,538 | 329,160 | 588,358 |
| Sail, tent, &c. | 16 | 37 | 18 | 109 | 1 | 111 | 35,555 | 504 | 165,706 | 243,193 |
| Other | 37 | 168 | 35 | 202 | 10 | 423 | 86,424 | 6,924 | 211,814 | 369,031 |
| Total | 1,967 | 19,372 | 1,479 | 13,374 | 605 | 34,790 | 6,429,313 | 230,965 | 12,808,006 | 23,617,447 |
| *Class VIII.—Books, Paper, Printing, Engraving, &c.* | | | | | | | | | | |
| Printing | 416 | 5,847 | 482 | 6,310 | 12 | 1,669 | 1,895,981 | 48,067 | 1,748,088 | 5,342,617 |
| Account-book, stationery, &c. | 35 | 634 | 41 | 660 | .. | 667 | 205,362 | 5,329 | 261,618 | 605,229 |
| Fancy box | 35 | 455 | 24 | 304 | 6 | 812 | 146,424 | 3,944 | 308,518 | 582,073 |
| Die sinking, engraving, &c. | 19 | 104 | 20 | 200 | .. | 6 | 35,722 | 1,216 | 31,005 | 101,071 |
| Other | 32 | 2,840 | 35 | 698 | 2 | 150 | 171,110 | 49,032 | 249,774 | 626,465 |
| Total | 537 | 9,880 | 602 | 8,172 | 20 | 3,304 | 2,454,599 | 107,588 | 2,599,003 | 7,257,455 |
| *Class IX.—Musical Instruments* | 20 | 366 | 13 | 468 | .. | 17 | 105,628 | 2,196 | 128,486 | 277,009 |
| *Class X.—Arms and Explosives* | 10 | 543 | 3 | 264 | .. | 156 | 87,155 | 8,010 | 180,450 | 338,247 |

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1923-24—*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 XI.—Vehicles and Fittings, Saddlery, Harness, &c.* | | | | | | | | | | |
| Coachbuilding .. .. .. | 296 | 1,298 | 346 | 2,341 | .. | 24 | 472,742 | 15,187 | 526,257 | 1,213,054 |
| Bicycle, &c. .. .. .. | 473 | 1,774 | 501 | 3,106 | 3 | 70 | 655,383 | 21,879 | 567,307 | 1,594,925 |
| Saddle, harness .. .. .. | 42 | 33 | 51 | 301 | .. | 64 | 63,476 | 642 | 96,461 | 192,677 |
| Other .. .. .. .. | 19 | 80 | 23 | 185 | .. | 13 | 32,779 | 891 | 47,088 | 106,980 |
| Total .. .. | 830 | 3,185 | 921 | 5,933 | 3 | 171 | 1,224,380 | 38,599 | 1,237,113 | 3,107,636 |
| *Class XII.—Shipbuilding, Fitting, &c.* | 12 | 1,409 | 9 | 381 | .. | 2 | 89,340 | 5,319 | 34,031 | 143,065 |
| *Class XIII.—Furniture, Bedding, &c.* | | | | | | | | | | |
| Upholstery, bedding, &c. .. .. | 71 | 619 | 48 | 578 | 3 | 325 | 155,163 | 5,099 | 421,068 | 695,384 |
| Cabinet, including billiard table .. | 307 | 2,545 | 405 | 2,854 | 5 | 109 | 569,368 | 14,956 | 681,107 | 1,596,751 |
| Picture frame .. .. .. | 20 | 63 | 21 | 77 | .. | 14 | 17,520 | 478 | 23,956 | 53,816 |
| Other .. .. .. .. | 8 | 111 | 5 | 165 | .. | 20 | 35,792 | 2,140 | 71,205 | 131,940 |
| Total .. .. | 406 | 3,338 | 479 | 3,674 | 8 | 468 | 777,843 | 22,673 | 1,197,336 | 2,477,891 |

| | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| *Class XIV.—Drugs, Chemicals, and By-products.* | | | | | | | | | | |
| Blacking, blue, &c. .. .. | 24 | 199 | 17 | 159 | .. | 176 | 51,599 | 2,563 | 258,694 | 391,976 |
| Chemicals, drugs, &c. .. .. | 50 | 1,537 | 35 | 640 | 1 | 534 | 220,956 | 22,106 | 464,515 | 912,427 |
| Fertilizers .. .. .. | 8 | 1,918 | 4 | 864 | .. | 7 | 209,801 | 39,567 | 761,865 | 1,209,368 |
| Other .. .. .. .. | 39 | 312 | 30 | 213 | 1 | 18 | 38,742 | 2,740 | 100,737 | 178,556 |
| Total .. .. | 121 | 3,966 | 86 | 1,876 | 2 | 735 | 521,098 | 66,976 | 1,585,811 | 2,692,327 |
| *Class XV.—Surgical and Scientific Appliances* .. .. .. | 36 | 63 | 32 | 153 | .. | 10 | 29,438 | 1,109 | 28,891 | 80,139 |
| *Class XVI.—Timepieces, Jewellery, and Plated-ware* .. .. | 111 | 518 | 119 | 885 | 1 | 105 | 187,029 | 7,289 | 232,853 | 545,827 |
| *Class XVII.—Heat, Light, and Energy.* | | | | | | | | | | |
| Electric apparatus .. .. | 77 | 515 | 77 | 768 | 1 | 33 | 144,259 | 5,407 | 206,754 | 462,063 |
| Electric light .. .. .. | 90 | 154,622 | 5 | 1,672 | .. | 75 | 462,172 | 624,321 | 2,326 | 2,176,551 |
| Gas, coke .. .. .. | 45 | 2,014 | 3 | 2,448 | .. | 110 | 699,173 | 6,732 | 838,749 | 2,098,571 |
| Other .. .. .. .. | 7 | 1,613 | 1 | 263 | .. | 423 | 97,691 | 10,910 | 228,650 | 510,426 |
| Total .. .. | 219 | 158,764 | 86 | 5,151 | 1 | 641 | 1,403,295 | 647,370 | 1,276,479 | 5,247,611 |
| *Class XVIII.—Leatherware (except Saddlery and Harness)* .. .. | 62 | 469 | 68 | 609 | 2 | 392 | 158,593 | 5,107 | 369,345 | 645,642 |

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1923-24—*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 XIX.—Wires, not elsewhere included.* | | | | | | | £ | £ | £ | £ |
| Umbrella .. .. .. | 7 | 13 | 5 | 53 | .. | 137 | 24,389 | 287 | 78,734 | 126,422 |
| Rubber goods .. .. .. | 20 | 6,655 | 16 | 1,646 | .. | 539 | 446,831 | 89,560 | 852,799 | 1,560,888 |
| Brush, broom .. .. .. | 18 | 178 | 20 | 276 | 1 | 98 | 59,475 | 1,446 | 110,504 | 201,490 |
| Basket, wickerware .. .. | 26 | 20 | 30 | 212 | .. | .. | 28,157 | 283 | 26,752 | 70,697 |
| Total .. .. | 71 | 6,866 | 71 | 2,187 | 1 | 774 | 558,852 | 91,576 | 1,068,789 | 1,959,497 |
| Grand Total .. .. | 7,289 | 314,561 | 6,805 | 100,773 | 695 | 47,889 | 27,472,084 | 2,803,239 | 62,217,874 | 113,921,927 |

**Increase in value of output of certain industries, 1918-19 and 1923-24.**

Most of the more important manufacturing industries in the State have shown a substantial increase in the value of output in the last five years. The output for the years 1918-19 and 1923-24 of a number of leading industries is shown in the following table, the industries being arranged in order of increase in value:—

## OUTPUT OF INDUSTRIES, 1918-19 AND 1923-24.

| Industry. | Value of Output. | | Increase in Five Years. | |
|---|---|---|---|---|
| | 1918-19. | 1923-24. | Value. | Per cent. |
| | £ | £ | £ | |
| Engineering, iron foundries, &c. | 3,359,580 | 6,087,049 | 2,727,469 | 81·2 |
| Woollen mills .. .. | 1,126,119 | 3,561,480 | 2,435,361 | 216·3 |
| Printing .. .. .. | 3,014,240 | 5,342,617 | 2,328,377 | 77·2 |
| Sawmills, moulding, &c. .. | 2,187,100 | 4,388,991 | 2,201,891 | 100·7 |
| Railway workshop .. .. | 1,248,380 | 3,222,714 | 1,974,334 | 158·1 |
| Butter, cheese, &c. .. .. | 6,056,342 | 7,974,676 | 1,918,334 | 31·7 |
| Boot and shoe .. .. | 4,040,550 | 5,888,699 | 1,848,149 | 45·7 |
| Electric light and power .. | 835,190 | 2,176,551 | 1,341,361 | 160.6 |
| Dressmaking and millinery .. | 1,891,802 | 3,135,160 | 1,243,358 | 65·7 |
| Confectionery, &c. .. .. | 1,661,680 | 2,882,561 | 1,220,881 | 73·5 |
| Hosiery .. .. .. | 803,231 | 1,892,662 | 1,089,431 | 135.6 |
| Bicycle, motor, &c. .. .. | 516,376 | 1,594,925 | 1,078,549 | 208.8 |
| Sugar .. .. .. | 2,274,192 | 3,338,770 | 1,064,578 | 46.8 |
| Agricultural implements .. | 702,870 | 1,690,645 | 987,775 | 140.5 |
| Breweries .. .. .. | 1,476,335 | 2,412,387 | 936,052 | 63·4 |
| Brick, pottery, &c. .. .. | 632,841 | 1,568,362 | 935,521 | 147·7 |
| Clothing, tailoring, &c. .. | 2,980,583 | 3,908,514 | 927,931 | 31·1 |
| Cabinet, including billiard table | 706,815 | 1,596,751 | 889,936 | 125·9 |
| Flour mills .. .. | 4,656,403 | 5,495,110 | 838,707 | 18·0 |
| Underclothing .. .. | 1,832,183 | 2,601,053 | 768,870 | 42·0 |
| Gasworks .. .. .. | 1,373,603 | 2,098,571 | 724,968 | 52.8 |
| Forest sawmills .. .. | 657,880 | 1,374,581 | 716,701 | 108.9 |
| Sheet iron, tinware, &c. .. | 727,380 | 1,364,693 | 637,313 | 87.6 |
| Cement and cement goods .. | 190,539 | 769,692 | 579,153 | 304·0 |
| Bacon curing .. .. | 1,107,910 | 1,602,615 | 494,705 | 44.7 |
| Coachbuilding .. .. | 729,316 | 1,213,054 | 483,738 | 66.3 |
| Fertilisers .. .. .. | 790,130 | 1,209,368 | 419,238 | 53·1 |
| Tobacco, &c. .. .. | 1,735,678 | 2,126,625 | 390,947 | 22·5 |
| Bedding, upholstery, &c. .. | 310,786 | 695,384 | 384,598 | 12·4 |
| Oatmeal, starch, &c. .. | 742,724 | 1,121,412 | 378,688 | 51·0 |
| Chaffcutting and grain crushing | 691,053 | 1,034,083 | 343,030 | 49.6 |
| Electric apparatus .. .. | 123,258 | 462,063 | 338,805 | 274·9 |
| Brass, copper .. .. | 322,270 | 656,370 | 334,100 | 103.7 |
| Biscuit .. .. .. | 847,256 | 1,135,114 | 287,858 | 34·0 |
| Fancy box, paper bag .. | 327,844 | 582,073 | 254,229 | 77·5 |
| Aerated waters, cordials, &c. .. | 464,343 | 698,770 | 234,427 | 50.5 |
| Chemicals, drugs, &c. .. | 691,271 | 912,427 | 221,156 | 32·0 |

## 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., 1914 TO 1923-24.

| 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. |
|---|---|---|---|---|---|---|
| | | | £ | | | £ |
| 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 | 658,026 |
| 1923–24 .. .. | 80 | 5,850 | 557,930 | 2,821 | 108 | 646,015 |

The quantity of bark used in connexion with tanning operations in 1923–24 was 13,066 tons. The output of tanneries for each of the last ten years was as follows :—

### OUTPUT OF TANNERIES, ETC., 1914 TO 1923-24.

| 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. | | | |
| | | | | number | lbs. | £ |
| 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 |
| 1923–24 .. | 788,942 | 526,818 | 2,387,235 | 971,559 | 12,885,685 | 4,675,911 |

The value of the leather, &c., imported into Victoria from oversea countries during the year ended 30th June, 1924, was £172,804.

**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, 1914 TO 1923-24.

| 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. | £ |
| 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 |
| 1923-24 | 17 | 210,270 | 730 | 147,124 | 289,364 | 34,424 | 937,148 |

* Not including soap made in small soap works not classified as factories, viz., 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, 1,346 cwt. in 1922-23, and 1,258 cwt. in 1923-24.

The quantity of tallow used in 1923-24 in the manufacture of soap and candles was 176,443 cwt. in factories, and 392 cwt. in minor works.

The imports from oversea countries in 1923-24 included 323,032 lbs. of soap valued at £20,617, and 24,969 lbs. of candles valued at £1,454.

**Brickyards, potteries, &c.** Particulars relating to brickyards and potteries for the ten years 1914 to 1923-24 are shown in the following statement. The value of the land, plant, buildings, &c., used in connexion with such works in 1923-24 was £1,001,250 :—

BRICKS, POTTERY, PIPES, AND TILES, 1914 TO 1923-24.

| Year. | Number of Establishments. | Number of Employees. | Amount of Wages Paid | Number of Bricks Made.* | Value of— | |
|---|---|---|---|---|---|---|
| | | | | | Pipes and Tiles. | Pottery. |
| | | | £ | | £ | £ |
| 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 |
| 1923-24 .. | 104 | 3,467 | 735,719 | 247,598,000 | 541,796 | 241,821 |

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

The estimated value of bricks made in 1923-24 was £784,745, being an increase of £68,185 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 1914 to 1923-24 is given in the table which follows :—

FOREST SAW-MILLS, 1914 TO 1923-24.

| 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. | £ |
| 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 |
| 1923-24 .. | 241 | 624,590 | 3,272 | 686,419 | 134,639,000 | 942,476 |

In addition to the forest saw-mills there were 450 other factories working in wood. Particulars relating to these for the year 1923-24 are given on page 539.

**Firewood, &c.**

It is estimated that the approximate value of the production of firewood for consumption in the year 1923-24 was £1,033,700. 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 1914 the number of factories has increased by 46 per cent., the number of persons employed therein by 20 per cent., the amount of wages paid by 120 per cent., the value of machinery and plant by 90 per cent., the value of materials used by 93 per cent., and the value of the output by 106 per cent. The chief particulars of the industry for the years 1914 to 1923-24 are given in the next table :—

ENGINEERING, IRON FOUNDRY, ETC., 1914 TO 1923-24.

| 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. |
| | | | £ | | £ | £ | £ | £ |
| 1914 .. | 354 | 7,899 | 762,392 | 8,601 | 1,038,622 | 1,298,255 | 94,284 | 2,961,187 |
| 1915 .. | 364 | 7,999 | 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 |
| 1923-24 | 516 | 12,917 | 1,445,840 | 10,305 | 2,288,499 | 2,501,025 | 183,953 | 6,087,049 |

The above figures are exclusive of railway workshops, which in 1923–24 numbered 18, and gave employment to 5,890 hands who were paid £1,300,137; the value of the materials dealt with by such workshops in that year was £1,596,236, and the value of the output was £3,222,714, of which 68 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, 1914 TO 1923–24.

| Year. | No. of Factories. | No. of Employees. | Wages Paid. | Value of— | | |
|---|---|---|---|---|---|---|
| | | | | Fuel, &c., Used. | Materials Used. | Output. |
| | | | £ | £ | £ | £ |
| 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 |
| 1923–24 .. | 61 | 3,144 | 688,229 | 44,171 | 713,637 | 1,690,645 |

The wages averaged £127 15s. 9d. for each employee in 1914, and £218 18s. in 1923–24. 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 1914 to 1923–24. The value of the machinery, plant, land and buildings in connexion with these establishments was £153,029 in 1914 and £322,080 in 1923–24.

BACON CURING. 1914 TO 1923–24.

| Year. | Number of Establishments. | Number of Employees. | Amount of Wages Paid. | Pigs Slaughtered for Curing. | Weight of Bacon and Hams Cured. | Value of Output. |
|---|---|---|---|---|---|---|
| | | | £ | number | lbs. | £ |
| 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 | 1,289,267 |
| 1923–24 .. | 24 | 502 | 118,751 | 217,847 | 20,458,243 | 1,602,615 |

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 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, 116 in 1922–23, and 95 in 1923–24; the quantity (in pounds) of bacon and hams cured in these works was 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, 9,600 in 1922–23, and 9,025 in 1923–24.

In addition, the following quantities of bacon and hams were returned as having been cured on farms:—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, 1,975,729 lbs. in 1922–23, and 2,082,731 lbs. in 1923–24. The total quantity of bacon and hams cured in 1923–24 was thus 22,540,974 lbs.—an increase of 3,262,250 lbs. as compared with 1922–23.

**Butter and cheese factories.**

The number of butter, cheese, and kindred factories in 1923–24 was 184. Of these 148 were making butter, 32 cheese, 4 concentrated milk, 6 condensed milk, 12 powdered milk, 13 casein, and 1 milk sugar. There were also 26 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 1914 to 1923–24 were as follows:—

BUTTER AND CHEESE FACTORIES, 1914 TO 1923–24.

| Year. | Number of Factories. | Value of Machinery, Plant, Land, and Buildings. | Number of Employees. | Amount of Wages Paid. | Value of Output. |
|---|---|---|---|---|---|
| | | £ | | £ | £ |
| 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 |
| 1923–24 .. .. | 184 | 1,685,530 | 2,186 | 511,001 | 7,974,676 |

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on page 514.

**Meat freezing and preserving works.**

Meat freezing and preserving works numbered thirteen in 1923-24, and gave employment to 885 hands and 8 working proprietors, the wages of the hands amounting to £161,643. The approximate value of machinery, plant, land and buildings in that year was £1,356,560. The output for each of the last ten years is given in the following table :—

MEAT FREEZING AND PRESERVING, 1914 TO 1923-24.

| Year. | Frozen. | | | |
|---|---|---|---|---|
| | Cattle. | Sheep. | Rabbits. | Poultry. |
| | qrs. | number. | number. | number. |
| 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 |
| 1923-24 .. .. | 16,044 | 691,630 | 160,998 | ... |

| Year. | Preserved. | | | |
|---|---|---|---|---|
| | Beef. | Mutton. | Rabbits. | Other Meats, &c. |
| | cwt. | cwt. | cwt. | cwt. |
| 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 |
| 1923-24 .. .. | 8,098 | 564 | 32 | 1,411 |

NOTE.—In addition to the above, there were treated at freezing works 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; 2,855 calves and 7,335 pigs in 1921-22; and 98 calves and 121 pigs in 1923-24.

**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, 1924 :—

MEATS IMPORTED AND EXPORTED OVERSEA, 1923-24.

| Meats. | Imports. | | Exports. | |
|---|---|---|---|---|
| | Quantity. | Value. | Quantity. | Value. |
| | | £ | | £ |
| Frozen— | | | | |
| Mutton .. .. | 3,806 lbs. | 170 | 552,901 lbs. | 13,757 |
| Lamb .. .. | .. | .. | 21,833,739 ,, | 656,438 |
| Beef .. .. | .. | .. | 1,811,145 ,, | 22,944 |
| Pork .. .. | 226,136 lbs. | 8,685 | .. | .. |
| Rabbits and Hares .. | .. | .. | 80,499 prs. | 8,477 |
| Poultry .. .. | 280 lbs. | 15 | 3,388 ,, | 1,945 |
| Game .. .. | 5,040 lbs. | 695 | 2,076 lbs. | 119 |
| Potted and Concentrated | .. | 28,658 | .. | 872 |
| Preserved in tins .. | .. | 16,800 | 370,379 lbs. | 9,409 |
| Sausage Casings.. .. | .. | 58,115 | 1,324 cwt. | 20,591 |
| Not elsewhere included .. | .. | 175 | .. | 1,241 |
| Total value .. | .. | 113,313 | .. | 737,236 |

**Flour mills.**

The value of the machinery, plant, land and buildings used in connexion with flour mills was estimated at £503,885 in 1914, and at £737,985 in 1923-24. Particulars of the industry for the ten years 1914 to 1923-24 are as follows :—

FLOUR MILLS, 1914 TO 1923-24.

| Year. | Number of Mills. | Number of Employees. | Amount of Wages Paid. | Wheat Ground into Flour. | Flour Made. | Value of Total Output. |
|---|---|---|---|---|---|---|
| | | | £ | bushels. | tons. | £ |
| 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 |
| 1923-24 .. | 47 | 1,082 | 266,540 | 18,552,540 | 382,204 | 5,495,110 |

In addition to the flour made, the wheat ground in 1923–24 produced 8,711,743 bushels of bran and 7,491,647 bushels of pollard. Other grain operated on amounted to 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, 44,363 bushels in 1922–23, and 34,283 bushels in 1923–24.

**Exports of bread stuffs.**

During the year 1923-24, 1,904,520 lbs. of biscuits valued at £59,413, and 211,685 tons of flour valued at £2,175,854, were exported from Victoria to countries beyond Australia.

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

In 1923-24 there were 47 establishments in which the manufacture of jams, pickles, and sauces was carried on, and the number of persons employed therein was 2,539, of whom 34 were working proprietors. The wages paid to the employees amounted to £397,750, and the value of machinery, plant, land and buildings was £475,185. 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, 1914 TO 1923–24.

| Year. | Fruit Used. | Sugar Used. | Jams and Jellies Made. | Fruit Preserved. | Fruit Pulped. | Sauce Made. | Pickles Made. |
|---|---|---|---|---|---|---|---|
| | cwt. | cwt. | cwt. | cwt. | cwt. | pints. | pints. |
| 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 | 115,589 | 94,810 | 7,064,520 | 1,972,320 |
| 1918-19.. | 496,690 | 314,645 | 495,575 | 133,230 | 91,550 | 4,913,050 | 2,137,730 |
| 1919-20.. | 628,721 | 262,585 | 323,452 | 181,562 | 225,522 | 6,546,610 | 1,874,240 |
| 1920-21.. | 465,349 | 171,706 | 231,297 | 61,542 | 178,786 | 6,601,330 | 1,239,250 |
| 1921-22.. | 384,214 | 148,886 | 157,712 | 239,656 | 100,317 | 6,600,530 | 1,056,430 |
| 1922-23.. | 450,199 | 177,334 | 206,966 | 221,157 | 114,615 | 8,439,440 | 2,106,950 |
| 1923-24.. | 552,262 | 191,216 | 197,850 | 239,077 | 208,688 | 10,696,190 | 2,361,250 |

Some of these establishments also candied fruit peel, the quantities being 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, 6,831 cwt. in 1922–23, and 3,820 cwt. in 1923–24. The value of the output in 1923–24 of the whole of the establishments whose produce is shown in the above table was £1,930,258.

**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 preliminary arrangements are being made to enable this to be done. A sum of £65,000 has been voted for the purpose, and an engineer has been appointed to proceed with the work.

The State Rivers and Water Supply Commission is well advanced with an irrigation scheme on the Macalister 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. |
| 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 |
| 1923–24 .. .. .. | 1,937 | 29,512 | 3,499 |

The last season was a very favorable one in every respect. Growers were paid 37s. 6d. a ton for their beets, and a profit of £19,016 was realized.

**Breweries.** Particulars regarding breweries for the ten years 1914 to 1923-24 are set forth in the next table. Machinery and plant were valued at £394,785 in 1914 and at £661,475 in 1923-24, whilst land and buildings were valued at £396,030 and £459,800 respectively in those years. The wages paid in 1923-24 amounted to £323,806.

BREWERIES, 1914 TO 1923-24.

| Year. | Number of Breweries. | Number of Employees. | Materials Used— | | | Beer Made. | Value of Output. |
|---|---|---|---|---|---|---|---|
| | | | Sugar. | Malt. | Hops. | | |
| | | | cwt. | bushels. | lbs. | gallons. | £ |
| 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 |
| 1923-24 | 14 | 1,180 | 112,840 | 743,131 | 796,769 | 23,907,000 | 2,412,387 |

**Distilleries.** The number of distilleries working in 1923-24 was 10, and the persons employed numbered 129, of whom four were working proprietors. The estimated value of the machinery, plant, land and buildings was £280,520. The quantities of materials used in manufacture and of spirits distilled in each of the last ten years were as follows :—

DISTILLERIES, 1914 TO 1923-24.

| Year. | Materials Used. | | | | Spirits Distilled. |
|---|---|---|---|---|---|
| | Wine. | Malt. | Other Grain. | Molasses. | |
| | gallons. | bushels. | bushels. | lbs. | proof gal. |
| 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 |
| 1923-24 .. .. | 1,114,590 | 121,691 | .. | 2,350,880 | 730,158 |

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 :—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, 14,930 gallons in 1922-23, and 13,792 gallons in 1923-24.

**Tobacco factories.**

The number of tobacco, cigar, and cigarette factories licensed in 1923-24 was thirty-one, of which seventeen were too small to be classified as ordinary factories and were consequently not included in the statistical tabulation on page 540. In the year mentioned the remaining fourteen employed 1,803 hands, who were paid £332,930 in wages, and used machinery, plant, land and buildings valued at £339,810. 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, 1914 TO 1923-24.

| Year. | Unmanufactured Leaf Operated on. | | Quantity Manufactured. | | | |
|---|---|---|---|---|---|---|
| | Australian. | Imported. | Tobacco. | Snuff. | Cigars. | Cigarettes. |
| | lbs. | lbs. | lbs. | lbs. | number. | number. |
| 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 |
| 1923-24 .. | 471,862 | 4,998,680 | 5,833,903 | 99 | 29,244,981 | 87,896,350 |

**Woollen mills.**

There were twenty-seven woollen mills working in 1923-24, and the number of persons employed therein was 4,914 of whom twenty-two were working proprietors. The wages paid to employees amounted to £713,411, and the approximate value of the machinery, plant, land and buildings was £2,878,350. The value of the raw materials used during the year was £2,086,136, and that of the goods manufactured in the same period, £3,561,480.

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

WOOLLEN MILLS, 1914 TO 1923-24.

| Year. | Quantity of Scoured Wool Used. | Quantity of Cotton Used. | Goods Manufactured— | | | | Value of Output. |
|---|---|---|---|---|---|---|---|
| | | | Tweed and Cloth. | Flannel. | Blankets. | Shawls and Rugs. | |
| | lbs. | lbs. | yards. | yards. | pairs. | number | £ |
| 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 |
| 1923–24 | 7,936,456 | 848, 812 | 1,927,298 | 6,095,442 | 377,354 | 115,443 | 3,561,480 |

During the period 1914 to 1923-24 the value of the output of woollen mills increased by 517 per cent. The articles manufactured showed a considerable increase in quantity in the ten-year period, and, except in the case of flannel, the production of individual articles was greater in 1923-24 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, 1914 TO 1923-24.

| Year. | Number of Factories. | Persons Employed. | Value of Machinery, Plant, Land, and Buildings. | Wages Paid. |
|---|---|---|---|---|
| | | | £ | £ |
| 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 |
| 1923–24 .. .. | 400 | 12,434 | 1,529,615 | 1,941,075 |

## OUTPUT OF BOOT FACTORIES, 1914 TO 1923–24.

| Year. | Goods Manufactured— | | Value of Materials Used. | Value of Output. |
|---|---|---|---|---|
| | Boots and Shoes. | Slippers.* | | |
| | pairs. | pairs. | £ | £ |
| 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 |
| 1923–24 .. .. | 7,063,385 | 1,107,257 | 2,879,194 | 5,888,699 |

* 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 £13,118,477 in 1923–24, as compared with £5,568,744 in 1914. During the period 1914 to 1923–24 the persons employed increased by 6 per cent., the wages paid by 125 per cent., the value of materials used by 139 per cent., and the value of the output by 136 per cent. Particulars of the industry for each of the last ten years are as follows :—

## DRESS (EXCLUSIVE OF BOOT) FACTORIES, 1914 TO 1923–24.

| Year. | Number of Factories. | Number of Persons Employed. | | | Amount of Wages Paid. | Value of Materials Used. | Value of Output. |
|---|---|---|---|---|---|---|---|
| | | Males. | Females. | Total. | | | |
| | | | | | £ | £ | £ |
| 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 |
| 1923–24 | 1,501 | 4,751 | 26,772 | 31,523 | 3,574,059 | 7,181,020 | 13,118,477 |

**Electric light and power works.**

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

ELECTRIC LIGHT AND POWER WORKS, 1914 TO 1923–24.

| Year. | Number of Stations. | Horse-power of Machinery. | Value of Machinery and Plant. | Persons Employed. | Wages Paid. | Electricity Supplied. | Value of Output. |
|---|---|---|---|---|---|---|---|
| | | | £ | | £ | British units. | £ |
| 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 |
| 1923–24 | 90 | 154,622 | 5,864,065 | 1,752 | 462,172 | 405,108,000 | 2,176,551 |

The electricity supplied in 1923–24 represented an increase of over 800 per cent. on that supplied in 1914.

The particulars relating to the power houses at Newport under the control of the Victorian Railways Commissioners and the State Electricity Commission are included in the figures for 1923–24 which appear in the above table. This largely accounts for the seeming discrepancy between the quantity and value of the output for the year mentioned. The quantity of electricity generated in these power houses in 1923–24 was 275,114,000 units ; the value of this has been estimated at bulk rates by the respective departments.

## STATE ELECTRICITY COMMISSION ACTS 1918 AND 1920.

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

The duties of the Commission include the following :—

(1) To inquire into and report to the Government as to the steps which should be taken to co-ordinate and concentrate all electrical undertakings in Victoria, and to secure the efficient inter-connexion of such undertakings by the adoption of the necessary standards of plant, pressure, &c.

(2) To encourage and promote the use of electricity for industrial and manufacturing purposes, and to report to the Government on the prospects of establishing new industries in Victoria requiring large quantities of electrical energy.
(3) To carry out investigations of coal deposits or of water power in connexion with the generation of electricity

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

(1) To erect and operate electrical undertakings.
(2) To supply electricity in bulk to any corporation.
(3) To supply electricity to any person outside any area in which there is an existing undertaking.
(4) To carry on any business associated with an electric undertaking.
(5) To make regulations as to precautions to be adopted in the use of electricity, and to arrange for the licensing of electric wiremen.

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

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

In accordance with the instructions contained in the Act, the Commission has constructed a coal winning plant and an electric generating station in the neighbourhood of Morwell, for the purpose of utilizing the practically unlimited supplies of brown coal in that area. The scheme provides for the winning of coal on the open cut system by means of mechanical appliances, for the erection of a power station close to the site of the open cut, having an initial capacity of 50,000 kilowatts, with provision for triplication, and for the erection at Yarraville of a receiving station with the necessary switch and transforming gear. This latter station is now completed and in operation.

In addition, a plant is being installed at Yallourn, 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, Yarragon, Maffra, Sale, Tyers, Heyfield, Mirboo North, Drouin and Korumburra. 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, Terang, Mortlake, Warrion,

Beeac, Cobden, Noorat, Alvie, Allansford, Winchelsea and Birregurra. 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, Drysdale and Ocean Grove 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 municipalities of Brunswick, Coburg, Williamstown, and Footscray, and the shires of Braybrook and Lilydale, and has built a subsidiary line, operating at 22,000 volts, from Brunswick sub-station, which encircles the eastern half of the outer metropolitan area, passing through and giving service to Ringwood, Dandenong, Frankston, and the Mornington Peninsula. It has also taken over the supply and retail distribution of energy to Dandenong, Werribee, and Essendon—Flemington.

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, and, pending completion of the line, supply will be given to the north-eastern portions of the State over a transmission line from Thomastown.

**Gasworks.** The approximate value of the machinery, plant, land and buildings connected with gasworks in Victoria was £1,796,720 in 1914, and £2,440,710 in 1923–24. The gas made in the latter year was 42 per cent. in excess of that made in 1914. Particulars in regard to these works are given below.

GASWORKS, 1914 TO 1923–24.

| Year. | Number of Works.* | Persons Employed. | Wages Paid. | Coal Used. | Gas Made. | Coke Produced. | Value of Output. |
|---|---|---|---|---|---|---|---|
| | | | £ | tons. | cubic feet. | tons. | £ |
| 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 |
| 1923–24 .. | 45 | 2,561 | 699,173 | 410,517 | 5,407,962,000 | 259,080 | 2,098,571 |

* 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 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, 248,481 in 1922–23, and 223,986 in 1923–24.

**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 between the metropolis and the remainder of the State, for 1914 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. | | | |
| | 1914. | 1921–22. | 1922–23. | 1923–24. | 1914. | 1921–22. | 1922–23. | 1923–24. |
| Treating raw material, product of pastoral pursuits, &c. .. | 78 | 89 | 87 | 84 | 276 | 204 | 208 | 204 |
| Treating oils and fats, animal, vegetable, &c. .. .. | 14 | 19 | 21 | 19 | 11 | 9 | 9 | 9 |
| Processes in stone, clay, glass, &c. .. | 102 | 130 | 140 | 149 | 111 | 85 | 91 | 103 |
| Working in wood .. | 202 | 265 | 289 | 336 | 247 | 322 | 324 | 355 |
| Metal works, machinery, &c. .. | 493 | 671 | 705 | 696 | 229 | 213 | 213 | 212 |
| Connected with food and drink, &c. .. | 196 | 277 | 289 | 277 | 447 | 431 | 442 | 443 |
| Clothing and textile fabrics, &c. .. | 1,141 | 1,460 | 1,589 | 1,594 | 374 | 358 | 370 | 373 |
| Books, paper, printing, &c... .. | 288 | 345 | 356 | 367 | 165 | 162 | 161 | 170 |
| Musical instruments, &c. .. .. | 5 | 14 | 17 | 19 | .. | 1 | 1 | 1 |
| Arms and explosives | 7 | 10 | 9 | 9 | 4 | 1 | 1 | 1 |
| Vehicles, saddlery, harness, &c. .. | 240 | 365 | 371 | 413 | 298 | 361 | 379 | 417 |
| Ship and boat building and repairing.. | 14 | 10 | 10 | 11 | 1 | 1 | 1 | 1 |
| Furniture, upholstery and bedding .. | 243 | 337 | 367 | 370 | 26 | 29 | 30 | 36 |
| Drugs, chemicals, and by-products .. | 56 | 88 | 91 | 90 | 35 | 27 | 31 | 31 |
| Surgical and other scientific appliances | 23 | 35 | 36 | 34 | 1 | 2 | 2 | 2 |
| Jewellery, time-pieces and plated-ware .. | 93 | 101 | 105 | 104 | 5 | 8 | 6 | 7 |
| Heat, light, and power .. .. | 42 | 80 | 88 | 95 | 92 | 117 | 121 | 124 |
| Leatherware, n.e.i. .. | 34 | 58 | 61 | 59 | .. | 2 | 3 | 3 |
| Minor wares, n.e.i. .. | 55 | 63 | 68 | 62 | 2 | 3 | 4 | 9 |
| Total .. | 3,326 | 4,417 | 4,699 | 4,788 | 2,324 | 2,336 | 2,397 | 2,501 |

Since 1914 the number of factories in the State has increased by 1,639, the greatest numerical increase in the classes being that

of the clothing and textile factories, of which there were 452 more in 1923-24 than in 1914.

**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. | 1914. | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
|---|---|---|---|---|---|
| Treating raw materials, product of pastoral pursuits, &c. .. | 3,310 | 4,045 | 4,329 | 4,488 | 4,276 |
| Treating oils and fats, animal, vegetable, &c. .. .. | 711 | 835 | 880 | 915 | 920 |
| Processes in stone, clay, glass, &c. .. .. .. | 4,283 | 5,486 | 5,391 | 6,059 | 6,661 |
| Working in wood .. .. | 7,472 | 9,529 | 9,537 | 9,939 | 10,825 |
| Metal works, machinery, &c. .. | 19,694 | 23,276 | 22,868 | 23,406 | 24,978 |
| Connected with food and drink, &c. .. .. .. | 15,308 | 17,673 | 17,974 | 19,037 | 19,199 |
| Clothing and textile fabrics, &c. | 39,446 | 44,341 | 48,844 | 51,898 | 50,248 |
| Books, paper, printing, &c. .. | 9,153 | 10,281 | 10,465 | 11,307 | 12,098 |
| Musical instruments, &c. .. | 170 | 384 | 390 | 444 | 498 |
| Arms and explosives .. .. | 970 | 650 | 756 | 406 | 423 |
| Vehicles, saddlery, harness, &c. | 5,086 | 6,087 | 6,173 | 6,407 | 7,028 |
| Ship and boat building and repairing .. .. .. | 593 | 900 | 684 | 618 | 392 |
| Furniture, bedding, and upholstery .. .. .. | 2,986 | 3,917 | 3,709 | 4,392 | 4,629 |
| Drugs, chemicals, and by-products .. .. .. | 1,834 | 2,564 | 2,465 | 2,511 | 2,699 |
| Surgical and other scientific appliances.. .. .. | 114 | 199 | 203 | 203 | 195 |
| Jewellery, time-pieces, and plated-ware .. .. .. | 925 | 1,397 | 1,183 | 1,151 | 1,110 |
| Heat, light, and power .. | 3,769 | 4,738 | 5,090 | 5,364 | 5,879 |
| Leatherware, n.e.i. .. .. | 566 | 1,057 | 1,065 | 1,123 | 1,071 |
| Minor wares, n.e.i. .. .. | 2,009 | 3,384 | 2,870 | 2,957 | 3,033 |
| Total .. .. | 118,399 | 140,743 | 144,876 | 152,625 | 156,162 |

The total increase in the number of hands employed during the period covered by the above table was 37,763, which represented an advance of about 31 per cent. The greatest development had taken place in clothing factories, industries connected with food, drink, &c., and metal works, which showed increases of 10,802, 3,891, and 5,284 respectively in the number of persons employed in 1923-24 as compared with the number in 1914.

**Size of factories.**

An examination of the figures relating to factories in 1914 and 1923-24 shows that increases in the number of factories and in the number of hands employed have been most pronounced in the smallest sized factories, and in those employing from 21 to 50 hands. Particulars of factories of different sizes in 1914 and 1923-24 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. | | |
|---|---|---|---|---|---|---|
| | 1914. | 1923-24. | Increase. | 1914. | 1923-24. | Increase. |
| | | | % | | | % |
| Under 4 hands.. | 1,045 | 1,636 | 56·6 | 2,411 | 3,643 | 51·1 |
| 4 „ .. | 646 | 729 | 12·8 | 2,584 | 2,916 | 12·8 |
| 5 to 10 „ .. | 1,941 | 2,233 | 15·0 | 13,437 | 15,567 | 15·9 |
| 11 to 20 „ .. | 926 | 1,202 | 29·8 | 13,457 | 17,368 | 29·1 |
| 21 to 50 „ .. | 659 | 939 | 42·5 | 20,838 | 29,960 | 43·8 |
| 51 to 100 „ .. | 239 | 311 | 30·1 | 16,510 | 21,623 | 31·0 |
| Over 100 „ .. | 194 | 239 | 23·2 | 49,162 | 65,085 | 32·4 |
| Total .. | 5,650 | 7,289 | 29·0 | 118,399 | 156,162 | 31·9 |

## PROPORTION OF FACTORIES OF DIFFERENT SIZES.

| Size of Factory. | Percentage to Total. | | | |
|---|---|---|---|---|
| | Factories. | | Hands. | |
| | 1914. | 1923-24. | 1914. | 1923-24. |
| Under 4 hands .. .. | 18·5 | 22·4 | 2·0 | 2·3 |
| 4 „ .. .. | 11·4 | 10·0 | 2·2 | 1·9 |
| 5 to 10 „ .. .. | 34·4 | 30.6 | 11·4 | 10·0 |
| 11 to 20 „ .. .. | 16·4 | 16·5 | 11·4 | 11·1 |
| 21 to 50 „ .. .. | 11·7 | 12·9 | 17·6 | 19·2 |
| 51 to 100 „ .. .. | 4·2 | 4·3 | 13·9 | 13·8 |
| Over 100 „ .. .. | 3·4 | 3·3 | 41·5 | 41·7 |
| 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. | 1914. | 1919–20. | 1920–21. | 1921–22. | 1922–23. | 1923–24. |
|---|---|---|---|---|---|---|
| Working proprietors .. | 5,707 | 5,898 | 6,645 | 6,904 | 7,296 | 7,500 |
| Managers, overseers .. | 3,283 | 4,130 | 4,354 | 4,454 | 4,673 | 4,929 |
| Accountants, clerks .. | 3,981 | 5,602 | 6,106 | 6,307 | 6,582 | 6,966 |
| Engine-drivers, firemen | 1,835 | 2,144 | 2,108 | 2,156 | 2,106 | 2,197 |
| Workers in factory or works .. .. | 97,923 | 113,276 | 116,650 | 119,598 | 126,791 | 129,617 |
| Outworkers .. .. | 1,737 | 1,492 | 1,151 | 1,476 | 1,228 | 870 |
| Carters, messengers .. | 2,835 | 3,056 | 2,964 | 3,115 | 3,316 | 3,378 |
| Others .. .. | 1,098 | 924 | 765 | 866 | 633 | 705 |
| Total .. | 118,399 | 136,522 | 140,743 | 144,876 | 152,625 | 156,162 |

**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 1914 to 1923–24, 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. |
| 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 |
| 1923–24 .. | 107,578 | 1,334 | 48,584 | 593 | 156,162 | 961 |

Males formed 67·4 per cent. in 1914 and 68·9 per cent. in 1923-24 of the total persons employed. The increase during the period 1914 to 1923-24 in the number of males employed was 27,806, or 34·8 per cent., and in the number of females employed, 9,957, or 25·8 per cent.

**Employment of females.**

Of the total females in factories 72·9 per cent. are engaged in the textile and clothing industries, and 10·7 per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next table :—

FEMALE EMPLOYMENT IN FACTORIES, 1923-24.

| Industry. | Number Employed. | | Females per 100 Males. |
|---|---|---|---|
| | Males. | Females. | |
| Oatmeal, &c. | 409 | 323 | 78·97 |
| Biscuit | 867 | 609 | 70·24 |
| Jam, pickle, and sauce | 1,521 | 1,052 | 69.16 |
| Confectionery | 1,875 | 1,964 | 104·75 |
| Tobacco, &c. | 1,189 | 631 | 53·07 |
| Woollen mills | 2,218 | 2,696 | 121·55 |
| Clothing, tailoring, &c. | 2,271 | 7,575 | 333·55 |
| Dressmaking, millinery | 410 | 8,311 | 2,027·07 |
| Underclothing | 420 | 5,669 | 1,349·76 |
| Hats, caps, &c. | 693 | 969 | 139·82 |
| Hosiery | 564 | 3,460 | 613·48 |
| Waterproof clothing | 52 | 130 | 250·00 |
| Boots and shoes | 7,100 | 5,334 | 75·12 |
| Printing, &c. | 6,792 | 1,681 | 24·75 |
| Bookbinding, stationery, &c. | 701 | 667 | 95·15 |
| Fancybox, &c. | 328 | 818 | 249·39 |
| Rope, twine | 569 | 375 | 65·91 |
| Sail, tent | 127 | 112 | 88·19 |
| Ammunition | 86 | 61 | 70·93 |
| Match | 189 | 423 | 223·81 |
| Fancy leather | 542 | 373 | 68·82 |
| Rubber goods | 1,662 | 539 | 32·43 |
| All other factories | 76,993 | 4,812 | 6·25 |
| Total | 107,578 | 48,584 | 45·16 |

**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 constituted 4·03 and 7·15 per cent. respectively in 1923-24, as against 3·88 and 4·78 per cent. in 1914. The number of children

employed in factories and their proportions to the total employees are given in the subjoined table for the years 1914 to 1923-24 :—

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. |
| 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 |
| 1923–24 .. | 4,057 | 3,422 | 7,479 | 4·03 | 7·15 | 5·03 |

**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 1914 to 1923-24 :—

MACHINERY IN FACTORIES.

| Year. | Number of Factories equipped with Machinery. | Value of Machinery and Plant. | Horse-power of Engines. |
|---|---|---|---|
| | | £ | |
| 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 |
| 1923–24 .. .. | 6,030 | 28,223,915 | 314,561 |

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, 1914 TO 1923-24.

| Year. | Number of Factories using— | | | | | |
|---|---|---|---|---|---|---|
| | Steam. | Gas. | Electricity. | Oil. | Water, Wind, or Horses. | Manual Labour. |
| 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 |
| 1923-24 .. | 885 | 540 | 4,174 | 402 | 29 | 1,259 |

| Year. | Actual Horse-power of Engines. | | | | |
|---|---|---|---|---|---|
| | Steam. | Gas. | Electricity. | Oil. | Total. |
| 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 |
| 1923-24 .. .. | 195,744 | 18,394 | 95,340 | 5,083 | 314,561 |

Although steam is the principal motive power, and was used to supply 62 per cent. of the total mechanical power employed in factories in 1923-24, a remarkable development is shown in the use of electricity, which in 1914 was used by 1,782, and in 1923-24 by 4,174 factories, the actual horse-power increasing from 22,584 to 95,340 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. |
| 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 |
| 1923–24 | 3,003 855 | 436,425 | 19,577,822 | 4,453,982 | 339 | 19 | 1 | 142 | 13 | 5 | 212 | 19 | 0 | 99 | 7 | 1 |

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

The amount of wages paid during the year 1923–24, £27,472,084, represented an average payment for all employees of £184 15s. 11d., which was an increase of £9 0s. 2d. on the average wage for 1922–23, of £11 19s. 2d. on that for 1921–22, of £25 7s. 7d. on that for 1920–21, of £49 5s. 6d. on that for 1919–20, of £64 6s. 6d. on that for 1918–19, of £74 0s. 7d. on that for 1917–18, of £78 18s. 5d. on that for 1916–17, of £83 0s. 11d. on that for 1915, and of £86 5s. 11d. on that for 1914. 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, 1922–23, and 1923–24, 67 in 1914 and 1918–19, 65 in 1917–18, and 64 in 1916–17. The above average wage for 1923–24 (£184 15s. 11d.) 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 1923–24 are given in the subjoined statement:—

## FACTORY COSTS AND OUTPUT, 1923–24.

| 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. .. | 4,591,973 | 110,188 | 827,819 | 6,196,579 |
| Treating oils and fats, animal, vegetable, &c. .. .. | 797,828 | 41,193 | 188,311 | 1,289,619 |
| Processes in stone, clay, glass, &c. .. .. .. | 698,677 | 494,219 | 1,453,348 | 3,739,356 |
| Working in wood .. .. | 2,643,435 | 45,706 | 2,164,208 | 6,276,504 |
| Metal works, machinery, &c. | 6,531,626 | 311,316 | 5,178,810 | 14,269,565 |
| Connected with food and drink, &c. .. .. .. | 24,207,742 | 565,840 | 3,633,025 | 33,760,511 |
| Clothing and textile fabrics, &c. .. .. .. | 12,808,006 | 230,965 | 6,429,313 | 23,617,447 |
| Books, paper, printing, &c. .. | 2,599,003 | 107,588 | 2,454,599 | 7,257,455 |
| Musical instruments, &c. .. | 128,486 | 2,196 | 105,628 | 277,009 |
| Arms and explosives .. | 180,450 | 8,010 | 87,155 | 338,247 |
| Vehicles, saddlery, harness, &c. | 1,237,113 | 38,599 | 1,224,380 | 3,107,636 |
| Ship and boat building and repairing .. .. | 34,031 | 5,319 | 89,340 | 143,065 |
| Furniture, upholstery, and bedding .. .. | 1,197,336 | 22,673 | 777,843 | 2,477,891 |
| Drugs, chemicals, and by-products .. .. | 1,585,811 | 66,976 | 521,098 | 2,692,327 |
| Surgical and other scientific instruments .. .. | 28,891 | 1,109 | 29,438 | 80,139 |
| Jewellery, time-pieces, and plated-ware .. .. | 232,853 | 7,289 | 187,029 | 545,827 |
| Heat, light, and power .. | 1,276,479 | 647,370 | 1,403,295 | 5,247,611 |
| Leatherware, n.e.i. .. .. | 369,345 | 5,107 | 158,593 | 645,642 |
| Minor wares, n.e.i. .. .. | 1,068,789 | 91,576 | 558,852 | 1,959,497 |
| Total .. .. | 62,217,874 | 2,803,239 | 27,472,084 | 113,921,927 |

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, 1923-24.

| 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 | 13·4 | 10·7 |
| Treating oils and fats, animal, vegetable, &c. .. .. .. | 61·9 | 3·2 | 14·6 | 20·3 |
| Processes in stone, clay, glass, &c. .. | 18·7 | 13·2 | 38·9 | 29·2 |
| Working in wood .. .. | 42·1 | 0·7 | 34·5 | 22·7 |
| Metal works, machinery, &c. .. | 45·8 | 2·2 | 36·3 | 15·7 |
| Connected with food and drink, &c. .. | 71·7 | 1·7 | 10·8 | 15·8 |
| Clothing and textile fabrics, &c. .. | 54·2 | 1·0 | 27·2 | 17·6 |
| Books, paper, printing, &c. .. | 35·8 | 1·5 | 33·8 | 28·9 |
| Musical instruments, &c. .. .. | 46·4 | 0·8 | 38·1 | 14·7 |
| Arms and explosives .. .. | 53·3 | 2·4 | 25·8 | 18·5 |
| Vehicles, saddlery, harness, &c. .. | 39·8 | 1·2 | 39·4 | 19·6 |
| Ship and boat building and repairing | 23·8 | 3·7 | 62·5 | 10·0 |
| Furniture, upholstery, and bedding .. | 48·3 | 0·9 | 31·4 | 19·4 |
| Drugs, chemicals, and by-products .. | 58·9 | 2·5 | 19·4 | 19·2 |
| Surgical and other scientific instruments .. .. .. .. | 36·1 | 1·4 | 36·7 | 25·8 |
| Jewellery, time-pieces, and plated-ware .. .. .. .. | 42·7 | 1·3 | 34·3 | 21·7 |
| Heat, light, and power .. .. | 24·3 | 12·3 | 26·8 | 36·6 |
| Leatherware, n.e.i. .. .. | 57·2 | 0·8 | 24·6 | 17·4 |
| Minor wares, n.e.i. .. .. | 54·5 | 4·7 | 28·5 | 12·3 |
| Total .. .. .. | 54·6 | 2·5 | 24·1 | 18·8 |

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 39 per cent. and the cost of raw materials 19 per cent. of the value of the finished article, whilst in the industries connected with food and drink the expenditure on wages amounts to 11 per cent. and that on raw materials to over 72 per cent. of the value of the output.

**Cost of production, 1914 to 1923-24.**

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 1914 to 1923-24 :—

## COST OF PRODUCTION AND VALUE OF OUTPUT OF FACTORIES, 1914 TO 1923-24.

| Year. | Cost of Production. | | | | Total Value of Output. |
|---|---|---|---|---|---|
| | Materials. | Fuel, Light, and Power. | Salaries and Wages. | All other Expenditure, Interest, and Profit. | |
| | £ | £ | £ | £ | £ |
| 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 |
| 1923-24 .. | 62,217,874 | 2,803,239 | 27,472,084 | 21,428,730 | 113,921,927 |

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

## PROPORTION OF OUTLAY TO OUTPUT OF FACTORIES, 1914 TO 1923-24.

| Year. | Proportion of Outlay to Output. | | | | Total. |
|---|---|---|---|---|---|
| | Materials. | Fuel, Light, and Power. | Salaries and Wages. | Other Expenditure, Interest, and Profit. | |
| | % | % | % | % | % |
| 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 |
| 1923-24 .. .. | 54·6 | 2·5 | 24·1 | 18·8 | 100·0 |

The ratio of salaries and wages to the value of the output of factories was 21·5 per cent. on the average of the last five years, as against 19·7

per cent. in the period 1914 to 1918–19. The cost of materials was 58·7 per cent. of the value of output in the period 1919–20 to 1923–24, as compared with 62·0 per cent. in the years 1914 to 1918–19. 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 13s. 8d. in every £100 of the total output value in the period 1919–20 to 1923–24, as compared with £16 12s. 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 1923–24 :—

MACHINERY, PLANT, LAND AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1923–24.

| Class of Industry. | Value of Machinery and Plant. | Value of Land and Buildings. |
|---|---|---|
| | £ | £ |
| Treating raw material, product of pastoral pursuits, &c. .. .. .. .. | 731,375 | 837,710 |
| Treating oils and fats, animal, vegetable, &c. .. | 254,785 | 190,255 |
| Processes in stone, clay, glass, &c. .. .. | 1,095,840 | 926,520 |
| Working in wood .. .. .. .. | 1,204,775 | 932,720 |
| Metal works, machinery, &c. .. .. .. | 3,060,945 | 2,912,680 |
| Connected with food and drink, &c. .. .. | 4,985,775 | 4,970,855 |
| Clothing and textile fabrics, &c. .. .. | 3,816,925 | 5,687,050 |
| Books, paper, printing, &c. .. .. .. | 2,426,590 | 2,087,480 |
| Musical instruments, &c. .. .. .. | 34,360 | 117,235 |
| Arms and explosives.. .. .. .. | 218,775 | 204,480 |
| Vehicles, saddlery, harness, &c. .. .. | 323,390 | 1,299,240 |
| Ship and boat building and repairing .. .. | 102,530 | 232,275 |
| Furniture, upholstery, and bedding .. .. | 185,920 | 822,185 |
| Drugs, chemicals, and by-products .. .. | 600,380 | 640,095 |
| Surgical and other scientific instruments .. | 13,640 | 52,055 |
| Jewellery, time-pieces, and plated-ware .. | 68,460 | 235,520 |
| Heat, light, and power .. .. .. | 8,363,465 | 2,086,885 |
| Leatherware, n.e.i. .. .. .. .. | 50,045 | 156,900 |
| Minor wares, n.e.i. .. .. .. .. | 685,940 | 580,420 |
| Total .. .. .. .. | 28,223,915 | 24,972,560 |

The capital invested in plant, buildings, &c., used in connexion with three classes of industries—food and drink; clothing and textile fabrics; and heat, light and power—amounted, in the year under review, to £29,910,955, or more than one-half of the total for all manufacturing industries.

The values of machinery and plant and of land and buildings used in connexion with manufacturing industries are shown in the next table for the years 1914 to 1923-24 :—

MACHINERY, PLANT, LAND AND BUILDINGS USED IN MANUFACTURING INDUSTRIES, 1914 TO 1923-24.

| Year. | Value of Machinery and Plant. | Value of Land and Buildings. |
|---|---|---|
| | £ | £ |
| 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 |
| 1923-24 .. .. .. .. .. | 28,223,915 | 24,972,560 |

It will be seen from these figures that the values of machinery and plant and land and buildings more than doubled between 1914 and 1923-24.

**Accidents in factories.**

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

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

ACCIDENTS IN FACTORIES, 1914 TO 1923.

| Year. | Number of Employees. | Number of Accidents. | Percentage of Accidents to Number of Employees. |
|---|---|---|---|
| 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 |
| 1923 .. .. | 128,915 | 1,034 | ·802 |

**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 1923-24 was £38,735, and of the materials used, £26,848. 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, 1919-20 TO 1923-24.

| Produce. | Value in— | | | | |
|---|---|---|---|---|---|
| | 1919-20. | 1920-21. | 1921-22. | 1922-23. | 1923-24. |
| *Cultivation.* | £ | £ | £ | £ | £ |
| Wheat .. .. | 5,726,667 | 14,307,377 | 10,509,945 | 8,031,875 | 8,189,069 |
| Oats .. .. | 1,848,903 | 1,295,229 | 931,346 | 1,416,355 | 1,455,331 |
| Barley, malting .. | 304,377 | 263,963 | 221,757 | 298,792 | 195,545 |
| ,, other .. | 173,196 | 183,389 | 179,843 | 137,445 | 66,665 |
| Maize .. .. | 336,920 | 186,529 | 194,358 | 205,314 | 253,276 |
| Other Cereals .. | 58,207 | 49,532 | 66,537 | 75,553 | 71,173 |
| Grass and Clover Seed .. .. | 5,606 | 8,570 | 6,113 | 3,537 | 3,880 |
| Potatoes .. | 1,328,640 | 586,458 | 555,111 | 1,040,662 | 701,229 |
| Onions .. .. | 274,375 | 131,104 | 157,930 | 139,888 | 215,444 |
| Other Root Crops | 14,148 | 13,151 | 11,259 | 11,800 | 15,032 |
| Hay .. .. | 8,304,475 | 5,259,863 | 4,413,091 | 6,327,338 | 5,229,162 |
| Straw .. .. | 68,893 | 75,015 | 66,164 | 76,644 | 66,677 |
| Green Forage* .. | 449,010 | 397,620 | 447,050 | 512,255 | 536,855 |
| Tobacco .. | 16,240 | 3,800 | 24,160 | 35,600 | 41,880 |
| Grapes, not made into wine, raisins, &c. .. .. | 42,025 | 21,010 | 39,978 | 71,793 | 45,589 |
| Raisins, ordinary | 138,899 | 84,533 | 125,154 | 132,308 | 27,420 |
| ,, sultanas.. | 494,037 | 263,772 | 443,319 | 555,059 | 122,775 |
| Currants .. | 139,153 | 157,298 | 187,605 | 171,642 | 57,027 |
| Wine .. .. | 347,370 | 333,346 | 166,883 | 171,749 | 217,713 |
| Hops .. .. | 10,365 | 14,988 | 22,650 | 23,195 | 29,772 |
| Other Crops .. | 71,859 | 57,027 | 68,536 | 81,447 | 104,066 |
| Fruit grown for sale in orchards and gardens .. | 1,274,715 | 1,054,491 | 1,184,069 | 1,172,325 | 1,193,689 |
| Fruit in private orchards and gardens .. .. | 13,810 | 15,250 | 12,660 | 10,670 | 10,505 |
| Market Gardens .. | 442,155 | 427,035 | 500,640 | 493,780 | 810,600 |
| Total .. | 21,884,045 | 25,190,350 | 20,538,158 | 21,197,026 | 19,660,374 |

* Exclusive of area under sown grasses.

VALUE OF VICTORIAN PRODUCTION, 1919–20 TO 1923–24—*continued.*

| Produce. | Value in— | | | | |
|---|---|---|---|---|---|
| | 1919–20. | 1920–21. | 1921–22. | 1922–23. | 1923–24. |
| *Dairying and Pastoral.* | £ | £ | £ | £ | £ |
| Milk consumed in natural state .. | 2,424,050 | 2,622,010 | 2,027,040 | 1,995,280 | 2,130,345 |
| Butter made .. | 4,945,480 | 7,043,950 | 5,127,570 | 6,660,600 | 6,491,310 |
| Cheese made .. | 344,210 | 189,070 | 203,620 | 163,180 | 253,795 |
| Cream made (not for butter) .. .. | 32,970 | 76,560 | 80,130 | 127,530 | 177,090 |
| Condensed, Concentrated, and Powdered Milk .. .. | 1,516,000 | 1,885,080 | 2,074,620 | 1,434,720 | 1,509,400 |
| Horses .. .. | .. | .. | 71,800 | .. | .. |
| Cattle .. .. | 4,856,100 | 5,269,650 | 3,099,300 | 3,384,270 | 1,413,310 |
| Pigs .. .. | 2,782,290 | 1,250,680 | 1,277,730 | 1,280,040 | 1,507,600 |
| Sheep (without wool) | 1,139,960 | 1,750,220 | 1,991,600 | 3,752,260 | 2,600,450 |
| Wool .. .. | 7,908,010 | 4,729,400 | 4,662,750 | 6,380,600 | 7,695,000 |
| Total .. | 25,949,070 | 24,816,620 | 20,616,160 | 25,178,480 | 23,778,300 |
| *Mining.* | | | | | |
| Gold .. .. | 575,260 | 648,969 | 443,938 | 453,962 | 405,245 |
| Coal .. .. | 406,620 | 528,919 | 634,397 | 695,430 | 563,289 |
| Stone from Quarries (including limestone) .. | 300,100 | 383,002 | 434,520 | 468,468 | 518,064 |
| Other Metals and Minerals .. .. | 48,150 | 46,755 | 30,299 | 48,021 | 45,829 |
| Total .. | 1,330,130 | 1,607,645 | 1,543,154 | 1,665,881 | 1,532,427 |
| *Forest Produce.* | | | | | |
| Timber (Forest Sawmills only) .. | 693,995 | 905,720 | 896,070 | 946,930 | 942,480 |
| Firewood (estimated).. | 790,140 | 923,200 | 918,550 | 927,860 | 1,033,700 |
| Bark for Tanning .. | 153,260 | 125,830 | 138,520 | 136,830 | 130,660 |
| Total .. | 1,637,395 | 1,954,750 | 1,953,140 | 2,011,620 | 2,106,840 |
| *Miscellaneous.* | | | | | |
| Honey and Beeswax .. | 35,930 | 45,346 | 48,075 | 40,122 | 45,559 |
| Poultry production (estimated) .. .. | 3,579,230 | 4,545,620 | 4,406,750 | 4,315,810 | 4,587,560 |
| Rabbits and Hares .. | 913,220 | 401,690 | 238,632 | 266,478 | 310,930 |
| Fish .. .. | 181,760 | 167,340 | 149,400 | 160,151 | 161,905 |
| Total .. | 4,710,140 | 5,159,996 | 4,842,857 | 4,782,561 | 5,105,954 |
| Total Value of Primary Products .. .. | 55,510,780 | 58,729,361 | 49,493,469 | 54,835,568 | 52,183,895 |
| Manufacturing—Added Value* .. | 34,259,060 | 38,330,232 | 43,592,856 | 46,355,804 | 49,141,526 |
| Grand Total .. | 89,769,840 | 97,059,593 | 93,086,325 | 101,191,372 | 101,325,421 |

* 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 less in the year 1923–24 than in the preceding year, the most noticeable decrease being shown in "Cultivation" and "Dairying and Pastoral." There has been a marked improvement in the value of forest produce in recent

years, this having advanced from £912,950 in 1914 to £2,106,840 in 1923-24.

The total value of primary production in 1923-24 was £52,183,895, and that of manufactures (added value) was £49,141,526. The former was less by £2,651,673, and the latter greater by £2,785,722, than 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, 1919-20 TO 1923-24.

| Produce. | Value of Produce per head in— | | | | | | | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| | 1919-20. | | | 1920-21. | | | 1921-22. | | | 1922-23. | | | 1923-24. | | |
| | £ | *s.* | *d.* | £ | *s.* | *d.* | £ | *s.* | *d.* | £ | *s.* | *d.* | £ | *s.* | *d.* |
| Cultivation .. | 14 | 12 | 7 | 16 | 11 | 6 | 13 | 4 | 10 | 13 | 6 | 7 | 12 | 1 | 11 |
| Dairying and Pastoral | 17 | 7 | 0 | 16 | 6 | 7 | 13 | 5 | 10 | 15 | 16 | 8 | 14 | 12 | 7 |
| Mining .. .. | 0 | 17 | 9 | 1 | 1 | 2 | 0 | 19 | 11 | 1 | 0 | 11 | 0 | 18 | 10 |
| Forest .. .. | 1 | 1 | 11 | 1 | 5 | 9 | 1 | 5 | 2 | 1 | 5 | 4 | 1 | 5 | 11 |
| Miscellaneous .. | 3 | 3 | 0 | 3 | 7 | 10 | 3 | 2 | 5 | 3 | 0 | 2 | 3 | 2 | 10 |
| Total Primary Production | 37 | 2 | 3 | 38 | 12 | 10 | 31 | 18 | 2 | 34 | 9 | 8 | 32 | 2 | 1 |
| Manufactures .. | 22 | 18 | 1 | 25 | 4 | 5 | 28 | 2 | 2 | 29 | 3 | 0 | 30 | 4 | 8 |
| Grand Total | 60 | 0 | 4 | 63 | 17 | 3 | 60 | 0 | 4 | 63 | 12 | 8 | 62 | 6 | 9 |

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 32 per cent. higher in 1923-24 than in 1919-20.