## PART X.

## PRODUCTION.

## LAND AND SETTLEMENT.

The total area of the State is $56,245,760$ acres. On 31st December, 1939, this comprised :-

|  |  |  |  | Acres. |
| :---: | :---: | :---: | :---: | :---: |
| Lands ahenated in fee-simple | $\ldots$ | $\ldots$ | $27,762,315$ |  |
| Lands in process of alienation | $\ldots$ | $\ldots$ | $4,815,259$ |  |
| Crown lands | $\ldots$ | $\ldots$ | $\ldots$ | $\ldots$ |
| $23,668,186$ |  |  |  |  |
| Total | $\ldots$ | $\ldots$ | $\ldots$ |  |
|  |  |  | $\ldots$ | $56,245,760$ |

The Crown lands comprise-
Permanent forests (under Forests Act) .. 4,121,871
Timber reserves (under Forests Act) .. 723,953
State Forests and Timber reserves (under Land
Act) . . . .. .. .. 330,027
Water reserves .. .. .. .. 313,237
Reserves for Agricultural Colleges, \&c. .. 88,587
Reserves in the Mallee . . .. .. 410,000
Other reserves .. .. .. .. 478,005
Roads .. .. .. .. .. 1,794,218
Water frontages, beds of rivers, lakes, \&c.; unsold land in cities, towns, and boroughs. . 4,551,409
$\begin{array}{cccc}\text { Land in occupation under- } \\ \text { Perpetual leases } & \text {.. .. . } & & \\ & \end{array}$
Other leases and licences .. .. 25,899
Temporary grazing licences .. .. 8,015,966
Unoccupied .. .. .. .. 2,740,150
Total .. .. .. .. $23,668,186$
13473/40.-30

In the following table are shown the area of Crown

Alienathon of Isind. lands sold absolutely and conditionally, and the area of lands alienated in fee-simple during the last six years. A portion of the area conditionally sold reverts to the Orown each year in consequence of the non-fulfilment of conditions by the selectors. The lands alienated each year include areas selected in previous years.

> VICTORIA-ALIENATION OF CROWN LANDS, 1934 TO 1939.

| Year. |  | Area of Crown Lands Sold. |  |  | Crown Lands alienated in Feesimple. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Absolutely, at Auction, $\& \mathrm{c}$. | $\begin{gathered} \text { Conditionally } \\ \text { to } \\ \text { Selectors. } \end{gathered}$ | Total. | Area. | Purchase Money. |
|  |  | Acres. | Acres. | Acres. | Acres. | $\boldsymbol{£}$ |
| 1934 | - | 4,661 | 68,726 | 73,387 | 143,851 | 119,219 |
| 1935 | $\cdots$ | 4,545 | 44,324 | 48,869 | 288,443 | 199,339 |
| 1936 | -• | 5,290 | 34,440 | 39,730 | 108,011 | 88,937 |
| 1937 | . | 5,472 | 51,636 | 57,108 | 115,572 | 153,350 |
| 1938 | . | 7,882 | 64,003 | 71,885 | 231,318 | 214,420 |
| 1939 | -* | 3,577 | 46,063 | 49,640 | 359,144 | 175,025 |

From the period of the first settlement of the State

Amount
realized by sale of Crown lands. to the end of 1939 the amount realized by the sale of Crown lands was $£ 36,703,902$. Payment of a considerable portion of this amount extended over a series of years without interest, upon very easy terms.

Lands
remaining for The next table shows the whole of the unalienated remaining for lands of the Crown remaining for disposal :-
VICTORIA-CROWN LANDS REMAINING FOR DISPOSAL ON 31st DECEMBER, 1939.

| Location. | Classification. |  |  |  |  |  | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Agricultural and Grazing. |  |  |  |  | Auriferous. |  |
|  | First. | Second. | Third. | Fourth. | Pastoral. |  |  |
| County. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Anglesey . . |  | 2,550 | 63,948 | 1,235 |  | 2,000 | 69,733 |
| Buln Buln.. | 7,634 | 41,053 | 101,197 |  |  |  | 149,884 393,097 |
| Bogong ${ }_{\text {Benambra }}$ | 86 62 | 9,803 | 119,679 $\mathbf{2 5 9 , 5 0 5}$ | 9,190 2,778 | 170,700 243,600 | $\begin{aligned} & 83,639 \\ & 87,890 \end{aligned}$ | 393,097 593,835 |
| Bourke . ${ }^{\text {B }}$ |  | 71 | - 25 |  |  |  | -96 |
| Bendigo | 76 | 452 | 3,076 |  |  | 2,092 | 5,696 |
| Borung . |  | 1,332 | 7,594 |  |  | 2,495 | 11,421 |
| Croajingolong | 2,125 | 1,487 | 541,438 | 25,900 | 771,345 | 13,800 | 1,356,095 |
| Dargo .. |  |  | 96,819 | 450 | 431,160 130,600 | 70,000 | 598,429 |
| Delatite Dalhousie | 168 20 | 14,117 | 83,001 1,433 | 9,979 | 130,600 | 60,000 442 | 297,862 |
| Dundas |  |  | 62,709 | 4,700 | 15,754 |  | 83,163 |
| Evelyn | 49 | 223 | 10,111 |  |  | 1,475 | 11,888 |
| Follett |  |  | 111,366 | 1,780 | 24,416 |  | 137,562 |
| Gladstone | 591 | 1,164 | 2,171 | 2,508 | .. | 8,668 | 15,102 |
| Grant | 64 | 365 | 2,628 |  | . | 6,184 | 9,241 |
| Grenville .. | 33 | 1,060 | 295 | $\cdots$ | . | 5,102 | 6,490 |
| Gunbower .. | 152 |  |  |  | $\ldots$ | .. | 152 |
| Heytesbury | 428 | 935 | 116,703 | $\cdots$ |  |  | 118,066 |
| Kara Kara | 106 | 181 | 1,922 | $\cdots$ | $\cdots$ | 2,655 | 4,864 |
| Karkarooc. | .. | 39 |  |  |  |  | - 15839 |
| Lowan |  | 555 | 127,278 | 21,526 | 9,000 |  | 158,359 |
| Moira | 494 |  | 5,274 | 883. | .. | 1,200 | 7,851 12,882 |
| Mornington | 33 | 1,253 | 11,596 $\mathbf{9 1 , 9 9 1}$ | $\ldots$ |  |  | 12,882 |
| Normanby .. Polwarth | 12,161 | 14,714 | 91,991 22,425 | $\cdots$ |  |  | 91,991 |
| Rodney | 198 | ${ }_{196}$ |  |  |  | 1,865 | 2,259 |
| Ripon | 20 | 420 | 92,746 | $\cdots$ |  | 2,180 | 25,366 |
| Tambo |  |  | 200,144 |  | 371,000 | 900 | 572,044 |
| Tanjil |  |  | 101,577 | . | 361,400 | 67,000 | 529,977 |
| Talbot | 117 | 1,112 | 146 | $\cdots$ | .. | 19,585 | 20,960 |
| Tatchera ${ }^{\text {Villiers }}$. | 235 | 70 | 1,285 |  |  |  | 305 1,285 |
| Vonnangatta |  |  | 147,406 |  | 846,400 |  | 993,806 |
| 'Total | 24,849 | 93,651 | 2,317,488 | 80,929 | 3,375,375 | 439,172 | 6,331,464 |
| Throughout the State | Swamp or reclaimed lands ${ }^{\text {Lands which auction }}$ |  |  |  |  |  | 2,968 |
|  |  |  |  |  |  |  | 5,918 |
| The north - westernportionState | Mallee lands available for selection Mallee lands (such as are suitable |  |  |  |  |  | 29,350 |
|  |  |  |  |  | to be ev | ntually | 4,386,416 |

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

The "Torrens System", whereby persons acquiring

Transter of Land Act. possession of land may receive a clear title, was introduced into Victoria in 1862. The system has been the means of simplifying procedure in connexion with the transfer of land and thereby reducing the cost of dealing in real estate. It gives a title to the transferee free of any latent defect and the Crown grant issues through the Titles Office. In order to bring under the Transfer of Land Act land that was parted with prior to 1862 ( $5,142,321$ acres), application must be made accompanied by strict proofs of the applicant's interest in the property.

During 1939 there were submitted 240 such applications in respect of land amounting in area to 2,810 acres, and in value to $£ 264,109$; while the land actually brought under the Act as a result of applications was 9,995 acres valued at $£ 397,889$. Up to the end of 1939 there had been brought under the Act 3,280,804 acres valued at $£ 73,438,303$. The area of the land still under the Old Law System at the end of 1939 was $1,861,517$ acres. A summary of dealings under the Transfer of Land Acts will be found on page-212.

In granting an application to have land brought under

Assurance
Fund. the Transfer of Land Act 1928, the Commissioner of Titles is required to issue a perfect Title save as to any circumstances of which he has had notice. To assure and indemnify the Government in a case where the Supreme Court or some higher Tribunal has decided that some person other than the applicant has an interest in the property, and it has consequently been found necessary to compensate such other person, there has been constituted an Assurance Fund which is built up of contributions of $\frac{1}{2} \mathrm{~d}$. in the $£$ on the value of the laud covered by the application. During 1939-40 receipts of the Fund comprised contributions, $£ 2,076$, and
 amounted to $£ 1,031$, and the sum of $£ 5,095$ was paid out in accordance with section 3 of the Special Funds Act 1920 to provide for the interest on loan moneys expended on University buildings. The balance at the credit of the Assurance Fund on 30th June, 1940, was $£ 114,435$. The amount paid up to 30 th June, 1940, as compensation and for judgments recovered, including costs, was £11,317.

## CLOSER SETTLEMENT AND DISCHARGED SOLDIERS' SETTLEMENT.

The history of Closer Settlement and of Discharged Soldiers' Settlement in Victoria will be found in previous issues of the Year-Book.

## Dissoiution of the Closer Settlement Commission.

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

## DESTRUCTION OF VERMIN AND NOXIOUS WEEDS.

state
expenditure Active operations for the destruction of vermin and expendure
on destruction noxious weeds on Crown lands were first undertaken by of ermin and
noxious weeds. the Government in 1880. Subsidies to Shire Councils for the destruction of wild animals are made from revenue, and advances to municipalities and farmers for the purchase of wire netting from Loan Funds. The following are the amounts spent during the last five years:-
VICTORIA-EXPENDITURE ON DESTRUCTION OF VERMIN AND NOXIOUS WEEDS, 1935-36 TO 1939-40.

| Year. |  |  |  | From Revenue. | Wire Netting Advances from Loan Funds. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | £ | £ |
| 1935-36 .. | . | . | .. | 98,135 | 19,444 |
| 1936-37 .. | . | . | .. | 95,957 | 19,585 |
| 1937-38 | . | . | . | 92,935 | 14,235 |
| 1938-39 .. | . | .. | . | 83,248 | 15,235 |
| 1939-40 .. | . | .. | .. | 79,477 | 12,325 |

## WATERWORKS.

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

VICTORIA-STATE EXPENDITURE AND LOAN LIABILITY ON WATERWORKS* TO 30th JUNE, 1940.

| Description of Works. | Capital <br> Expenditure <br> to $30 t h$ <br> June, 1940. | Loan Redemption Paid. | Loan Liability at 30th June, 1940. |
| :---: | :---: | :---: | :---: |
|  | £ | £ | £ |
| Free Headworks | 1,226,832 | 491 | 1,226,341 |
| Capital Works and Charges not apportionable to Districts | 1,664,731 | 323,395 | 1,341,336 |
| Headworks Costs apportioned to Districts | 10,442,655 | 74,986 | 10,367,669 |
| Irrigation and Water Supply Districts (exclusive of Headworks Costs) | 5,678,853 | 84,109 | 5,594,744 |
| Urban Divisions of Irrigation Districts | 63,438 | 1,391 | 62,047 |
| Waterworks Districts (exclusive of. Headworks Costs) | 2,766,323 | 45,422 | 2,720,901 |
| Urban Districts of Waterworks Districts (exclusive of Headworks Costs) | 2,386,325 | 29,664 | 2,356,661 |
| Flood Protection and Drainage Districts . . | 379,613 | 6,086 | 373,527 |
| Waterworks Trusts and Local Governing Bodies | $3,844,981$ | 650,90I | 3,194,080 |
| Total | 28,453,751 | 1,216,445 | 27,237,306† |

[^0]
## IRRIGATION AND WATER SUPPLY DEVELOPMENT.

Prior to 1905 the management of irrigation in Victoria was in the hands of various Irrigation Trusts, which were

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

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

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

|  | At 30th June, 1907. | At 30th June, 1940. |
| :---: | :---: | :---: |
| Area of State artificially supplied with water <br> (acres) | 10,800,000 | 15,118,000 |
| Capacity of reservoirs .. (acre feet) | 474,000 | 1,963,200 |
| Irrigation Districts- . |  |  |
| Number of Districts administered | 10 | 30 |
| Number of Districts having Water Rights . | Ni] | 25 |
| Total of such Water Rights (acrefeet) | Nil | 464,916 |
| Area under Irrigated Culture . ${ }^{\text {a }}$ (ares) | 108,000 | 517,903 |
| Valuation for Rating purposes .. (£) | 196,000 | 876,657 |
| Rural Waterworks Districts (Domestic and Stock Supply) - |  |  |
| Number of Districts administered | ${ }^{3}$ | 27 |
| Valuation for Rating purposes .. (£) | 125,000 | 1,537,675 |
| Urban Districts- |  |  |
| Number of Districts administered . . | 1 | 89 |
| Valuation for Rating purposes . $\quad . \quad$ (£) | 5,600 | 699,527 |
| Coliban System (Urban, Rural, Irrigation and |  |  |
| Mining Supplies)- <br> Valuation for Urban Rating purposes | $\begin{gathered} 1910 . \\ \mathbf{3 1 7 , 7 5 0} \end{gathered}$ | 401,249 |
| Flood Protection Districts- |  |  |
| Number of Districts. administered | . | 4 |
| Drainage DistrictsNumber of Districts administered |  |  |
|  |  |  |
| Valuation for Rating purposes .. (£) |  | 362,968 |

## PROGRESS IN IRRIGATION DEVELOPMENT.

The area under irrigated culture for all kinds of crops has increased from 129,771 acres in 1909-10 to 517,903 acres in 1939-40.

VICTORIA-LANDS UNDER IRRIGATED CULTURE 1939-40.

| District. |  |  |  |  |  | Area Irrigated. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Katandra |  | . |  |  | . | Acres. $4,881$ |
| North Shepparton |  | . |  | . | . | 8,766 |
| Shepparton . |  | - |  |  | . | 13,609 |
| South Shepparton | $\cdots$ | -. | . | . | $\cdots$ | 4,569 |
| Rodney | . | - | . | . | $\cdots$ | 64,581 |
| Tongala-Stanhope |  | - | . | . | $\cdots$ | 34,421 |
| Rochester .. |  | . |  |  | . | 52,981 |
| Echuca North |  |  |  |  | . | . . |
| Dingee | . | . | $\cdots$ | $\cdots$ | $\cdots$ | 3,692 |
| Calivil | . | . |  | - | . | 9,886 |
| Tragowel Plains | . | . |  |  | . | 49,735 |
| Deakin |  |  |  |  |  | 3,194 |
| Boort |  |  |  |  | . | 16,385 |
| Leitchville | $\cdots$ | . | . |  | . | 7,245 |

Victoria-Lands Under Irrigated Culture 1939-40-continued.


The subjoined table shows the total extent of irrigated Total area
Irrigated. land in the State in 1909-10 and in each of the five years, 1935-36 to 1939-40, and the purposes for which the land was utilized.

VICTORIA--IRRIGATED AREAS: HOW UTILIZED.

| Crop. | 1909-10. | 1935-36. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | acres. | acres. | acres. | acres. | acres. | acres. |
| Cereals | 23,715 | 39,835 | 38,328 | 6ז, 466 | 84,379 | 33,207 |
| Lucerne | 24,124 | 91,267 | 86,568 | 87,655 | 76,148 | 74,553 |
| Sorghum and other annual fodders | 8,094 | 20,776 | 19,753 | 26,548 | 26,942 | 14,528 |
| Pastures | 50,541 | 252,345 | 292,001 | 326,518 | 251,629 | 310,504 |
| Vineyards and orchards | 17,524 | 67,319 | 66,526 | 66,417 | 65,137 | 72,969 |
| Fallow | 4,988 | 6,275 | 8,093 | 7,342 | 5,126 | 5,417 |
| Miscellaneous | 785 | 18,018 | 7,558 | 10,166 | 5,996 | 6,725 |
| Total | 129,771 | 495,835 | 518,827 | 590,112 | 515,357 | 517,903 |

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

Of the total area irrigated in 1939-40-517,903 acres-the percentages devoted to different purposes were as follow:-Pastures, 60 ; lucerne, 15 ; vineyards, orchards, and gardens, 14 ; cereals, 6; sorghum and other annual fodder crops, 3 ; fallows and miscellaneous, 2.

Progress in Dairying is one of the principal industries in irrigation Irrigation Areas,
1939-40. districts. Dairy herds grazed on irrigated pastures obtained prominent positions in the 1939-40 Standard Herd Test conducted by the Department of Agriculture.

The production of dried vine and tree fruits, of citrus, and of fruits for canning are established features in these districts. There has also been considerable expansion in market gardening and a development of the canning industry in relation thereto. The Victorian dried vine-fruit crop amounted to 57,970 tons. The production of citrus fruits in irrigation districts during the 1939-40 season amounted to 597,600 bushels-approximately 90 per cent. of the citrus production of the State.

The Victorian production of canned fruit in the season 1939-40 was $1,881,478$ cases, which was approximately 73 per cent. of the Australian output in that season.

Supply of
water for $\quad$ Extensive schemes for the supply of water for domestic water for and and stuck purposes are under the control of the State stock purposes. Rivers and Water Supply Commission. Altogether, the area so supplied is approximately 23,622 square miles-about 27 per cent. of the total area of the State. The major portion of the area supplied is in the Mallee and Wimmera districts.

The number of country centres supplied with water for domestic use is -120 by the Commission, 113 by Waterworks Trusts, and 16 by Local Government bodies.

The estimated population in country centres supplied with water is 445,500 persons.

## STORAGE AND SUPPLY SCHEMES

## Total Water 8torages in state.

In 1902 the total capacity of storages in the State was 172,000 acre feet. .The present capacity is $1,963,200$ acre feet. The Hume Reservoir, designed to contain $2,000,000$ acre feet (half of which can, subject to the provisions of the River Murray Agreement, be credited to the State of Victoria) now has a capacity of $1,250,000$ acre feet. When the final stage of this work has been constructed (involving a further approval of the interested State Governments), and the Glenmaggie and the Lauriston Reservoirs are completed, the combined storage capacity available to users in Victoria will be 2,399,700 acre feet.


Existing Storages-continued.


# Further Storage whtch could be Provided by Completion of Existing Works. 

| Maffra-Sale System- <br> Glenmaggie Reservoir (balance of 150,000 acre feet) | 45,500 |  |
| :---: | :---: | :---: |
| Murray System- |  |  |
| Hume Reservoir, at junction with Mitta River (half |  |  |
|  |  | 420,500 |
| Total capacity of storages when works are |  | 399,700 |

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

## METEOROLOGY.

Particulars in regard to climate and weather conditions Meteorological have been furnished by the Commonwealth Meteorologist,
Records. and are given in the following tables. In the first are shown the rainfall for each district and for the whole State for each of the years 1901 to 1940 , together with the mean rainfall covering a period of 70 years.

## VICTORIA-RAINFALL_YEARLY RECORDS AND AVERAGES.

| Year. | Districts. |  |  |  |  |  |  |  | Whole State. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Mallee. | Wimmera. | Northern. | NorthCentral. | North- <br> Eastern. | Western. | Central. | Gippsland. |  |
|  | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. | Inches. |
| 1901 | $9 \cdot 39$ | $16 \cdot 61$ | $13 \cdot 58$ | 24.78 | 28.08 | $27 \cdot 90$ | $28 \cdot 98$ | 33.66 | $22 \cdot 05$ |
| 1902. | 7*64 | 1I•94 | 11.26 | $18 \cdot 4 \mathrm{I}$ | $20 \cdot 10$ | $23 \cdot 54$ | $24 \cdot 88$ | 33-35 | $18 \cdot 55$ |
| 1903 | $16 \cdot 34$ | 22.76 | $22 \cdot 22$ | $32 \cdot 07$ | $33 \cdot 13$ | $33 \cdot 43$ | $32 \cdot 86$ | 33.68 | 27-44 |
| 1904 | 10*75 | $17 \cdot 22$ | 17.32 | $28 \cdot 00$ | $33 \cdot 56$ | $28 \cdot 54$ | 31.29 | $30 \cdot 02$ | $23 \cdot 49$ |
| 1905 | $12 \cdot 01$ | $18 \cdot 40$ | $16 \cdot 39$ | $25 \cdot 36$ | $31 \cdot 72$ | $28 \cdot 79$ | 29.61 | $37 \cdot 84$ | $24 \cdot 53$ |
| 1906 | $15 \cdot 22$ | $23 \cdot 42$ | $24 \cdot 16$ | $32 \cdot 00$ | $42 \cdot 11$ | $32 \cdot 53$ | $30 \cdot 13$ | 34.81 | $28 \cdot 49$ |
| 1907 | $9 \cdot 25$ | $17 \cdot 07$ | 14.74 | $22 \cdot 42$ | $26 \cdot 19$ | $26 \cdot 16$ | $25 \cdot 36$ | $27 \cdot 20$ | $20 \cdot 40$ |
| 1908 .. | $12 \cdot 33$ | 17.72 | $14 \cdot 38$ | $19 \cdot 98$ | $26 \cdot 40$ | 25.81 | $20 \cdot 08$ | $24 \cdot 29$ | $20 \cdot 02$ |
| 1909 . | $14 \cdot 35$ | $22 \cdot 38$ | $20 \cdot 04$ | $29 \cdot 77$ | $35 \cdot 62$ | $31 \cdot 37$ | $30 \cdot 57$ | 34-09 | $26 \cdot 52$ |
| 1910 | $15 \cdot 96$ | $22 \cdot 36$ | $20 \cdot 13$ | $29 \cdot 13$ | $32 \cdot 10$ | $32 \cdot 45$ | $28 \cdot 28$ | $30 \cdot 80$ | $25 \cdot 96$ |
| 1911 | $17 \cdot 84$ | $19 \cdot 89$ | 19•87 | $29 \cdot 79$ | $33 \cdot 24$ | $31 \cdot 13$ | $36 \cdot 88$ | $39 \cdot 71$ | $28 \cdot 08$ |
| 1912 | $12 \cdot 50$ | $17 \cdot 52$ | $18 \cdot 12$ | $23 \cdot 00$ | $30 \cdot 93$ | $25 \cdot 94$ | $24 \cdot 92$ | $26 \cdot 60$ | $21 \cdot 86$ |
| 1913 | $12 \cdot 66$ | 16.38 | $16 \cdot 76$ | $24 \cdot 22$ | 29•69 | $25 \cdot 85$ | $27 \cdot 64$ | $34 \cdot 65$ | $22 \cdot 96$ |
| 1914 | $7 \cdot 29$ | $9 \cdot 76$ | $9 \cdot 73$ | 14.95 | $19 \cdot 94$ | 18.56 | $20 \cdot 05$ | $23 \cdot 81$ | $14 \cdot 66$ |
| 1915 | 12.42 | $18 \cdot 98$ | $16 \cdot 75$ | $25 \cdot 65$ | $34 \cdot 17$ | $27 \cdot 44$ | $24 \cdot 67$ | $27 \cdot 63$ | 22.35 |
| 1916 | 17.72 | $22 \cdot 54$ | $25 \cdot 60$ | $34 \cdot 44$ | $44 \cdot 01$ | $30 \cdot 72$ | 38.78 | $37 \cdot 78$ | $30 \cdot 27$ |
| 1917 | $19 \cdot 55$ | $21 \cdot 96$ | $26 \cdot 34$ | $35 \cdot 86$ | $56 \cdot 09$ | $31 \cdot 70$ | $32 \cdot 41$ | $34 \cdot 63$ | 30.77 |
| 1918 | $13 \cdot 59$ | $16 \cdot 44$ | $21 \cdot 96$ | $28 \cdot 30$ | $36 \cdot 96$ | $25 \cdot 70$ | $30 \cdot 11$ | 33.39 | 24.70 |
| 1919 | $11 \cdot 46$ | $13 \cdot 86$ | $15 \cdot 06$ | $21 \cdot 21$ | $27 \cdot 27$ | $26 \cdot 47$ | $25 \cdot 48$ | $37 \cdot 03$ | $22 \cdot 77$ |
| 1920 | $14 \cdot 93$ | $16 \cdot 04$ | $20 \cdot 15$ | $28 \cdot 37$ | $34 \cdot 42$ | $25 \cdot 99$ | $31 \cdot 38$ | $33 \cdot 37$ | $25 \cdot 43$ |
| 1921 | 16.29 | 19.99 | $23 \cdot 69$ | $31 \cdot 75$ | $39 \cdot 57$ | $27 \cdot 36$ | $31 \cdot 13$ | $31 \cdot 73$ | $25 \cdot 35$ |
| 1922 | $10 \cdot 44$ | $17 \cdot 15$ | $13 \cdot 15$ | $20 \cdot 85$ | $26 \cdot 10$ | 28.09 | $27 \cdot 82$ | 32.92 | $21 \cdot 35$ |
| 1923 | 15.07 | $20 \cdot 21$ | $17 \cdot 60$ | $27 \cdot 30$ | $34 \cdot 80$ | $33 \cdot 51$ | $30 \cdot 11$ | $33 \cdot 88$ | $26 \cdot 12$ |
| 1924 .. | 16.08 | $22 \cdot 17$ | $23 \cdot 29$ | 34.74 | $40 \cdot 70$ | 3.113 | $40 \cdot 30$ | 37-37 | $28 \cdot 10$ |
| 1925 | $9 \cdot 87$ | $14 \cdot 20$ | 14.09 | 20.28 | 27-42 | $22 \cdot 43$ | $23 \cdot 12$ | $29 \cdot 69$ | 19•74 |
| 1926 | $12 \cdot 64$ | $17 \cdot 00$ | 16.85 | 24.25 | $35 \cdot 36$ | $26 \cdot 70$ | $24 \cdot 20$ | $29 \cdot 72$ | $22 \cdot 90$ |
| 1927 | $7 \cdot 66$ | $13 \cdot 93$ | $11 \cdot 14$ | $18 \cdot 67$ | $26 \cdot 15$ | $23 \cdot 20$ | $22 \cdot 16$ | $28 \cdot 43$ | $18 \cdot 56$ |
| 1928 | 14.04 | $19 \cdot 10$ | $21 \cdot 27$ | 29-56 | 37-21 | $30 \cdot 46$ | $29 \cdot 86$ | $33 \cdot 98$ | $26 \cdot 14$ |
| 1929 | $9 \cdot 10$ | $15 \cdot 56$ | $13 \cdot 65$ | $24 \cdot 20$ | $27 \cdot 24$ | $29 \cdot 28$ | $31 \cdot 13$ | $32 \cdot 36$ | $22 \cdot 00$ |
| 1930 | 15.32 | $20 \cdot 94$ | $19 \cdot 68$ | 30.59 | $32 \cdot 49$ | $29 \cdot 43$ | $30 \cdot 85$ | $33 \cdot 66$ | $25 \cdot 76$ |
| 1931 | 14.86 | $19 \cdot 25$ | $21 \cdot 77$ | $31 \cdot 20$ | $43 \cdot 18$ | $28 \cdot 79$ | $32 \cdot 88$ | $32 \cdot 65$ | $26 \cdot 97$ |
| 1932 | $14 \cdot 96$ | $18 \cdot 90$ | $20 \cdot 60$ | $29 \cdot 63$ | $34 \cdot 33$ | $31 \cdot 85$ | $32 \cdot 91$ | $34 \cdot 19$ | $26 \cdot 34$ |
| 1933 | 14.13 | $20 \cdot 96$ | $20 \cdot 25$ | $31 \cdot 09$ | 32-09 | $26 \cdot 87$ | $27 \cdot 56$ | 30.65 | $24 \cdot 47$ |
| 1934 .. | $13 \cdot 21$ | $16 \cdot 64$ | $21 \cdot 01$ | $28 \cdot 57$ | $42 \cdot 81$ | $29 \cdot 20$ | $35 \cdot 60$ | $43 \cdot 39$ | $27 \cdot 60$ |
| 1935 .. | 10.84 | 17.71 | $19 \cdot 53$ | $29 \cdot 14$ | $35 \cdot 86$ | $30 \cdot 49$ | $34 \cdot 23$ | $42 \cdot 53$ | 26.63 |
| 1936 | 14.39 | $19 \cdot 41$ | $19 \cdot 50$ | $28 \cdot 47$ | 35-52 | 26.91 | $30 \cdot 24$ | $36 \cdot 38$ | $25 \cdot 63$ |
| 1937 | $12 \cdot 69$ | $17 \cdot 19$ | $13 \cdot 70$ | 20.08 | $26 \cdot 25$ | $26 \cdot 39$ | $25 \cdot 20$ | $28 \cdot 33$ | 21.02 |
| 1938 | $6 \cdot 30$ | $11 \cdot 39$ | $8 \cdot 66$ | 15.62 | $20 \cdot 49$ | $22 \cdot 63$ | $20 \cdot 47$ | $26 \cdot 39$ | $16 \cdot 28$ |
| 1939 | $15 \cdot 32$ : | $20 \cdot 33$ | $27 \cdot 72$ | $37 \cdot 83$ | $53 \cdot 05$ | $32 \cdot 94$ | $38 \cdot 10$ | $38 \cdot 16$ | $31 \cdot 37$ |
| 1940 | 6.82 | 11-26 | 9*67 | 17•13 | $21 \cdot 21$ | $21 \cdot 51$ | $22 \cdot 81$ | $26 \cdot 94$ | 16.73 |
| $\begin{aligned} & \text { Means } \\ & \text { for } 70 \\ & \text { years } \end{aligned}$ | $13 \cdot 15$ | $18 \cdot 37$ | 18•52 | $26 \cdot 97$ | $33 \cdot 45$ | $28 \cdot 14$ | $29 \cdot 71$ | 34-37 | $24 \cdot 60$ |

The wettest portion of the State is the Cape Otway Forest in the Western District, which is closely followed by the South Gippsland and the Latrobe and Thomson Basin sections of the Gippsland District. The lightest rainfall occurs in the Mallee District, the northern portion of which receives on the average from 10 to 12 inches only per year.

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

## AVERAGES OF CLIMATIC ELEMENTS IN MELBOURNE.

| Meteorological Elements. | Spring. | Summer. | Autumn. | Winter. |
| :---: | :---: | :---: | :---: | :---: |
| Mean pressure of air in inches | 29.973 | $29 \cdot 921$ | $30 \cdot 079$ | $30 \cdot 076$ |
| Monthly range of pressure of air-Inches. | 886 | 764 | 812 | 976 |
| Mean temperature of air in shade-- ${ }^{\circ} \mathrm{Fahr}$. | $57 \cdot 8$ | $66 \cdot 6$ | $59 \cdot 4$ | $50 \cdot 0$ |
| Mean daily range of temperature of air in shade- ${ }^{\circ}$ Fahr. | $18 \cdot 7$ | $21 \cdot 1$ | $17 \cdot 4$ | $14 \cdot 0$ |
| Mean relative humidity. Saturation $=100$ | 65 | 60 | 69 | 75 |
| Mean rainfall in inches | 7-22 | $6 \cdot 00$ | $6 \cdot 56$ | $5 \cdot 86$ |
| Mean number of days of rain | 39 | 25 | 33 | 44 |
| Mean amount of spontaneous evaporation in inches .. | 10•24 | $17 \cdot 20$ | $7 \cdot 94$ | $3 \cdot 73$ |
| Mean daily amount of cloudiness-Scale 0 to 10 | $6 \cdot 0$ | $5 \cdot 2$ | $5 \cdot 9$ | $6 \cdot 4$ |
| Mean number of days of fog | 1 | 1 | 7 | 12 |

In the subjoined statement are shown the yearly averages of the climatic elements in Melbourne for 1939 and for the last 84 years, as well as the extremes between which the yearly average values of such elements have oscillated in the latter period.

## YEARLY AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS IN MELBOURNE.

| Meteorological Elements. | Yearly Averages and Extremes. |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Year 1939. |  | Extremes betaveen which the Yearly Average Values have oscillated in 84 years. |  |
|  |  |  | Highest. | Lowest. |
| Mean atmospheric pressure (inches). | 29.977 | $30 \cdot 012$ | $30 \cdot 106$ | 29.945 |
| Highest | $30 \cdot 598$ | $30 \cdot 607$ | $30 \cdot 770$ | $30 \cdot 488$ |
| Lowest | $29 \cdot 085$ | $29 \cdot 250$ | $29 \cdot 495$ | 28.942 |
| Range (inches) | $1 \cdot 513$ | $1 \cdot 359$ | $1 \cdot 719$ | $1 \cdot 074$ |
| Mean temperature of air in shade ( ${ }^{\circ}$ Fahr.) | $58 \cdot 9$ | 58.5 | $59 \cdot 9$ | 57.3 |
| Mean daily maximum .. ( ${ }^{\circ} \mathrm{Fahr}$.) | $67 \cdot 9$ | 67.4 | $69 \cdot 4$ | $65 \cdot 4$ |
| Mean daily minimum | 50.0 | $49 \cdot 6$ | 51.2 | $47 \cdot 2$ |
| Absolute maximum | $114 \cdot 1$ | $105 \cdot 0$ | $114 \cdot 1$ | 96.6 |
| Absolute minimum | $30 \cdot 0$ | $30 \cdot 9$ | $34 \cdot 2$ | $27 \cdot 0$ |
| Mean daily range | $17 \cdot 9$ | 17.8 | $20 \cdot 4$ | $15 \cdot 0$ |
| Absolute annual range | $84 \cdot 1$ | $74 \cdot 1$ | $84 \cdot 1$ | $66 \cdot 0$ |
| $\begin{array}{cr}\text { Solar Radiation } & \text { (mean } \\ \text { maxima) } & . . \\ \text {.. }\end{array}$ | $106 \cdot 1$ | 116.9 | $127 \cdot 6$ | $105 \cdot 6$ |
| Terrestrial Radiation (mean | $44 \cdot 7$ | $43 \cdot 9$ | $46 \cdot 8$ | $39 \cdot 5$ |
| Rainfall (in inches) | $33 \cdot 11$ | $25 \cdot 64$ | $38 \cdot 04$ | $15 \cdot 61$ |
| Number of wet days | 166 | 141 | 187 | 102 |
| $\begin{array}{ccc}\text { Year's amount of free evaporation (in } \\ \text { inches) } & . & . . \\ \text {.. }\end{array}$ | $41 \cdot 05$ | $39 \cdot 11$ | $45 \cdot 66$ | 31.59 |
| $\begin{array}{ccc}\text { Percentage } \\ =100 \text { ) } & \text { humidity } & \text { (saturation } \\ . . & . . & . .\end{array}$ | 65 | 67 | 76 | 61 |
| $\begin{array}{c}\text { Cloudiness } \\ \text { clear) }\end{array}$ (scale  <br> .. $=$ overcast, $0=$ | $6 \cdot 0$ | $5 \cdot 9$ | $6 \cdot 4$ | $4 \cdot 8$ |
| Number of days of fog .. | 22 | 21 | 50 | 5 |

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

VICTORIA--DISTRIBUTION OF AVERAGE RAINFALL.

| Rainfall. |  |  |  |  |  | Area. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Inches. |  |  |  |  |  | Square Miles. |
| Under 15. | . | $\cdots$ | . | . | - | 18,701 |
| 15 to $20 \ldots$ | . | . | . | . | . | 13,800 |
| 20 to $25 .$. | - | . | . | . | . | 13,551 |
| 25 to 30 .. | . | . | . | . | - | 14,528 |
| 30 to 40 .. | .. | . | . | . | . | 15,802 |
| 40 to 50 | .. | . | . | .. | . | 6,671 |
| 50 to 60 .. | . | . | - | . | $\cdots$ | 2,660 |
| Over 60 .. | -• | . | . | . | .. | 2,171 |

## AGRICULTURAL RESEARCH AND EDUCATION.

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

Research and experimental work are conducted at the

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

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

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

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

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

The pasture experiments are largely responsible for advances made in pasture improvement throughout Victoria. During the season 1939-40, 3,218,761 acres were topdressed and resulted in an estimated increase in carrying capacity of about 50 per cent. above pastures not similarly treated.

[^1]Experimental
Farms and Agricultural colleges.

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

> VICTORIA-GOVERNMENT EXPERIMENTAL FARMS AND AGRICULTURAL COLLEGES, 1939-40.

| Particulars. | Burnley <br> School of Primary Agriculture, \&c. | Central Research Farm, Werribee. | Rutherglen. |  | Mallee Research Station, Walpeup. | Horticultural Research Station, Tatura. | Dookie Agricultural College. | Longere <br> nong <br> Agricultural College. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | State Farm. | Viticultural Station. |  |  |  |  |
|  | acres. | acres. | acres. | acres. | acres. | acres. | acres. | acres. |
| Area under crop | 12 | 1,017 | 341 | 104 | 463 | 53 | $682$ | 915 |
| Other arable land.. | 15 | 1,070 | 484 | 49 | 330 | 16 | 1,488 | 1,1.37 |
| Balance of area | 6 | 100 | 295 | 45 | 1,135 | 35 | 3,756 | 334 |
| Total area of farm. . | 33 | 2,187 | 1,120 | 198 | 1,928 | 104 | 5,926 | 2,386 |
|  | $\mathcal{L}$ | $£$ | $£$ | $£$ | $\mathcal{L}$ | $\mathcal{L}$ | £ | £ |
| Value of produce for year | 800 | 8,250 | 3,025 | 742 | 2,069 |  | 10,980 | 6,888 |
| Receipts- |  |  |  |  |  |  |  |  |
| Government Grant Council of Agri- |  |  |  |  |  |  |  |  |
| cultural Educa- | ¢ 3,661 | 13,514 | 1,792 | 3,033 | 2,575 | 1,513 | 8,928 | 6,466 |
| tion Contribution | ] |  |  |  |  |  |  |  |
| Other | 1,184 | 6,930 | 2,823 | 51.8 | 1,112 |  | 11,336 | 8,694 |
| Total receipts .. | 4,845 | 20,444 | 4,615 | 3,551 | 3,687 | 1,513 | 20,264 | 15,160 |
| Total expenditure.. | 3,661 | 13,514 | 4,333 | 3,033 | 2,575 | 1,513 | 20,264 | 15,160 |
| Number of students | 70 | 14 | . | * | - |  | 71 | 35 |

Inspection ol Orchards,
Nurseries, \&c.

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

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

Melbourne University has a well-equipped School of

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

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

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

The headquarters of the Council are located at 314 Albert-street, East Melbourne. Two of the Council's Divisions-the Division of Forest Products and the Division of Animal Health and Nutritionalso have their headquarters in Victoria. Researches into timber seasoning, preservation, identification, mechanics, physics, chemistry, and general utilization are carried out by the former Division. The Victorlan work of the Division of Animal Health and Nutrition is concentrated mainly on problems of cattle diseases, e.g., pleuropneumonia, mastitis, and bovine haematuria.

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

## AGRICULTURE.

Progress of cultivation.

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

The following table shows the area under cultivation from period to period during the last 85 years :-
VICTORIA-ACREAGE CULTIVATED ANNUALLY, 1855 TO 1940.

| Period or Year (ended March). |  |  |  | Annual average area in each quinquennium, 1855 to 1925, and actual area each year 1926-1940, under- |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Crop. | Fallow. | Total Cultivation |
| 1855-65 | .. | . |  | acres. <br> 325,676 | acres. <br> 12,146 | acres. $337,822$ |
| 1865-75 | . | . |  | 624,377 | 57,274 | 681,651 |
| 1875-85 | .. | .. |  | 1,306,920 | 137,536 | 1,444,456 |
| 1885-95 |  | . |  | 2,109,326 | 364,282 | 2,473,608 |
| 1895-1905 | . | . |  | 3,022,914 | 524,197 | 3,547,111 |
| 1905-15 |  | .. |  | 3,756,211 | 1,276,148 | 5,032,359 |
| 1915-25 |  | . |  | 4,594,244 | 1,852,145 | 6,446,389 |
| 1926 | .. | .. |  | 4,433,492 | 2,457,136 | 6,890,628 |
| 1927 | .. | .. |  | 4,735,173 | 2,569,021 | 7,304,194 |
| 1928 | .. | - |  | 4,942,258 | 2,692,044 | 7,634,302 |
| 1929 | - | . |  | 5,505,651 | 2,683,462 | 8,189,113 |
| 1930 | . | . |  | 5,579,258 | 2,482,662 | 8,061,920 |
| 1931 | . | . |  | 6,715,660 | 2,590,629 | 9,306,289 |
| 1932 | . | - |  | 5,407,109 | 2,145,819 | 7,552,928 |
| 1933 | . | $\cdots$ |  | 5,115,745 | 2,633,287 | 7,749,032 |
| 1934 | $\cdots$ | - |  | 5,266,913 | 2,543,043 | 7,809,956 |
| 1935 | . | .- |  | 4,677,683 | 2,216,464 | 6,894,147 |
| 1936 | . | . |  | 4,438,761 | 2,358,777 | 6,797,538 |
| 1937 | . | $\cdots$ |  | 4,407,312 | 2,483,163 | 6,890,475 |
| 1938 | . | $\cdots$ |  | 4,662,354 | 2,604,556 | 7,266,910 |
| 1939 | .. | . |  | 5,019,299 | 2,543,225 | 7,562,524 |
| 1940 | . | .. |  | 5,002,362 | 2,377,405 | 7,379,767 |

Land occupied The following tables give information relating to land in different districts. occupied in each district during the season 1939-40 :-

## VICTORIA-LAND IN OCCUPATION IN EACH DISTRICT, SEASON 1939-40.

(Areas of 1 acre and upwards.)


It will be seen from these tables that the proportion of cultivation to land occupied is much larger in the Wimmera, Mallee, and Northern than in other districts. Of the occupied land in each of these districts, 33 per cent. in the Wimmera, 40 per cent. in the Mallee, and 22 per cent. in the Northern districts were used for agriculture in 1939-40. In that year the area cultivated in these three districts was nearly 83 per cent. of the total cultivation in Victoria. In the North-Central, Western, and North-Eastern districts, the land occupied is largely devoted to grazing. Gippsland, Western, and Central are the chief dairying districts, and contain 81 per cent. of the sown pastures of the State.

Size of
holdings and how utilized, 1925, 1929, 1934, and 1938.

To illustrate the uses to which the land was applied in $1925,1929,1934$, and 1938 , information relating to holdings of different sizes of privately-owned land and Crown land held in conjunction therewith, appears in tables given on pages 436 to 438 of the 1938-39 issue of the Year-Book.

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

The principal crops grown in the State are wheat, oats,

Principal
Crops (Area, Production, and Average Yiefd). barley, potatoes, and hay. The following table shows, in respect of these products, the annual average area, production, and yield per acre during each decennium, 1855 to 1935 , and the actual area, production and yield per acre for each of the five seasons, 1936-1940.

VICTORIA-ACREAGE, PRODUCTION, AND AVERAGE YIELD OF FIVE PRINCIPAL CROPS, 1855 TO 1940.

| Period or Season. | Wheat.* | Oats,* | Barley.* | Potatoes. | Hay. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Annual Area. |  |  |  |  |
|  | acres. | acres. | acres. | acres. | acres. |
| 1855-65 | 119,001 | 83,296 | 4,843 | 24,123 | 80,117 |
| 1865-75 | 278,077 | 129,384 | 19,262 | 36,744 | 117,393 |
| 1875-85 | 776,031 | 147,343 | 41,188 | 39,089 | 226,775 |
| 1885-95 | 1,236,501 | 210,901 | 64,310 | 48,009 | 437,087 |
| 1895-1905 | 1,898,280 | 340,957 | 52,829 | 45,243 | 540,472 |
| 1905-15 | 2,190,336 | 390,642 | 60,378 | 56,272 | 848,587 |
| 1915-25 | 2,633,945 | 428,372 | 84,205 | 61,195 | 1,122,978 |
| 1925-35 | 3,268,656 | 445,987 | 88,358 | 65,677 | 1,057,905 |
| 1935-36 | 2,323,753 | 505,623 | 116,371 | 44,287 | 1,140,361 |
| 1936-37 | 2,393,827 | 381,069 | 100,003 | 45,627 | 1,181,612 |
| 1937-38 | 2,686,057 | 394,436 | 139,777 | 41,105 | 1,079,039 |
| 1938-39 | 2,748,362 | 657,999 | 175,891 | 34,396 | 1,104,558 |
| 1939-40 | 2,827,417 | 439,555 | 204,239 | 32,177 | 1,204,810 |

Annual Production.

|  |  | bushels. | bushels. | bushels. | tons. | tons. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1855-65 | - | 2,198,874 | 2,068,648 | 103,575 | 62,723 | 111,806 |
| 1865-75 |  | 4,385,814 | 2,636,747 | 390,337 | 111,800 | 153,852 |
| 1875-85 |  | 8,593,308 | 3,297,468 | 799,938 | 135,614 | 276,771 |
| 1885-95 |  | 12,268,905 | 4,649,393 | 1,187,007 | 170,905 | 547,092 |
| 1895-1905 |  | 14,032,145 | 6,649,453 | 947,580 | 134,357 | 672,982 |
| 1905-15 |  | 22,906,743 | 7,342,468 | 1,243,442 | 158,445 | 1,084,726 |
| 1915-25 |  | 39,171,358 | 7,965,864 | 1,923,654 | 169,864 | 1,511,298 |
| 1925-35 |  | 38,661,077 | 5,696,134 | 1,772,099 | 167,965 | 1,242,808 |
| 1935-36 |  | 37,552,062 | 6,365,056 | 2,314,427 | 104,125 | 1,346,953 |
| 1936-37 |  | 42,844,816 | 6,107,885 | 2,143,109 | 196,623 | 1,403,049 |
| 1937-38 |  | 48,173,191 | 5,327,199 | 2,708,519 | 134,712 | 1,244,935 |
| 1938-39 |  | 18,104,369 | 2,909,260 | 1,671,809 | 81,415 | 892,975 |
| 1939-40 | $\cdots$ | 45,054,592 | 8,280,602 | 3,738,113 | 87,931 | 1,820,878 |

## Average Annual Yield per Adre.

| 1855-65 |  | bushers. | ${ }^{\text {bushels. }}$ | bashels. | tons. | tons. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1855-65 | $\cdots$ | 18.48 | 24.83 | 20.27 | $3 \cdot 64$ | $1 \cdot 31$ |
| 1875-85 | $\because$ | 11.07 | 22.38 | 19.42 | $3 \cdot 47$ | $1 \cdot 22$ |
| 1885-95 |  | $9 \cdot 92$ | 22.05 | $18 \cdot 46$ | $3 \cdot 56$ | $1 \cdot 21$ |
| 1895-1905 |  | $7 \cdot 39$ | 19.50 | $17 \cdot 94$ | $2 \cdot 97$ | 1.25 |
| 1905-15 | $\cdots$ | $10 \cdot 46$ | 18.79 | $20 \cdot 59$ | $2 \cdot 82$ | $1 \cdot 28$ |
| 1915-25 | $\cdots$ | 14.87 | $18 \cdot 60$ | 22.84 | $2 \cdot 78$ | $1 \cdot 35$ |
| 1925-35 |  | 11.83 | 12.77 | 20.06 | $2 \cdot 56$ | $1 \cdot 17$ |
| 1935-36 | $\cdots$ | $16 \cdot 16$ | 12.59 | 19.89 | $2 \cdot 35$ | $1 \cdot 18$ |
| 1936-37 | . | 17.90 | $16 \cdot 03$ | $21 \cdot 43$ | $4 \cdot 31$ | 1.19 |
| 1937-38 |  | 17•93 | 13.51 | $19 \cdot 38$ | $3 \cdot 28$ | $1 \cdot 15$ |
| 1938-39 | $\cdots$ | 6.59 | 4.42 | $9 \cdot 50$ | $2 \cdot 37$ | 0.81 |
| 1939-40 | . | $15 \cdot 93$ | 18.84 | $18 \cdot 30$ | $2 \cdot 73$ | $1 \cdot 51$ |

[^2]Area Cultivated
1939-40. VICTORIA-AREA UNDER CULTIVATION

| Districts and Counties. | Grain Crops. |  |  |  |  |  | 号 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $$ | $\stackrel{\text { 㽞 }}{8}$ | $\stackrel{\vdots}{\stackrel{y}{E}}$ | $\begin{aligned} & \stackrel{0}{\mathbf{N}} \\ & \stackrel{\rightharpoonup}{z} \end{aligned}$ |  |  |  |  |
|  | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. | Acres. |
| Central District- |  |  |  |  |  |  |  |  |
| Bourke | 2,690 | 5,084 | 3,198 |  | 249 | 2,868 | 667 | 59,691 |
| Grant | 11,196 | 11,756 | 18,141 | 258 | 1,792 | 6,094 | 871 | 66,144 |
| Mornington .. | $\underline{269}$ | 313 | 129 | 1,966 | 249 | 2,843 | 157 | 43,382 |
| Evelyn .. .. | . | 74 | 70 | 2 | 12 | 1,821 | . . | 7,732 |
| North Central District-- |  |  |  | 182 | 8 | 385 |  |  |
| Anglesey Dalhousie | 593 1,055 | 461 1,942 | 89 | 182 | ${ }_{26}^{8}$ | 2,407 | $\ldots$ | 5,929 13,695 |
| Talbot . | 12,174 | 11,410 | 1,965 | . | 287 | 5,612 | $\ldots$ | 50,838 |
| Western DistrictGrenville | 4,923 | 10,700 | 4,127 |  | 357 | 602 | 919 | 36,333 |
| Polwarth | 1,023 | 1,069 | -829 | . | 481 | 1,045 | 812 | 17,435 |
| Heytesbury | 20 | 20 | 98 |  | 28 | 149 | 7 | 19,424 |
| Hampden | 6,229 | 11,979 | 1,663 |  | 8 | 76 | 69 | 30,933 |
| Ripon . | 18,054 | 28,668 | 954 |  | 15 | 564 |  | 27,859 |
| Villiers . . | 575 | 5,010 | 979 | 4 | 331 | 2,708 | 785 | 29,757 |
| Normanby | 244 | 1,644 | 867 | . . | 657 | 506 |  | 27,384 |
| Dundas . . | 876 | 9,989 | 387 | -. | 180 | 34 |  | 28,116 |
| Follett . | 141 | 673 | 71 | . | 110 | 36 | 1 | 4,255 |
| Wimmera DistrictLowan | 221,781 | 52,486 | 28,701 |  | 3 |  |  | 65,252 |
| Borung . . | 526,950 | 32,354 | 41,165 | 15 | 32 | 65 | 3 | 86,302 |
| Kara Kara | 166,804 | 26,771 | 2,244 | . . | 7 | 14 | . | 32,051 |
| Mallee DistrictMillewa | 104,182 | 4,095 | 373 | - | - | 1 |  | 17,263 |
| Weeah | 159,422 | 32,086 | 16,310 | . | . |  |  | 30,517 |
| Karkarooc | 686,356 | 58,109 | 39,644 |  |  | 3 | 1 | 98,691 |
| Tatchera | 416,549 | 36,736 | 4,812 | 38 | 30 | 6 | 4 | 59,998 |
| Northern DistrictGunbower |  |  |  | 15 |  | 1 |  |  |
| Gunbower | 115,522 | 27,505 | 8,770 6,740 | 15 |  | 1 | 1 | 25,947 30,986 |
| Bendigo. | -96,345 | 18,602 | 4,263 | 4 | 39 | 12 | 3 | 45,157 |
| Rodney | 50,917 | 11,336 | 6,671 |  |  | 3 | 1 | 39,216 |
| Moira | 187,479 | 25,134 | 1,663 | 5 | 9 | 14 | 2 | 51,522 |
| North Eastern District- <br> Delatite |  |  | 89 |  | 67 | 651 |  |  |
| Bogong .. | 7,685 | 2,294 | 179 | 1,149 725 | 95 | 271 | 1 | 26,143 |
| Benambra | . 162 | 192 | 117 | 168 | 26 | 11 | . | 8,421 |
| Wonnangatta | . . | 2 | 3 | 119 | 3 | 9 | . | 385 |
| Gippsland DistrictCroajingolong | $\cdots$ | 20 |  | 2,435 | 223 | 81 |  | 977 |
| Tambo . . | 41 | 11 | 92 | 2,960 | 69 | 69 |  | 2,163 |
| Dargo | 52 | 105 | 548 | 3,508 | 79 | 75 |  | 2,866 |
| Tanjil . . | 3,245 | 1,545 | 7,530 | 5,240 | 238 | 169 | 3 | 23,757 |
| Buln Buln | 454 | 117 | 679 | 170 | 274 | 2,966 | 196 | 60,959 |
| Total for State .. | 2,827,417 | 439,555 | 204,239 | 18,983 | 5,984 | 32,177 | 4,503 | 1,204,810 |

of the State for the season 1939-40 is given in the following table :FOR THE SEASON 1939-40.


Yields of Principal Crops.

The table which follows shows the yields, in Counties, VICTORIA-YIELDS OF PRINCIPAL


Nots.-The letter " $F$ " signifies that the crop was a failure.
of the principal crops for the season, 1939-40.
CROPS FOR THE SEASON, 1939-40.


Note.-The letter " $F$ " signifies that the crop was a failure.

Area, Yield Value of $\mathbf{C r o p s}$, from, and the gross value of each of the principal crops in season 1939-40. Victoria for the season 1939-40.

## VICTORIA-AREA, YIELD, AND GROSS VALUE OF CROPS, 1939-40.



[^3]Production.

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

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

The bulk handling scheme which will be completed in two sections and is estimated to cost $£ 2,482,387$, provides for the erection, at country railway stations, of 140 elevators with individual capacities of seven sizes ranging from 65,000 to 300,000 bushels. These will serve terminal elevators at Geelong and Williamstown of $4,250,000$ bushels and $2,600,000$ bushels capacity respectively. The terminals are designed to receive wheat from railway trucks at the rate of 20,000 bushels per hour and to load into ships at 64,000 bushels per hour. When the whole system is completed the storage capacity will amount to $25,000,000$ bushels.

The first section of the scheme, which embraces the western portion of the State bounded on the east by the Melbourne-Mildura railway line, came into operation at the beginning of the 1939-40 season when 48 country elevators, the Geelong terminal elevator and 6 leased Mill silos were opened for the receival of wheat in bulk. The receivals for the $1939-40$ season amounted to $10,782,190$ bushels and the revenue from handling and storage charges to $£ 117,430$.

All the 77 country elevators serving the Geelong terminal have been completed. These elevators have a storage capacity of $9,170,000$ bushels and, together with the 6 leased Mill silos of $1,060,000$ bushels capacity and the Geelong terminal, will provide, in this section, total storage for $14,480,000$ bushels.

Construction of 61 elevators at country stations included in the second section of the scheme is proceeding and, at the Williamstown terminal, the construction of the foundations has been completed. Tenders for the construction of the superstructure have been received but the acceptance of any tender has been deferred.

The total amount expended on the scheme from 1st February, 1935, to 30th June, 1940, including preliminary expenses, was £ $1,321,923$.

## Wheat counties.

The principal wheat growing areas are in the Wimmera, (growing in Mallee, and Northern districts. In the season 1939-40 these districts were responsible for 97 . per cent. of the total wheat production of the State. Although other districts provide only small proportions of the total area, they are not to be regarded as unsuitable for wheat growing, as their average yield per acre is usually greater than in the areas mentioned. The yield in 1939-40 was $45,054,592$ bushels, or an average yield per acre of $15 \cdot 93$ bushels, in comparison with an average of only 6.59 bushels in 1938-39 (a year in which drought conditions prevailed) and an average of $17 \cdot 93$ bushels in 1937-38. The area sown and the production of wheat for grain in different counties for each of the three seasons, 193840, are shown in the following table:-

## VICTORIA-WHEAT AREAS AND YIELDS IN COUNTIES FOR THE THREE SEASONS, 1938-1940.

| Districts and Counties. | Year ended March. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Area. |  |  | Produce. |  |  | Average per Acre. |  |  |
|  | 1938. | 1939. | 1940. | 1938. | 1939. | 1940. | 1938. | 1939. | 1940. |
| Central- | acres. | acres. | acres. | bushels. | bushels. | bushels. | bush. | bush. | bush. |
| Bourke | 7,083 | 4,471 | 2,690 | 142,009 | 57,780 | 40,367 | 20.05 | $12 \cdot 92$ | 15-01 |
| Grant | 16,494 | 11,496 | 11,196 | 336,710 | 155,686 | 210,961 | $20 \cdot 41$ | $13 \cdot 54$ | $18 \cdot 84$ |
| Mornington | 1,306 | 216 | 269 | 21,784 | 4,548 | 1,661 | $16 \cdot 68$ | 21-06 | $6 \cdot 17$ |
| Evelyn | 73 | 57 | . . | 1,499 | 1,096 |  | 20. 53 | $19 \cdot 23$ |  |
| Total | 24,956 | 16,240 | 14,155! | 502,002 | 219,110 | 252,989 | $20 \cdot 12$ | $13 \cdot 49$ | $17 \cdot 87$ |
| North-Central- | 774 | 490 | 593 | 15,982 | 4,914 | 10,438 | 20-65 | $10 \cdot 03$ | $17 \cdot 60$ |
| Anglesey . . |  |  |  |  |  |  |  |  |  |
| Dalhousie .. | 1,808 | 829 | 1,055 | 31,809 | 10,654 | 17,966 | $17 \cdot 59$ | $12 \cdot 85$ | 17-03 |
| 'Talbot . | 18,989 | 13,276. | 12,174 | 428,247 | 109,178 | 243,015 | $22 \cdot 55$ | 8-22 | $19 \cdot 96$ |
| Total | 21,571 | 14,595 | 13,822 | 476,038 | 124,746 | 271,419 | $22 \cdot 07$ | 8.55 | 19*64 |
|  |  |  |  |  |  |  |  |  |  |
| Polwarth Heytesbury Hampden | -132 | 4,945 | 4,923 | 2,962 | 76,832 |  | $22 \cdot 4412 \cdot 23$ |  | $30: 70$ |
|  | . 132 | . ${ }^{31}$ | - 20 |  | 379 |  |  |  |  |
|  | 6,636 | 6,157 | 6,229 | 167,400 | 105,615 | 128,968 | $25 \cdot 23$ | 17•15 | $20 \cdot 70$ |
| Ripon | 22,084 | 19,504 | 18,054 | 645,431 | 373,788 | 394,261 | $29 \cdot 23$ | $19 \cdot 16$ | . $21 \cdot 84$ |
| Villiers | 985 | 1,054 | 575 | 21,493 | 17,703 | 9,624 | 21. 82 | $16 \cdot 80$ | $16^{\cdot 74}$ |
| Normanby | 832 | , 552 | 244 | 18,470 | 10,100 | 4,329 | $22 \cdot 20$ | $18 \cdot 30$ | $17 \cdot 74$ |
| Dundas | 2,341 | 1,480 | 876 | 49,958 | 22,408 | 14,171 | 21.34 | $15 \cdot 14$ | $16 \cdot 18$ |
| Follett | 253 | 225 | 141 | 3,749 | 3,919 | 2,054 | $14 \cdot 82$ | 17•42 | $14 \cdot 57$ |
| Total | 39,462 | 33,948 | 31,062 | 1,053,375 | 610,744 | 655,273 | $26 \cdot 69$ | 17•99 | $21 \cdot 10$ |
| Wimmera-Iowan |  |  |  |  |  |  |  |  |  |
| Lowan | 209,577 <br> 487,656 | 201,592 |  | 5,012,598 | 2,507,471 | 4,447,328 | $23 \cdot 92$ | $12 \cdot 44 \cdot 20 \cdot 05$ |  |
| Kara Kara |  | 488,262 | 526,950 | 12,515,822 | 5,115,822 | $9,488,833$ $3,822,334$ | $25 \cdot 67$ 21.99 |  | $18 \cdot 01$ $22 \cdot 91$ |
| Total | 839,197 | 835,798 | 915,535 20,649,672 |  | 8,888,329 | $17,758,495$ | $24 \cdot 61$ | $10.6319 .40$ |  |

## Victoria-Wheat Areas and Yields in Counties for the Tifree Seasons, 1938-1940-continued.

| Districts and Counties. | Year ended March. |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Area. |  |  | Produce. |  |  | Average per Acre. |  |  |
|  | 1938. | 1939. | 1940. | 1938. | 1939. | 1940. | 1938. | 1939. | 1940. |
|  |  |  |  |  |  |  |  |  |  |
| Millewa | 103,065 | 101,892 | 104,182 | 996,211 | 97,080 | 958,399 | 9.67 | $\cdot 95$ | ${ }^{9} \cdot 20$ |
| Weeah . ${ }^{\text {a }}$ | 164,848 | 168,513 | 159,422 | 2,101,828 | 1,157,026 | 1,229,081 | $12 \cdot 75$ | $6 \cdot 87$ | 7.71 |
| Karkarooc <br> Tatchera | 603,073 344,178 | $\begin{aligned} & 670,920 \\ & 394,993 \end{aligned}$ | 686,356 416,549 | $8,424,302$ $3,894,548$ | $\begin{array}{r} 2,609,725 \\ 972,394 \end{array}$ | $8,873,666$ $7,093,060$ | $13 \cdot 97$ 11.32 | 3.89 $2 \cdot 46$ | 12.93 |
| Total | 1,215,164 | 1,336,318 | 1,366,509 | 15,416,889 | 4,836,225 | 18,154,206 | $12 \cdot 69$ | $3 \cdot 62$ | 13•29 |
| Northern- |  |  |  |  |  |  |  |  |  |
| Gunbower | 20,118 | 21,273 | 23,274 | 217,030 | 41,372 | 422,260 | $10^{\cdot} 79$ | $1 \cdot 94$ | $18 \cdot 14$ |
| Gladstone | 103,527 | 109,604 | 115,522 | 2,000,698 | 678,518 | 2,316,705 | $19^{\prime} 33$ | $6 \cdot 19$ | $20^{\circ} 05$ |
| Bendigo | 94,764 | 93,515 | 96,345 | 1,548,645 | 314,308 | 1,778,463 | 16.34 | $3 \cdot 36$ | 18.46 |
| Rodney .. | 64,279 | 66,843 | 50,917 | 1,111,147 | 242,118 | 880,949 | 17.29 | $3 \cdot 62$ | 17•30 |
| Moira | 230,278 | 196,615 | 187,479 | 4,404,390 | 1,714,029 | 2,425,978 | $19^{-13}$ | $8 \cdot 72$ | 12-94 |
| Total | 512,966 | 487,850 | 473,537 | 9,281,910 | 2,990,345 | 7,824,355 | 18.09 | $6 \cdot 13$ | $16 \cdot 52$ |
| North-Eastern- |  |  |  |  |  |  |  |  |  |
| Delatite | 3,157 | 2,469 | 1,158 | 76,552 | 56,068 | 9,925 | $24 \cdot 25$ | $22 \cdot 71$ | $8 \cdot 57$ |
| Bogong . . | 25,300 | 16,755 | 7,685 | 633,909 | 331,771 | 44,150 | 25.06 | $19 \cdot 80$ | 5•74 |
| Benambra ${ }_{\text {W }}$ | 255 | 87 | 162 | 4,881 | 1,527 | 2,907 | 19'14 | 17-55 | 17•94 |
| Wonnangatta | .. |  |  |  |  |  |  |  |  |
| Total | 28,712 | 19,311 | 9,005 | 715,342 | 389,366 | 56,982 | 24.91 | $20 \cdot 16$ | $6 \cdot 33$ |
| Gippssland- |  |  |  |  |  |  |  |  |  |
| Croajingolong | 9 | 7 |  | 107 | 47 |  | 11.89 | 9-40 |  |
| Tambo - | 40 | 17 | 41 | ${ }_{987} 88$ | ${ }_{1}^{157}$ |  | 14.68 | 9•24 | $17 \cdot 73$ |
| Tautij | 141 3,434 | \% $\begin{array}{r}55 \\ 3,930\end{array}$ | 52 3,245 | 2,901 65,971 | 1,061 41,316 | 786 69,809 | $20 \cdot 57$ 19.21 | $10 \cdot 51$ | ${ }_{21} \cdot 51$ |
| Bulo Buln | 405 | 295 | 454 | 8,397 | 2,923 | 9,551 | 20.73 | $9 \cdot 91$ | 21-04 |
| Total | 4,029 | 4,302 | 3,792 | 77,963 | 45,504 | 80,873 | $19 \cdot 35$ | $10 \cdot 5$ | 21-33 |
| Total (State) | 2,686,057 | 2,748,362 | 2,827,417 | 48,173,191 | 18,104,369 | 45,054,592 | 17-93 | $6 \cdot 59$ | $15 \cdot 93$ |

The production of wheat in the other Australian States in 1939-40 was as follows:-New South Wales, 76,552,000 bushels; South Australia, 41,072,000 bushels; Western Australia, 40,861,000 bushels; Queensland, 6,585,000 bushels; and Tasmania, 108,000 bushels. The total production for the Commonwealth was 210,277,000 bushels.

Monthly
Rainfall and In the following table the average yield per acre in Rainfage and

Avelds each of the main wheat growing counties for the years | of Wheat |
| :--- |
| 1929 to 1940. |
| . | mean rainfall recorded each month. The rainfall during the growing season is shown separately to indicate its effect on wheat production. While the table is useful as a general reference in respect of the relationship of wheat yields to rainfall, it should be remembered that temperatures, winds, and other factors such as the extent to which fallowing, rotational cropping, and fertilizing are practised have also considerable effect on average yields, as do also the varieties of wheat used.

VICTORIA-RAINFALL
AND AVERAGE WHEAT YIELD PER ACRE
COUNTIES FOR THE YEARS 1929 TO 1940.

Average Wheat Yield Per Acre in


13473/40.-31


On pages 455 and 456 of the $1938-39$ issue of the

> Wheat
> Growing in conjunction with Sheep Grazing and Dairying.

Varieties of Wheat. Year-Book, tables appear showing (a) the extent to which mixed farming was practised in conjunction with wheat growing and (b) the wheat productivity of the State in bag series per acre for the season 1935-36.

The following statement shows the areas under the principal varieties of wheat, including wheat for hay, for the seasons $1937-38$ to $1939-40$. The varieties are tabulated in order of popularity for the last-mentioned season. The percentages shown indicate the fluctuation which has taken place amongst the popular varieties.

Over 100 varieties of wheat were sown. The number which was tried in the Mallee greatly exceeded that experimented with in any other district. A more extended list showing the area and percentage of each variety, and the ten principal varieties grown in the wheat-growing districts, can be obtained on application to the Government Statist.
VICTORIA-VARIETIES OF WHEAT SOWN IN EACH OF THE SEASONS, 1937-38, 1938-39, AND 1939-40.

| Variety (in order of Popularity, Season 1939-40.) |  | 1937-38. |  | 1938-39. |  | 1939-40 |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Area Sown. | Percentage of Total Area Sown. | Area Sown. | Percentage of Total Area Sown. | Area Sown. | Percentage of Total Area Sown. |
|  |  | Acres. |  | Acres. |  | Acres. |  |
| Ghurka .- |  | 1,250,623 | $45 \cdot 05$ | 1,436,646 | $47 \cdot 78$ | 1,383,327 | $47 \cdot 33$ |
| Ranee (incl. 4H) | . | 573,268 | $20 \cdot 65$ | 612,733 | $20 \cdot 38$ | 657,418 | $22 \cdot 49$ |
| Dundee |  | 249,342 | $8 \cdot 98$ | 319,291 | $10 \cdot 62$ | 273,934 | $9 \cdot 37$ |
| Free Gallipoli |  | 323,001 | $11 \cdot 63$ | 252,758 | $8 \cdot 41$ | 208,887 | $7 \cdot 15$ |
| Bencubbin | $\cdots$ | 63,820 | $2 \cdot 30$ | 87,194 | $2 \cdot 90$ | 108,388 | $3 \cdot 71$ |
| Sepoy |  | 61,827 | $2 \cdot 23$ | 59,425 | $1 \cdot 98$ | 49,780 | $1 \cdot 70$ |
| Bobin |  | 31,279 | 1•13 | 35,305 | $1 \cdot 17$ | 45,080 | $1 \cdot 54$ |
| Rajah |  | 36,011 | $1 \cdot 30$ | 34,225 | $1 \cdot 14$ | 34,925 | $1 \cdot 19$ |
| Nabawa. |  | 25,901 | -93 | 20,355 | -68 | 18,349 | $\cdot 63$ |
| Nizam |  | 13,576 | -49 | 14,005 | $\cdot 47$ | 17,465 | -60 |
| Major |  | 23,497 | -85 | 18,247 | -61 | 14,609 | -50 |
| Baldmin . |  | 5,310 | -19 | 10,322 | -34 | 12,655 | -43 |
| Turvey | . | 13,516 | -49 | 11,258 | -37 | 10,753 | $\cdot 37$ |
| Federation |  | 12,085 | $\cdot 44$ | 10,054 | $\cdot 33$ | 9,223 | -32 |
| Mac's White | $\cdots$ | 11,335 | $\cdot 41$ | 13,873 | $\cdot 46$ | 8,176 | -28 |
| Waratah |  | 11,140 | $\cdot 40$ | 9.154 | -30 | 7,313 | -25 |
| Regalia | . |  |  | 710 | -02 | 6,986 | -24 |
| Warden |  | 7,005 | -25 | 7,076 | -24 | 6,772 | $\cdot 23$ |
| Mogul . |  | 6,412 | $\cdot 23$ | 5,616 | $\cdot 19$ | 5,241 | $\cdot 18$ |
| Baringa .. |  | 10,120 | -36 | 7,695 | -26 | 5,005 | $\cdot 17$ |
| Gular |  | 1,022 | -04 | 1,736 | -06 | 2,572 | -09 |
| Ford |  | 2,745 | -10 | 3,151 | -10 | 2,523 | -09 |
| C.M.G. |  | 2,502 | -09 | 3,145 | -10 | 2,444 | -08 |
| Gluclnb |  | 1,433 | -05 | 1,981 | -06 | 2,400 | -08 |
| Joffre |  | 2,323 | -08 | 1,849 | -06 | 2,250 | -08 |
| Sword |  | 3,066 | -11 | 2,554 | -09 | 2,162 | -07 |
| Yandilla King | .. | 2,454 | -09 | 1,873 | -06 | 1,983 | $\cdot 07$ |
| Gluyas . ${ }^{\text {a }}$ |  | 2,840 | -10 | 2,740 | -09 | 1,798 | -06 |
| Currawa. |  | 3,727 | -13 | 2,321 | -08 | 1,546 | $\cdot 05$ |
| Seagul |  | 50 |  | 704 | -02 | 1,520 | -05 |
| Penny |  | 2,171 | -08 | 1,178 | -04 | 1,438 | -05 |
| Bald Early |  | 3,145 | - 11 | 1,913 | -03 | 1,260 | -04 |
| Bena |  | 3,778 | $\cdot 14$ | 2,403 | -08 | 1,227 | -04 |
| Other Varieties | $\cdots$ | 15,977 | $\cdot 57$ | 13,711 | $\cdot 45$ | 13,618 | $\cdot 47$ |
| Total | .. | 2,776,301 | $100 \cdot 00$ | 3,007,201 | $100 \cdot 00$ | 2,923,027 | $100 \cdot 00$ |

The most interesting feature of the foregoing statement is the rise and fall in popularity of certain varieties. For the season 1939-40, increased areas were sown with Ghurka, Dundee, Bencubbin, and Bobin as compared with 1937-38, while decreases took place in respect of Free Gallipoli, Nabawa, and Sepoy.

Many changes have also taken place in the leading varieties of wheat in other Australian wheat-growing States during recent years. In New South Wales, Bencubbin has displaced Ford as the leading variety. In 1935-36 only 0.6 per cent. of the area was sown with Bencubbin. Dundee now occupies third place in that State. On the other hand, Nabawa, which was the leading variety with 47 per cent. of the total area sown in Western Australia in 1929, has declined to sixth place on the list, with only $4 \cdot 24$ per cent. of the area sown in 1939. In South Australia the area sown with the varieties Ranee, Bencubbin, and Dundee was ouly $19 \cdot 02$ per cent. of the total area sown in 1935-36, but the area now sown with these varieties amounts to $42 \cdot 18$ per cent. of the total area sown. Free Gallipoli became the leading variety in Victoria in 1929-30, and continued as such until the season 1934 -35, when it was superseded by Ghurka.

PRINCIPAL VARIETIES OF WHEAT SOWN IN AUSTRALIAN STATES, 1939-40.

| New South Wales. |  | Victoria. |  | South Australia. |  | Western Australia. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Variety. | Percentage of Total Area. | Variety. | Percentage of Total Area. | Variety. | Percentage of Total Area. | Variety. | Percentage of Total Area. |
| Bencubbin . . | $24 \cdot 35$ | Ghurka .. | 47-33 | Ranee .. | $20 \cdot 08$ | Bencubbin | $37 \cdot 00$ |
| Ford | $18 \cdot 16$ | Ranee | $22 \cdot 49$ | Bencubbin | $11 \cdot 59$ | Gluclub .. | $15 \cdot 90$ |
| Dundee | $13 \cdot 95$ | Dundee | $9 \cdot 37$ | Dundee .. | $10 \cdot 51$ | Merredin | $8 \cdot 36$ |
| Nabawa | $9 \cdot 10$ | Free Gallipoli | $7 \cdot 15$ | Nabawa | $8 \cdot 03$ | Noongaar .. | $5 \cdot 45$ |
| Waratah | $5 \cdot 24$ | Bencubbin | $3 \cdot 71$ | Sword | $7 \cdot 53$ | Gluyas Early | $4 \cdot 61$ |
| Ranee | $5 \cdot 07$ | Sepoy | $1 \cdot 70$ | Waratah | 5-69 | Nabawa .. | $4 \cdot 24$ |
| Gular | $3 \cdot 25$ | Bobin | $1 \cdot 54$ | Gluyas .. | $4 \cdot 97$ | Totadgin .. | $4 \cdot 17$ |
| All Other .. | $20 \cdot 88$ | All other | $6 \cdot 71$ | All other .. | $31 \cdot 60$ | All other | $20 \cdot 27$ |
| Total .. | $100 \cdot 00$ | Total .. | $100 \cdot 00$ | Total .. | $100 \cdot 00$ | Total .. | $100 \cdot 00$ |

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

| District. |  |  |  | Percentage (according to acreage) of total area in the State. | Weight per acre of- |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Seed SownI. | Fertilizers Used. |
|  |  |  |  |  | lb . | lb . |
| Central | . | . | $\ldots$ | 1.08 | 95 | 106 |
| North-Central | . | . | $\ldots$ | $\cdot 96$ | 103 | 109 |
| Western | . | . | .. | $1 \cdot 50$ | 89 | 139 |
| Wimmera | . | . | .. | $31 \cdot 12$ | 75 | 87 |
| Mallee .. | .. | .. | . | $44 \cdot 41$ | 58 | 62 |
| Northern | . | .. | . | $19 \cdot 67$ | 71 | 84 |
| North-Eastern | $\cdots$ | . | -• | $1 \cdot 10$ | 75 | 101 |
| Gippsland | -• | . | -• | $\cdot 16$ | 86 | 105 |
| 'ivit | State | -• | . | $100 \cdot 00$ | 67 | 77 |

The rate of sowing for the season $1937-38$ in the principal wheatgrowing counties, ranged from 44 lb . of seed per acre in the County of Millewa to 88 lb . in Ripon. Manure used varied from 40 lb . per acre in Millewa to 133 lb . in Ripon. On 52,983 acres sown to wheat, of which 41,773 acres were in the Mallee district, no manure at all was used. Superphosphates used on wheat (grain) areas in the season 1939-40 amounted to 94,920 tons, the value of which at country railway stations was $£ 384,400$.

## Fallow.

The large area of land fallowed for the next season's cropping operations is a feature of the three wheat-growing districts. Of the $2,377,405$ acres in fallow during the season 1939-40, $1,002,412$ were in the Mallee, 803,555 in the Wimmera, and 382,676 in the Northern districts. The total area of fallow in these three districts-2,188,643 acres--represented 92 per cent of the land fallowed in the State.

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

VICTORIA-LAND IN FALLOW AND WHEAT SOWN.

| Season. |  |  | Land in Fallow. | Season. |  |  | Area Sown to Wheat. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | acres. |  |  |  | acres. |
| 1901-02 | . | . | 681,778 | 1902-03 |  |  | 2,155,928 |
| 1911-12 | - |  | 1,469,608 | 1912-13 |  |  | 2,471,586 |
| 1921-22 | . |  | 2,052,964 | 1922-23 |  |  | 2,857,533 |
| 1927-28 | - | . | 2,692,044 | 1928-29 |  |  | 3,854,622 |
| 1928-29 | - | $\ldots$ | 2,683,462 | 1929-30 |  |  | 3,731,699 |
| 1929-30 | $\cdots$ |  | 2,482,662 | 1930-31 |  |  | 4,788,560 |
| 1930-31 |  |  | 2,590,629 | 1931-32 |  |  | 3,705,555 |
| 1931-32 | . | . | 2,145,819 | 1932-33 |  |  | 3,320,504 |
| 1932-33 | .. |  | 2,633,287 | 1933-34 |  |  | 3,208,619 |
| 1933-34 | $\cdots$ |  | 2,543,043 | 1934-35 |  |  | 2,576,019 |
| 1934-35 |  |  | 2,216,464 | 1935-36 |  |  | 2,401,548 |
| 1935-36 |  |  | 2,358,777 | 1936-37 |  |  | 2,466,664 |
| 1936-37 |  |  | 2,483,163 | 1937-38 |  |  | 2,776,301 |
| 1937-38 |  |  | 2,604,556 | 1938-39 |  |  | 3,007,201 |
| 1938-39 |  |  | 2,543,225 | 1939-40 |  |  | 2,923,027 |
| 1939-40 |  |  | 2,377,405 | 1940-41 |  | . | 2,769,580 |
| 1940-41 |  | . | 1,887,418 |  |  |  |  |

The weight of an imperial bushel of wheat is 60 lb .,

Wheat standard. but the actual weight of a bushel of Victorian wheat of fair average quality standard is determined annually by the Chamber of Commerce.

The following table shows the standard determined in Victoria for each of the ten seasons, $1931-32$ to $1940-41$ :-

| Season. |  |  | Weight of Bushel of Wheat, f.a.q. | Season. |  |  | Weight of Bushel of Wheat, f.a.q. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | 1 l . |  |  |  | lb. |
| 1931-32 | .. | -• | 623 | 1936-37 | . | -• | 62 |
| 1932-33 | . | . | 62 | 1937-38 | . | . | $63 \frac{1}{2}$ |
| 1933-34 | - | . | 60 | 1938-39 | . | -• | $64 \frac{1}{2}$ |
| 1934-35 | -• | $\cdots$ | 60 | 1939-40 | . | -• | $63 \frac{1}{2}$ |
| 1935-36 | -• | .. | $63 \frac{1}{2}$ | 1940-41 | . | . | $64 \frac{1}{4}$ |

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

VICTORIA-NUMBER OF HOLDINGS WITH TWENTY OR MORE ACRES OF WHEAT FOR GRAIN, SEASONS 1934-35 TO 1939-40.

| $1934-35$. | $1935-36$. | $1936-37$. | $1937-38$. | $1938-39$. | $1939-40$. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 12,582 | 12,051 | 12,090 | 12,936 | 12,305 | 12,065 |

It is estimated that about $14,500,000$ bushels of wheat

Stocks of wheat and flour.

VICTORIA-STOCKS OF WHEAT AND FLOUR.


## Oats.

Oats are grown in Victoria mainly as a hay crop. The area harvested (season 1939-40) for hay was 804,246 acres, and for grain 439,555 acres, which produced $1,177,452$ tons of hay, and $8,280,602$ bushels of grain respectively. About 30 per cent. of the area for grain was in the Mallee district, but the area for hay was spread over all districts. More than 60 varieties of oats are generally sown, but Algerian, with nearly 88 per cent. of the area, is predominantly the most popular variety.

Of the total area under hay in 1939-40, as shown in the table on page 399, 804,246 acres under oats produced 1,177,452 tons; 95,610 acres under wheat produced 129,848 tons; 42,270 acres under lucerne, \&c., produced 68,290 tons; and 262,684 acres under grass produced 445,288 tons; the yields per acre of these kinds of hay were $1 \cdot 46,1 \cdot 36,1 \cdot 62$, and $1 \cdot 70$ tons respectively.

The area under barley for grain in 1939-40 was 204,239
Barley. acres, of which 179,552 were under malting ( 2 row), and 24,687 under feed ( 6 row) barley. Although barley is grown generally throughout the State, 127,651 acres, or 62 per cent. of the total area for the season 1939-40, were sown in the counties of Grant, Lowan, Borung and Karkarooc. The average yield per acre in Grant was 26.27 bushels. The figures in the subjoined table show the acreage, production, and yield per acre, for each of the five years $1935-36$ to 1939-40 :-

VICTORIA-BARLEY PRODUCTION, 1935-36 TO 1939-40.

| Year ended March- | Area under Crop. |  | Produce |  | Average per Acre. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { Malting } \\ & \text { (2 row). } \end{aligned}$ | $\begin{aligned} & \text { Other } \\ & (6 \text { row }) . \end{aligned}$ | $\begin{aligned} & \text { Malting } \\ & \text { (2 row } \end{aligned}$ | $\begin{aligned} & \text { Other } \\ & \text { (6 row). } \end{aligned}$ | Malting (2 row). | Other (6 row). | Total. |
|  | acres. | acres. | bushels. | bushels. | bushels. | bushels. | bushels. |
| 1936 | 98,799 | 17,572 | 1,944,237 | 370,190 | $19 \cdot 68$ | $21 \cdot 07$ | $19 \cdot 89$ |
| 1937 | 83,802 | 16,201 | 1,782,931 | 360,178 | $21 \cdot 28$ | $22 \cdot 23$ | $21 \cdot 43$ |
| 1938 | 113,598 | 26,179 | 2,122,035 | 586,484 | $18 \cdot 68$ | $22 \cdot 40$ | 19.38 |
| 1939 | 150,984 | 24,907 | 1,411,139 | 260,670 | $9 \cdot 35$ | $10 \cdot 47$ | $9 \cdot 50$ |
| 1940 | 179,552 | 24,687 | 3,205,069 | 533,044 | 17.85 | $21 \cdot 59$ | $18 \cdot 30$ |

Maize.
Maize for grain is cultivated mainly in Gippsland, but two or three thousand acres are regularly grown in the Mornington and the North-Eastern districts. It is grown in Victoria both for grain and for green fodder. The areas for 193940 were 18,963 acres for grain, and 20,457 acres for fodder. The area, production and average yield for each of the five seasons, 1935-36 to 1939-40, are given in the following table :--

VICTORIA-MAIZE PRODUCTION, 1935-36 TO 1939-40.

| Season. |  | For Green Fodder. | For Grain. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Area. | Production. | Yield per Acre. |
|  |  |  | acres. | acres. | bushels. | bushels. |
| 1935-36 | $\cdots$ | 26,971 | 20,377 | 638,643 | $31 \cdot 34$ |
| 1936-37 | - | 26,543 | 20,115 | 794,506 | $39 \cdot 50$ |
| 1937-38 | - | 25,271 | 20,879 | 783,835 | $37 \cdot 54$ |
| 1938-39 |  | 26,114 | 18,485 | 416,578 | $22 \cdot 54$ |
| 1939-40 | - | 20,457 | 18,963 | 380,698 | $20 \cdot 08$ |

The annual average yield of the last five seasons was $30 \cdot 5$ bushels per acre, as compared with $45 \cdot 0$ in 1910-15, and $65 \cdot 4$ in 1900-05. The relatively light yield per acre for the latest five-year period was probably due to the cultivation of new areas, which are less fertile than the rich river flats upon which this cereal was grown exclusively in earlier periods.

Potatoes.
Victoria is ine largest potato-producing State in the Commonwealth. Out of a total area of 98,048 acres planted in 1938-39 to potatoes, 34,396 acres were grown in this State.

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

The following table shows the area, yield and value of potatoes for each of the five seasons, 1935-36 to 1939-40 :-

VICTORIA-POTATO PRODUCTION, 1935-36 TO 1939-40.

| Season | Area. | Production. | Average Yield. | Gross Value. |
| :---: | :---: | :---: | :---: | :---: |
|  | acres. | tons. | tons. | £ |
| 1935-36 | 44,287 | 104, 125 | $2 \cdot 35$ | 826,492 |
| 1936-37 | 45,627 | 196,623* | $4 \cdot 31$ | 614,447 |
| 1937-38 | 41,105 | 134,712* | $3 \cdot 28$ | 801,536 |
| 1938-39 | 34,396 | 81,415* | $2 \cdot 37$ | 1,095,032 |
| 1939-40 | 32,177 | 87,931* | 2.73 | 934,267 |

[^4]Onions are grown in nearly every county south of the

## Onions.

Dividing Range. The returns for last season show that in Grenville the yield was 5,962 tons from 919 acres ; in Villiers, 4,987 tons from 785 acres; in Polwarth, 5,394 tons from 812 acres; in Grant, 4,346 tons from 871 acres ; in Bourke, 3,792 tons from 667
acres ; in Buln Buln, 1,406 tons from 196 acres; and in Mornington, 974 tons from 157 acres. The following statement shows the area, yield and value for each of the last five years:-

VICTORIA—ONION PRODUCTION, 1935-36 TO 1939-40.

| Season- |  |  |  | Area. | Productios. | $\begin{aligned} & \text { Average } \\ & \text { Yeleld. } \end{aligned}$ | Gross Value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | acres. | tons. | tons, | £ |
| 1935-36 | . | .. | . | 5,441 | 26,143 | $4 \cdot 80$ | 235,287 |
| 1936-37 | . | . | . | 5,969 | 46,130 | $7 \cdot 73$ | 184,099 |
| 1937-38 | . | . | . | 6,036 | 45,583 | $7 \cdot 55$ | 188,620 |
| 1938-39 | . | . | $\cdots$ | 4,898 | 10,404 | $2 \cdot 12$ | 197,676 |
| 1939-40 | - | . | -• | 4,503 | 27,400 | 6.08 | 203,445 |

The prices which appear below are the average prices

Wholesale prices of agrieultural and pastoral products. realized for the marketed produce of the seasons enumerated. Average monthly prices, but not taking into account the quantities sold, are shown on pages 446 and 447.

VICTORIA-AVERAGE WHOLESALE PRICES REALIZED FOR AGRICULTURAL AND PASTORAL PRODUCE, 1930-31 TO 1939-40.

| Average Prices Realized for Produce of Season- | Wheat. | Oats. | Barley (Malting). | Maize. | Potatoes. | Onfons. | Wool. (Clipped, and on Skins.) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | per bushel. | per bushel | $\begin{gathered} \text { per } \\ \text { bushel. } \end{gathered}$ | $\begin{gathered} \text { per } \\ \text { bushel. } \end{gathered}$ | per ton. | per ton. | per lb. |
| 1930-31 |  | $1{ }^{1} 9$ | 2. 2 | $\begin{array}{rr}8 . & \\ 3 & 9\end{array}$ | $\begin{array}{cc}\text { s. } \\ 72 & 0\end{array}$ | $\begin{array}{ll}\text { s. } & \text { d. } \\ 53 & 0\end{array}$ | $\begin{array}{cc}\text { s. } & \text { d. } \\ 0 & 8.65\end{array}$ |
| 1931-32 | 3 21 | 20 | $30 \frac{1}{2}$ | 43 | 920 | 2370 | $\begin{array}{ll}0 & 8 \cdot 76\end{array}$ |
| 1932-33 | $210 \frac{3}{4}$ | 111 | 26 | 4 71 ${ }^{1}$ | 850 | 650 | 0 0.18 |
| 1933-34 | $211 \frac{1}{2}$ | 2 21 ${ }^{2}$ | 27 | 36 | 1060 | 850 | 1 2.71 |
| 1934-35 | $33 \frac{1}{4}$ | 2 31 | $210 \frac{1}{2}$ | 44 | 1750 | 1439 | $\begin{array}{ll}0 & 9 \cdot 52\end{array}$ |
| 1935-36 | 41 | 2 21 | $29 \frac{1}{2}$ | 51 | 1589 | 180 | $11 \cdot 96$ |
| 1936-37 | $5 \quad 5 \frac{1}{2}$ | 28 | 4 31 ${ }^{\frac{1}{2}}$ | 56 | 726 | 1460 | $1{ }^{1} 4 \cdot 39$ |
| 1937-38 | 41 | 3 31 | 310 | $411 \frac{1}{4}$ | 1450 | 1096 | $\begin{array}{ll}1 & 0.77\end{array}$ |
| 1938-39 | $27 \frac{1}{2}$ | 36 | 34 | 5 3年 | 2890 | 380 | $010 \cdot 59$ |
| 1939-40 | 3 8年 | 21 | 3 71 | 60 | 2300 | 1486 | $12 \cdot 06$ |

Vine Production.

The production of dried vine-fruits for the season 1939-40 amounted to 57,970 tons, as compared with a production of 43,960 tons for the previous season. This far exceeds the requirements for home consumption. Overseas exports of Victorian produce for the season 1939-40 amounted to 47,961 tons.

Australian production of dried vine-fruits for the season 1939-40 amounted to approximately 95,000 tons, of which the Victorian portion represented over 61 per cent.

Particulars of vine production for the five seasons 1935-36 to 1939-40 are given in the following table:-

VICTORIA-VINE PRODUCTION, 1935-36 TO 1939-40.

| Season. | $\underset{\text { of }}{\text { Number }}$Growers. | Area. |  | Produce. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Bearing. | $\begin{gathered} \text { Not } \\ \text { Bearing. } \end{gathered}$ | Grapes gathered. | Wine made. | Dried Fruits. |  |  |
|  |  |  |  |  |  | Raisins. |  | Currants. |
|  |  |  |  |  |  | Lexias. | Sultanas. |  |
|  |  | acres. | acres. | cwt. | gallons. | cwt. | cwt. | cwt. |
| 1935-36.. | 2,512 | 37,851 | 3,230 | 3,463,202 | 1,683,049 | 92,481 | 617,237 | 88,414 |
| 1936-37.. | 2,458 | 38,329 | 3,566 | 3,903,430 | 1,818,917 | 90,243 | 655,090 | 152,202 |
| 1837-38.. | 2,438 | 38,645 | 3,238 | 4,897,257 | 1,433,637 | 106,501 | 863,579 | 178,960 |
| 1938-39.. | 2,424 | 39,640 | 2,796 | 3,707,783 | 825,056 | 102,016 | 571,156 | 206,022 |
| 1939-40.. | 2,405 | 40,321 | 2,273 | 4,869,991 | 1,126,350 | 108,403 | 838,149 | 212,841 |

Of the total quantity of grapes gathered in 1939-40, it is estimated that $156,236 \mathrm{cwt}$. were used for making wine and spirits, $4,631,615$ cwt . for raisins and currants, and $82,140 \mathrm{cwt}$. for table consumption.

Of the dried fruit, $95,727 \mathrm{cwt}$. of lexias, $705,609 \mathrm{cwt}$. of sultanas, and 199,557 cwt. of currants were produced in the Mildura Shire, and $12,391 \mathrm{cwt}$. of lexias, $131,776 \mathrm{cwt}$. of sultanas, and $12,713 \mathrm{cwt}$. of currants in the Swan Hill Shire.

Tobaceo.
The imposition of emergency tariff rates about 1931 greatly stimulated the growing of tobacco in Victoria and, as a result, the area planted increased in the 1932-33 season to 13,418 acres. Due, however, to economic circumstances and to disease in the crops, the acreage subsequently declined. The 1939-40 crop amounted to 9,805 cwt., which was obtained from 2,018 acres.

The following table furnishes details of the area, production, and average yield in each of the five seasons, 1935-36 to 1939-40 :-

VICTORIA-TOBACOO PRODUCTION, 1935-36 TO 1939-40.

|  | Season- |  | Area. | Production. | Produce per Acre. | Gross Value. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | acres. | cwt. (dry). | cwt. (dry). | $\underline{1}$ |
| 1935-36 | $\ldots$ | -• | 5,840 | 25,706 | $4 \cdot 40$ | 231,114 |
| 1936-37 | . | $\ldots$ | 5,492 | 15,658 | $2 \cdot 85$ | 138,965 |
| 1937-38 | . | $\ldots$ | 4,736 | 20,860 | $4 \cdot 40$ | 185,808 |
| 1938-39 | $\cdots$ | . | 2,559 | 6,432 | $2 \cdot 51$ | 59,620 |
| 1939-40 | -• | . | 2,018 | 9,805 | $4 \cdot 86$ | 99,449 |

Flax.
The production of flax is confined mainly to the Central, Western, and Gippsland Districts.

The following table shows the area, the quantity of straw delivered at mills, and the produce obtained therefrom for each of the seasons 1934-35 to 1938-39. Australian imports of certain flax products for each of the years ended 30th June, 1935, to 1939 are also shown.

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

| Season. | Area.* | Straw delivered at Mills. | Produce Obtained. |  | Australian Imports (year ended 30th June). |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Fibre. | Linseed. | Fibre. | Linseed. | $\begin{aligned} & \text { Linseed } \\ & \text { Oil. } \end{aligned}$ |
|  | acres. | tons. | cwt. | cwt. | cwt. | cwt. | gallons. |
| 1934-35 | 769 | 995 | 680 | 2,660 | 103 | 752,501 | 252,730 |
| 1935-36 | 1,068 | 1,468 | 1,049 | 3,811 | 2,980 | 711,010 | 298,035 |
| 1936-37 | 912 | 952 | 848 | 2,130 | 0,913 | 680,054 | 223,570 |
| 1937-38 | 1,086 | 1,705 | 2,401 | 2,981 | 3,958 | 577,447 | 150,828 |
| 1938-39 | 1,260 | 950 | 1,080 | 960 | 3,286 | 635,190 | 188,629 |
| 1939-40 |  | Not | available. |  |  |  |  |

[^5]orchards. The extent of cultivation of each important class of fruit on holdings of one acre and upwards during the seasons 1934-35 and 1937-38 is shown in the following table :-
VICTORIA-FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS, 1934-35 AND 1937-38.

| Fruit. | Number of Trees, Plants, \&c. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1934-35. |  |  | 1937-38. |  |  |
|  | Bearing. | Not Bearing. | Total. | Bearing. | Not Bearing. | Total. |
| Apples | 2,385,315 | 510,281 | 2,895,596 | 2,295,155 | 400,777 | 2,695,932 |
| Pears | 848,066 | 238,747 | 1,086,813 | 908,593 | 289,965 | 1,198,558 |
| Quinces | 57,659 | 13,951 | 71,610 | 52,306 | 13,280 | 65,586 |
| Plums | 277,492 | 70,477 | 347,969 | 248,536 | 65,846 | 314,382 |
| Prunes | 62,621 | 1,873 | 64,494 | 47,087 | 3,396 | 50,483 |
| Cherries | 73,383 | 64,217 | 137,000 | 76,388 | 54,274 | 130,662 |
| Peaches | 842,985 | 314,466 | 1,157,45.1 | 921,630 | 427,769 | 1,349,399 |
| Apricots | 329,415 | 51,337 | 380,752 | 317,656 | 95,463 | 413,119 |
| Nectarines | 13,787 | 4,454 | 18,241 | 14,388 | 6,993 | 21,381 |
| Oranges | 435,739 | 64,477 | 500,216 | 365,948 | 50,424 | 416,372 |
| Lemons | 123,405 | 37,658 | 161,063 | 107,369 | 46,202 | 153,571 |
| Loquats | 3,101 | 744 | 3,845 | 1,918 | 527 | 2,445 |
| Figs . $\cdot$ | 25,528 | 9,829 | 35,357 | 25,131 | 8,531 | 33,662 |
| Persimmons . | 699 | 39 | 738 | 432 | 19 | 451 |
| Total Large Fruits | 5,479,195 | 1,382,550 | 6,861,745 | 5,382,537 | 1,463,466 | 6,846,003 |
| Raspberries | 337,000 | $\ldots$ | 337,000 | 322,572 | $\ldots$ | 322,572 |
| Loganberries | 146,260 |  | 146,260 | 108,845 |  | 108,845 |
| Strawberries | 4,505,409 |  | 4,565,409 | 4,777,003 |  | 4,777,003 |
| Gooseberries | 169,848 | 23,264 | 193,112 | 137,633 | 7,685 | 145,318 |
| Mulberries $\cdot$ - $\quad . \cdot$ | 716 | 105 | 821 | 659 | 62 | 721 |
| Currants (Red, White, and Black) .. | 30,179 | 11,788 | 41,967 | 18,014 | 2,773 | 20,787 |
| Ollves ${ }^{\text {a }}$. | 3,866 | 11, 42 | 3,908 | 2,498 | 234 | 2,732 |
| Passion-fruit | 82,115 | 37,824 | 119,939 | 100,530 | 44,700 | 145,230 |
| Almonds | 28,278 | 8,660 | 36,938 | 30,195 | 10,670 | 40,865 |
| Walnuts | 7,766 | 3,039 | 10,805 | 7,965 | 2,067 | 10,032 |
| Filberts | 1,943 | 164 | 2,107 | 1,924 | 78 | 2,002 |
| Chestnuts | 607 | 260 | 867 | 569 | 257 | 826 |
| Total Nuts | 38,594 | 12,123 | 50,717 | 40,653 | 13,072 | 53,725 |

Fruit growing
$1934-35$ to $1934-35$
$1939-40$.

The principal fruits grown in the State are apples, pears, peaches, and citrus. The excess of production over consumption was exported both overseas and interstate. The apple and pear crops for the season 1939-40 amounted to $1,603,043$ and $1,298,787$ bushels respectively.

A considerable quantity of apricots, peaches, and pears is grown, mostly in irrigated areas, for canning purposes. The total output of $1,881,478$ cases of canned fruits for the 1940 season comprised apricots, 227,922 cases ; peaches, 956,778 cases ; and pears, 696,778
cases. This output represented about 73 per cent. of the total Australian pack. In addition to the fruits shown in the subjoined table, large quantities of melons, rhubarb, and tomatoes were produced in orchards, the following being the quantities recorded for 1939-40 :Melons, 7,009 cwt.; rhubarb, 46,589 dozen bundles; tomatoes, 373,456 bushels. The gross value of all fruit grown in the season 1939-40 was $£ 1,653,849$ as compared with $£ 1,789,575$ in 1938-39.

VICTORIA-FRUIT GROWING, 1934-35 TO 1939-40.


Dried fruit Cexclusive of
Raisins and Currants).

The production of the various kinds of dried tree-fruits for each of the last five seasons is shown in the following statement. Particulars in respect of dried vine-fruits appear on page 420.

| $\begin{gathered} \text { Year ended } \\ \text { June- } \end{gathered}$ | Apples. | Apricots. | Figs. | Nectarines. | Peaches. | Pears. | Prunes. | Total. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | lb. | 1 l. | 1 l. | lb. | 1 b . | 1 l. | lb . | 1 l. |
| 1936 | 5,219 | 113,600 | 7,281 | 384 | 73,780 | 51,652 | 851,192 | 1,103,108 |
| 1937 .. | 1,529 | 32,495 | 5,287 | 1,232 | 96,862 | 58,564 | 1,023,484 | 1,219,453 |
| 1938 | 4,012 | 81,474 | 10,822 | 1,392 | 197,667 | 60,269 | 817,320 | 1,172,956 |
| 1939 .. | 1,283 | 54,995 | 2,436 | 690 | 158,505 | 39,499 | 603,650 | 861,058 |
| 1940 .. | 2,855 | 135,597 | 2,903 | 104 | 148,135 | 40,460 | 659,736 | 989,790 |

The area under market gardens in the season 1939-40

Market gardens. was 24,414 acres. As agricultural statistics are collected only in respect of areas of one acre and over, they do not provide a complete census of vegetable growing. In respect of operations conducted on a commercial basis, however, they give reliable information. These gardens are generally situated near large centres of population, and the producers are able to dispose of the bulk of their goods with a minimum loss from waste, \&c. The total value of production of market gardens, on the basis of $£ 50$ per acre, which is regarded as a fair average return, would be approximately $£ 1,220,700$. This does not include crops of one acre and over of potatoes or onions, such crops being tabulated under their respective heads in the returns relating to agriculture.

Minor Crops. There are other crops cultivated in Victoria in addition to those enumerated on page 400. The most important of these are :-Nursery products, cut flowers, sweet corn, sunflowers, garlic, scent plants, and agricultural seeds.

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

VICTORIA-ARTIFICIAL FERTILIZERS USED.


Machinery used on Holdings.

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

## VIC'TORIA-MACHINERY IN USE ON RURAL HOLDINGS.

| Year. | Chaffcutters. | Cream <br> Separators. | Cultivators. | Engines. | Graders. | Grain Drills. | Harrows. | Harvesters. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. | No. | No. | No. | No. |
| 1934 | 26,244 | 47,681 | 39,001 | 25,645 | 5,728 | 27,674 | 56,798 | 11,047 |
| 1936 1937 | 26,325 26,185 | 47,672 <br> 47719 | 37,971 | 27,436 28,693 | 5,610 | $\xrightarrow{27,206}$ | 55,770 | 10,521 |
| 1938 | 26,185 |  | 37,979 | 28,063 | 5,519 | 27,216 | 5,612 | 10,622 |
| 1939 1940 | 25,710 | ${ }_{*}^{46.380}$ | 37,307 | 31,182 32,718 | 5,362 | $\underset{\sim}{20,058}$ | 54,610 | 10,013 |


| Year. | Headers. | Milking Plants. | Ploughs. | $\begin{aligned} & \text { Reapers } \\ & \text { and } \\ & \text { Binders. } \end{aligned}$ | Shearing Plants. | Strippers. | Threshing Machines. | Tractors. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1934 .. | $\begin{gathered} \text { No. } \\ 6,959 \end{gathered}$ | $\stackrel{\text { No. }}{4,353}$ | $\begin{gathered} \text { No. } \\ 79,583 \end{gathered}$ | $\begin{gathered} \text { No. } \\ 23,211 \end{gathered}$ | $\begin{gathered} \text { No. } \\ 4,057 \end{gathered}$ | $\begin{aligned} & \text { No. } \\ & 1,926 \end{aligned}$ | No. 511 | $\begin{gathered} \text { No. } \\ 5,373 \end{gathered}$ |
| 1936 | 6,725 | 4,994 | 78,353 | 22,787 | 4,386 | 1,823 | 538 | 5,727 |
| 1937 . | 6,888 | 5,702 | 77,961 | 22,517 | 4,430 | 1,671 | 498 | 6,270 |
| 1938 |  |  |  |  |  |  |  | 7,593 |
| 1939. | 7,010 | 7,419 | 76,079 | 22,005 | 4,954 4,860 | 1,568 | 467 | 8,802 9,578 |
| 1940 . |  | 8,201 |  |  | 4,860 |  |  | 9,578 |

* Particulars not collected.

Persons
employed on
Rural
Holdings.

Iuformation is collected annually as to the number of persons ordinarily engaged in farm work on rural holdings of one acre or more. Persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, \&c., are excluded from the tabulation. In respect of female employees, it is evident that numbers of occupiers misinterpret the questions and wrongly include those who, though they may give some assistance out-doors, are primarily engaged in domestic duties. Particulars for the years 1935-36 to 1939-40 are as follow :-

VICTORIA-PERSONS ENGAGED ON RURAL HOLDINGS, INCLUDING WORKING PROPRIETORS, ETC., BUT EXCLUDING CASUAL AND SEASONAL WORKERS, 1935-36 TO 1939-40.


In the next return will be found particulars of the

Rates of
WagesRural
Holdings. rates of wages paid (with rations) upon rural holdings during 1939-40. The information has been furnished by the occupiers of holdings.

| VICTORIA-RATES O | $\begin{aligned} & \text { WAGES ON } \\ & 1939-40 . \end{aligned}$ | RURAL HOLDINGS, |
| :---: | :---: | :---: |
| Occupations. | Prevaling Rate. | Range. |
| Ploughmen | 42s. 6d. per week | 25s. to 72s. per week |
| Farm labourers | 41s. per week .. | 20s. to 72s. per week |
| Threshing machine hands | 1s. 3d. per hour | 1s. to 1 s . 6 d . per hour |
| Harvest hands | 11s. per day | 7s. to 15 s . per day |
| Milkers | 32s. 6d. per week | 20s. to 50s. per week |
| Maize pickers (without ration | 7d. per bag of cobs | 6 d . to 9 d . per bag of col |
| Married couples | 64s. per week | 50s. to 80s. per week |
| Female servants | 23s. 6d. per week | 15 s . to 45 s . per week |
| Shearers, hand (without ration | 37s. per 100 sheep | 32 s . 6 d . to 45 s . per 100 sheep |
| $\begin{gathered} \underset{\text { rations) }}{\text { machine }} \end{gathered} \text { (witho }$ | 38s. per 100 sheep | 32 s. 6d. to 50 s. per 100 sheep |
| Gardeners, market | ${ }^{5} 5$ s. per week | 40s. to 70s. per week |
| orchard | 57s. 6d. per week | 40s. to 78s. per week |
| Vineyard hands | 60s. per week .. | 40s. to 80s. per week |

Financial Assistance to Primary
Producers.

In recent years legislative provision has been made by both the Commonwealth and State Parliaments for granting financial relief to primary producers. These provisions have been described in previous issues of the $\bar{Y} \epsilon a r-B o o k$.

## PASTORAL AND DAIRYING INDUSTRIES.

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

LIVE STOCK IN VICTORIA, 1861 TO 1940.

|  |  |  | Horses (including Foals). | Cattle- |  | Sheep. | Pigs. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | Dairy Cows. | Other. |  |  |
|  |  |  | No. | No. | No. | No. | No. |
| 1861 | . | $\cdots$ | 76,536 | 197,332 | 525,000 | 5,780,896 | 61,259 |
| 1871 | . . | . | 209,025 | 212,193 | 564,534 | 10,477,976 | 180,109 |
| 1881 | . | $\cdots$ | 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 | . | $\cdots$ | 392,237 | 521,612 | 1,080,772 | 10,841,790 | 350,370 |
| 1911 | .- | . . | 472,080 | 668,777 | 878,792 | 12,882,665 | 333,281 |
| 1921 | - | -• | 487,503 | 620,005 | 955,154 | 12,171,084 | 175,275 |
| 1931 | . |  | 379,872 | 669,132 | 760,788 | 16,477,995 | 281,245 |
| 1936 | . | . | 356, 106 | 987,676 | 1,103,570 | 17,457,291 | 314,301 |
| 1937 | . | . | 357,158 | 968,555 | 1,037,204 | 17,663,103 | 318,673 |
| 1938 | . | . | 359,106 | 952,906 | 927,523 | 18,863,467 | 285,259 |
| 1939 | . | . | 343,828 | 889,259 | 808,036 | 17,007,352 | 252,462 |
| 1940 | . | . | 326,217 | 917,051 | 870,546 | 18,251,890 | 297,655 |

For the purpose of showing the varying extent of pastoral pursuits in Victoria, as indicated by the number of live stock grazed, it is necessary to express the various kinds of live stock in common terms. An arbitrary equivalent of ien sheep to each head of the larger kinds of live stock has, therefore, been taken and the total live stock grazed expressed as sheep :-

VICTORIA-IIVE STOCK GRAZED, 1861-1940.

|  | Year. |  | Equivalent in Sheep of Live Stock Grazed. | Year. |  |  | Equivalent in Sheep <br> of Live Stock Grazed. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | No. |  |  |  | No. |
| 1861 | . | $\cdots$ | 13,769,576 | 1931 | . | - | 34,575,915 |
| 1871 | $\cdots$ | $\cdots$ | 20,335,496 | 1936 | $\cdots$ | $\cdots$ | 41,930,811 |
| 1881 | $\cdots$ | . | 25,978,115 | 1937 | $\cdots$ | . | 41,292,273 |
| 1891 | - | $\cdots$ | 34,886,343 | 1938 | . |  | 41,258,817 |
| 1901 | $\cdots$ | $\cdots$ | 30,788,000 | 1939 | . | . | 37,418,582 |
| 1911 | $\cdots$ | . | 33,079,155 | 1940 | . | . | 39,390,010 |
| 1921 | . | . | 32,797,704 |  |  |  |  |

When making comparisons of the figures in the foregoing table, consideration should be given to the varying acreage under cultivation as shown on page 396.

[^6]Live stock in Australia.

In the following statement are given the numbers of horses, cattle, sheep and pigs in the various Australian States at March, 1940 :-

LIVE STOCK IN THE COMMONWEALTH, 1940.

| State. | Horses. | Cattle. | Sheep. | Pigs. |
| :---: | :---: | :---: | :---: | :---: |
|  | No. | No. | No. | No. |
| Victoria | 326,217 | 1,787,597 | 18,251,870 | 297,655 |
| New South Wales | 534,837 | 2,762,653 | 54,372,472 | 451,064 |
| Queensland | 445,810 | 6,198,798 | 24,190,931 | 391,333 |
| South Australia | 190,013 | 351,013 | 9,940,570 | 119,660 |
| Western Australia | 138,211 | 810,170 | 9,574,232 | 147,916 |
| Tasmania | 29,605 | 252,484 | 2,677,120 | 44,941 |
| Northern Territory | 32,721 | 922,581 | 38,587 | 483 |
| Australian Capital Territory | 1,241 | 5,879 | 259,408 | 601 |
| Total | 1,698,655 | 13,091,175 | 119,305,190 | 1,453,653 |

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

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



[^7]Distribution
of Live Stock.

The next table contains particulars of Live Stock

VICTORIA-DISTRIBUTION

in each County of the State as at March, 1940.

OF LIVE STOCK, 1940.

| Other Cattle. |  |  |  | Total Cattle. | Pigs. | Sheep. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Heifers (other than Springers). | Calves <br> (under <br> Twelve <br> Months). | Other Cattle. | Total Other Cattle. |  |  | Sheep. | Lambs. | Total. |
| No. | No. | No. | No. | No. | No. | No. | No. | No. |
| 6,325 | 9,046 | 13,369 | 28,740 | 80,008 | 12,362 | 381,439 | 101,288 | 485,727 |
| 6,335 | 9,309 | 14,144 | 29,788 | 54,229 | 8,599 | 640,600 | 152,295 | 792,895 |
| 16,584 | 23,707 | 28,079 | 68,370 | 157,988 | 24,053 | 170,850 | 67,176 | 238,026 |
| 2,776 | 3,619 | 7,445 | 13,840 | 27,476 | 4,639 | 45,304 | 19,049 | 64,353 |
| 2,313 | 5,127 | 8,847 | 16,287 | 26,112 | 3,346 | 427,509 | 85,541 | 513,050 |
| 1,871 | 3,448 | 3,590 | 8,909 | 15,938 | 1,757 | 398,429 | 120,983 | 519,412 |
| 3,528 | 7,223 | 6,182 | 16,933 | 33,134 | 4,813 | 386,667 | 114,985 | 501,652 |
| 3,351 | 5,272 | 3,707 | 12,330 | 36,003 | 7,800 | 517,593 | 120,851 | 638,444 |
| 6,525 | 9,012 | 6,356 | 21,893 | 55,635 | 11,318 | 136,315 | 38,010 | 174,325 |
| 7,722 | 11,742 | 4,864 | 24,328 | 75,258 | 8,995 | 38,916 | 15,894 | 54,810 |
| 9,656 | 10,879 | 19,541 | 40,076 | 83,728 | 5,390 | 730,978 | 193,839 | 924,817 |
| 1,348 | 2,536 | 3,722 | 7,606 | 14,045 | 1,305 | 753,791 | 164,747 | 918,538 |
| 8,524 | 13,600 | 21,728 | 43,852 | 86,515 | 3,903 | 785,281 | 217,548 | 1,002,829 |
| 5,833 | 9,901 | 12,152 | 27,886 | 54,950 | 8,572 | 600,025 | 145,015 | 745,040 |
| 2,555 | 4,695 | 8,192 | 15,442 | 27,096 | 2,865 | 769,429 | 148,598 | 918,027 |
| 822 | 2,427 | 4,815 | 8,064 | 11,256 | 516 | 260,193 | 34,464 | 294,657 |
| 1,371 | 3,100 | 2,029 | 6,500 | 14,046 | 2,000 | 883,901 | 194,246 | 1,078,147 |
| 1,611 | 3,802 | 2,035 | 7,448 | 17,911 | 4,223 | 720,600 | 163,576 | 884,176 |
| 740 | 1,969 | 1,512 | 4,221 | 8,801 | 1,375 | 481,401 | 128,925 | 610,326 |
| 158 | 433 | 331 | 922 | 1,920 | 757 | 103,108 | 25,273 | 128,381 |
| 152 | 744 | 211 | 1,107 | 3,199 | 712 | 108,221 | 22,049 | 130,270 |
| 1,011 | 2,755 | 859 | 4,625 | 12,036 | 2,995 | 424,749 | 99,410 | 524,159 |
| 1,395 | 4,183 | 3,225 | 8,803 | 19,666 | 5,225 | 410,582 | 94,482 | 505,064 |
| 5,664 | 11,670 | 7,192 | 24,526 | 55,054 | 14,487 | 308,553 | 80,060 | 388,613 |
| 773 | 2,007 | 1,310 | 4,090 | 8,896 | 1,554 | 383,327 | 101,224 | 484,551 |
| 3,248 | 6,602 | 4,905 | 14,755 | 32,077 | 7,602 | 411,379 | 118,303 | 529,682 |
| 7,423 | 12,902 | 7,523 | 27,848 | 63,571 | 18,165 | 411,131 | 129,980 | 541,111 |
| 5,223 | 11,283 | 11,229 | 27,735 | 50,376 | 18,257 | 839,606 | 194,149 | 1,033,755 |
| 6,688 | 15,138 | 25,237 | 47,063 | 75,539 | 8,058 | 566,158 | 145,070 | 711,228 |
| 9,004 | 18,861 | 27,068 | 54,933 | 96,424 | 15,405 | 334,171 | 83,440 | 417,611 |
| 4,406 | 13,899 | 33,379 | 51,684 | 74,080 | 8,590 | 251,647 | 85,728 | 337,375 |
| 247 | 770 | 2,474 | 3,491 | 4,446 | 304 | 40,396 | 11,190 | 51,586 |
| 1,396 | 3,030 | 8,200 | 12,626 | 19,687 | 4,399 | 45,710 | 13,965 | 59,675 |
| 1,260 | 3,642 | 9,691 | 14,593 | 21,841 | 4,485 | 91,210 | 35,166 | 126,376 |
| 1,250 | 2,823 | 6,202 | 10,275 | 16,682 | 4,007 | 76,771 | 27,069 | 103,840 |
| 7,753 | 12,045 | 18,394 | 38,192 | 79,760 | 17,393 | 290,850 | 78,824 | 368,674 |
| 34,441 | 42,345 | 43,979 | 120,765 | 272,214 | 56,429 | 355,055 | 94,613 | 449,668 |
| 181,282 | 305,546 | 383,718 | 870,546 | 1,787,597 | 297,655 | 14,584,845 | 3,667,025 | 18,251,870 |

The dairying industry is one of the principal sources of
Dairying. the wealth of the community. The gross value of dairy produce in the season $1939-40$ was $£ 14,854,336$ as compared with $£ 12,682,076$ in $1938-39$, $£ 12,989,517$ in $1937-38$, $£ 13,018,154$ in 1936-37, and $£ 11,376,604$ in 1935-36. The following table shows the numbers of cowkeepers and cows and the total production of butter and cheese for each of the last five years :--

$$
\text { VICTORIA-DAIRYING, } 1935-36 \text { TO 1939-40. }
$$

| As at 1st March— | Number <br> of <br> Cow- <br> keepers. | Number <br> of <br> Dairy Cows. | Butter made.* | Cheese made.* |  |
| :--- | :--- | :---: | :---: | :---: | :---: |
| 1936 | $\ldots$ | $\ldots$ | 58,259 | 987,676 | $148,132,507$ |
| 1937 | $\ldots$ | $\ldots$ | 57,723 | 968,555 | $154,194,197$ |
| 1938 | $\ldots$ | $\ldots$ | 57,129 | 952,906 | $141,321,445$ |
| 1939 | $\ldots$ | $\ldots$ | 55,812 | 889,259 | $130,573,918$ |
| 1940 | $\ldots$ | $\ldots$ | 55,438 | 917,051 | $164,826,094$ |

* Year ended 30th June.

Numbers and Sizes of $\begin{aligned} & \text { Dairy Herds. in Victoria, grouped, according to size, during each of the }\end{aligned}$

The following table shows the number of dairy herds five years, 1936-40:-

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

| As at <br> 1st March- | Number of Herds. |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 5 \text { to } 9 \\ & \text { cows. } \end{aligned}$ | $10 \text { to } 14$ <br> cows. | 15 to 19 cows. | 20 to 29 cows. | 30 to 49 cows. | 50 to 99 cows. | $\begin{gathered} 100 \text { and } \\ \text { over } \end{gathered}$ | Total. |
| 1936 | 11,403 | 6,274 | 4,002 | 5,984 | 6,473 | 3,480 | 614 | 38,230 |
| 1937 | 11,245 | 6,053 | 3,773 | 5,580 | 6,315 | 3,516 | 641 | 37,123 |
| 1938 | 10,553 | 5,655 | 3,453 | 5,153 | 6,253 | 3,637 | 669 | 35,373 |
| 1939 | 10,048 | 4,965 | 3,048 | 4,647 | 5,750 | 3,465 | 599 | 32,522 |
| 1940 | 9,792 | 5,032 | 3,193 | 4,674 | 5,920 | 3,651 | 650 | 32,912 |

The number of farmers with less than five cows was :-20,029 in 1936, 20,600 in 1937, 21,756 in 1938, 23,290 in 1939, and 22,526 in 1940. These numbers were excluded from the foregoing table as the groups were considered too small to be classed as dairy herds.

The milk Board This Act extends the powers of the Milk Board by Act 1936. providing that the Board, in addition to determining the minimum prices to be paid to owners of dairy farms for milk for sale or distribution in the metropolis, shall have power to determine the minimum prices to be paid for such milk to owners of milk depots and-in the case of sales other than sales by retail-to dairymen. A summary of the principal legislative provisions of this Act appears on pages 429 and 430 of the Victorian Year-Book for 1935-36.

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

VICTORIA-BUTTER AND CHEESE MADE, 1936-1940.


The quantities of concentrated, condensed, powdered milk and casein made, together with quantities of cream sold, during the last five years, were as follows:-
VICTORIA-MILK (CONCENTRATED, CONDENSED, AND
POWDERED) AND CASEIN MADE AND CREAM SOLD,
1936-1940.

| Year Ended |  | Cream Sold by Butter Factories. | Concentrated, Condensed, and Mowdered Milk Made. | Caseln Made. | Total Quantity of Milk Used for All Purposes. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $1,000 \mathrm{lb}$. | 1,000 lb. | $1,000 \mathrm{lb}$. | 1,000 Gallons. |
| 1936 | .. | 10,214 | 34,385 | 3,731 | 309,742 |
| 1937 | -• | 13,755 | 46,007 | 4,334 | 432,330 |
| 1938 | - | 17,097 | 52,065 | 5,095 | 408,271 |
| 1939 | . | 13,574 | 46,668 | 4,463 | 377,882 |
| 1940 | .. | 14,168 | 56,778 | 5,331 | 459,050 |

## Sheep.

The numbers of sheep in Victoria in various years since 1861 are shown in the table on page 428. Sheep are depastured in practically all districts of the State, but are relatively more numerous in the Wimmera, Western and Northern districts. The distribution of all live stock is shown in table on page 430.

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

Seasonal conditions also play a large part in determining

## Lambing.

 the proportion of lambs dropped to ewes mated, and thus a wide variation from the average natural increase may be experienced in any particular season. The following table show's the percentage of lambs marked in each of the five years, 1935 to 1939.VICTORIA-LAMBING PERCENTAGE, 1935 TO 1939.

| Year. |  |  |  |  | Proportion of Lambs Marked to Ewes Mated. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1935 |  |  |  |  | \% |
| 1935 | . | - | . | . | $83 \cdot 4$ |
| 1936 | $\cdots$ | $\cdots$ | - | $\cdots$ | $76 \cdot 5$ |
| 1937 | . | . | . | . . | $83 \cdot 5$ |
| 1938 | . | . | . | . | $68 \cdot 1$ |
| 1939 | . . | - | - | . | $81 \cdot 5$ |

Flocks of 8 heep in Districts.

A table containing a classification of the flocks of sheep in each district of Victoria as at March, 1939, was published on page 478 of the 1938-39 issue of the Year-Book. Sheep travelling on roads or located in cities or towns were excluded. The classification disclosed that, although the four groups with sheep under 500 comprised $72 \cdot 15$ per cent. of the owners, the number of sheep in those groups was only $23 \cdot 62$ per cent. of the total sheep in the State.

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

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

A table showing the breeds of sheep for the years 1932 to 1936 appears on page 480 of the 1938-39 issue of the Year-Book.

[^8]VICTORIA - RAMS, EWES, ETC.; EWES MATED; TRAVELLING SHEEP AND SHEEP


BREEDS OF RAMS IN EACH COUNTY (EXCLUSIVE OF IN TOWNS) AS AT MARCH, 1940.

| Ewes Mated (for <br> Lambing during Season 1940). |  | Breeds of Rams. |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| To Merino, Corriedale or Polwarth Rams (Wool Production). | To Rams of British Breeds (Fat-Lamb Production). | Merino. | Corriedale. | Polwarth. | Border Leicester. | Southdown. | Dorset Horn. | Other. |
| 30,112 | 192,151 | 158 | 544 | 191 | 1,004 | 1,802 | 766 | 749 |
| 155,391 | 196,904 | 1,612 | 1,993 | 476 | 1,192 | , 578 | 1,118 | 1,194 |
| 10,064 | 114,448 | 30 | 236 | 3 | 825 | 1,661 | 204 | 592 |
| 9,802 | 23,163 | - 52 | 681 | 17 | 145 | 342 | 23 | 94 |
| 83,241 | 126,486 | 990 | 1,048 | 108 | 369 | 1,704 | 76 | 619 |
| 90,281 | 165,650 | 1,262 | 958 | 105 | 1,171 | 1,301 | 888 | 536 |
| 121,808 | 159,249 | 2,541 | 1,067 | 55 | 1,664 | -359 | 631 | 871 |
| 173,844 | 89,187 | 4,893 | 942 | 1,065 | 862 | 391 | 217 | 429 |
| 29,796 | 49,026 | 22 | 136 | 1,281 | 363 | 394 | 71 | 411 |
| 2,764 | 26,407 | 3 | 25 | 26 | 111 | 413 | 25 | 261 |
| 276,588 | 136,095 | 5,386 | 2,238 | 2,110 | 584 | 1,116 | 318 | 1,007 |
| 266,231 | 89,718 | 7,814 | 820 | 268 | 697 | 238 | 478 | 250 |
| 273,426 | 77,657 | 3,471 | 1,894 | 2,491 | 559 | 360 | 114 | 1,018 |
| 168,269 | 87,792 | 1,623 | 2,355 | 621 | 644 | 403 | 233 | 521 |
| 212,918 | 83,674 | 3,735 | 1,613 | 319 | 933 | 183 | 336 | 400 |
| 35,395 | 42,632 | 489 | 326 | 73 | 472 | 285 | 145 | 202 |
| 333,293 | 75,260 | 8,223 | 1,158 | 48 | 659 | 97 | 483 | 199 |
| 217,369 | 218,484 | 3,969 | 1,394 | 220 | 1,977 | 584 | 1,343 | 512 |
| 166,500 | 145,233 | 4,273 | 640 | 349 | 1,750 | 204 | 413 | 268 |
| 40,560 | 50,637 | 1,086 | 153 | 13 | 549 | 3 | 188 | 68 |
| 31,702 | 61,555 | 154 | 559 | 61 | 372 | 51 | 516 | 143 |
| 46,965 | 317,705 | 124 | 802 | 84 | 3,337 | 203 | 1,417 | 283 |
| 19,450 | 342,094 | 128 | 343 | 39 | 4,470 | 372 | +769 | 390 |
| 29,626 | 233,623 | 792 | 429 | 80 | 2,477 | 593 | 1,222 | 190 |
| 121,339 | 167,804 | 1,986 | 729 | 34 | 2,191 | 225 | 348 | 506 |
| 70,884 | 262,107 | 1,100 | 699 | 53 | 2,972 | 718 | 853 | 798 |
| 39,277 | 304,122 | 417 | 697 | 25 | 3,539 | 1,273 | 1,396 | 799 |
| 60,444 | 664,478 | 431 | 1,137 | 139 | 5,329 | 6,064 | 1,777 | 1,455 |
| 125,978 | 297,407 | 855 | 1,453 | 248 | 2,065 | 2,380 | 238 | 1,767 |
| 59,269 | 190,905 | 671 | 581 | 209 | 2,756 | 667 | 248 | 485 |
| 81,605 | 69,590 | 1,116 | 488 | 31 | 599 | 291 | 236 | 327 |
| 11,961 | 8,902 | 100 | 102 | 16 | 50 | 14 | 1 | 98 |
| 13,949 | 6,008 | 121 | 116 | 2 | 55 |  | 1 | 83 |
| 40,553 | 17,188 | 533 | 385 | 46 | 168 | 35 | 1 | 111 |
| 28,511 | 13,453 | 536 | 79 |  | 100 | 14 | 6 | 114 |
| 84,898 | 70,438 | 1,281 | 440 | 30 | 274 | 266 | 478 | 753 |
| 40,794 | 117,668 | , 375 | 568 | 60 | 965 | 709 | 558 | 839 |
| 3,604,857 | 5,294,900 | 62,352 | 29,828 | 10,996 | 48,249 | 26,293 | 18,135 | 19,332 |

Statistics of wool production are obtained direct from

Production of Wool. the growers, from fellmongeries and, in respect of wool exported on skins, from the Customs Department.

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

VICTORIA—SHEEP AND LAMBS SHORN (IN DISTRICTS) SEASON 1939-40.

| Statistical District. | Shorn. |  | Wool Clipped <br> (including Crutchings). |  | Average. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Sheep. | Lambs. | Sheep's. | Lambs'. | Per Sheep. | $\begin{gathered} \text { Per } \\ \text { Lamb. } \end{gathered}$ |
|  | No. | No. | 1 l . | 1 l . | lb. | lb. |
| Central | 1,196,319 | 264,277 | 10,810,656 | 682,419 | $9 \cdot 04$ | $2 \cdot 58$ |
| North-Centra | 1,336,463 | 290,021 | 12,384,489 | 679,472 | $9 \cdot 27$ | $2 \cdot 34$ |
| Western | 5,079,670 | 1,094,238 | 42,294,414 | 2,731,447 | $8 \cdot 33$ | $2 \cdot 50$ |
| Wimmera | 2,356,401 | 476,946 | 21,689,977 | 1,210,457 | $9 \cdot 20$ | $2 \cdot 54$ |
| Mallee | 1,063,494 | 232,156 | 9,589,985 | 505,429 | $9 \cdot 02$ | $2 \cdot 18$ |
| Northern | 2,487,937 | 616,656 | 23,263,195 | 1,478,337 | $9 \cdot 35$ | $2 \cdot 40$ |
| North-Eastern | 1,289,556 | 329,659 | 11,601,997 | 726,269 | $9 \cdot 00$ | $2 \cdot 20$ |
| Glppsland .. | 914,275 | 228,245 | 7,699,544 | 408,491 | $8 \cdot 42$ | 1-79 |
| State Totals | 15,724,115 | 3,532,198 | 139,334,257 | 8,422,321 | $8 \cdot 86$ | $2 \cdot 38$ |

VICTORIA-SHEEP SHORN AND WOOL CLIPPED.

| Season. |  |  | Shorn. |  | $\begin{gathered} \text { Wool Clipped } \\ \text { including Orutchings). } \end{gathered}$ |  | A verage. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Sheep. | Lambs. | Sheep's. | Lambs'. | Per Sheep. | $\begin{gathered} \text { Per } \\ \text { Lamb. } \end{gathered}$ |
|  |  |  | No. | No. | lb. | lb. | lb. | lb. |
| 1935-36 | . | . | 14,962,109 | 3,427,684 | 117,845,531 | 7,627,166 | 7•88 | $2 \cdot 23$ |
| 1936-37 | . | . | 15,654,911 | 3,361,578 | 118,994,899 | 7,346,487 | 7•60 | 2.19 |
| 1937-38 |  | . | 16,402,071 | 4,308,272 | 133,228,048 | 9,176,862 | $8 \cdot 12$ | $2 \cdot 13$ |
| 1938-39 | . | $\cdots$ | 16,319,184 | 3,368,603 | 124,666,402 | 6,799,493 | $7 \cdot 64$ | $2 \cdot 02$ |
| 1939-40 | -• | $\cdots$ | 15,724,115 | 3,532,198 | 139,334,257 | 8,422,321 | $8 \cdot 86$ | 2-38 |

## VICTORIA-WOOL PRODUCTION AND VALUE.

|  |  |  |  |
| :--- | :--- | :--- | :---: | :---: | :---: | :---: | :---: |
| Season. |  |  |  |

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

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

> Marketing of Wool.

Under normal conditions of marketing, wool is sold by public auction at established "selling centres". These sales are attended by representatives of firms from practically every country in which woollen goods are manufactured extensively and also by buyers representing local woollen mills.

Wool is sold on a clean scoured basis. A light conditioned, high quality fleece would weigh a good deal less than a heavy conditioned, sandy, burry one. The extra weight compensates to some extent for the lower price received per lb. Some woolgrowers place importance on the price per lb . obtained for wool and others on the return per sheep.

When wool is sold at auction it is subject to the vagaries of fashion and competition, which make fluctuations inevitable. As a result, prices are sometimes more and sometimes less than the true market value. Some growers value their wool and set reserves thereon. Their valuations can only be approximations as the individual grower cannot be aware of all the factors which determine the prices realized.

Auction sales arranged for the sale of the 1939 clip were postponed owing to the international situation and, following the outbreak of war on the 3rd September, 1939, the Commonwealth Government two days later announced that the British Government would purchase the Australian wool clip for the duration of the war and for one full year thereafter. The interests of Australian mills are safeguarded under the purchase arrangement, and mills are able to select and purchase their full requirements for military and civil purposes and for combing for export by Australian topmakers.

A Central Wool Committee was appointed to control the receivals, storage, appraisement and shipment of wool to the United Kingdom and other destinations arranged by the United Kingdom. After negotiations, a flat price of $10 \frac{3}{4} \mathrm{~d}$. per 1 lb . sterling, equivalent to 13.437 d . per lb . Australian currency, in store at seaboard, was agreed upon. Since a flat price per lb., irrespective of type or quality would obviously be unfair, the clip receivals are being appraised by experts selected by the Wool Committee.

Approximately 1,500 different types or grades of wool have been established throughout Australia by the appraisers to enable them to value the wool so that, at the end of the season, the average price of all wool produced will be $13 \cdot 437 \mathrm{~d}$. per lb . This is a task, which, to the layman, would appear to be impossible, yet it is being successfully accomplished. Each type is given a specification and, if this is not fulfilled, the wool is reduced to a lower type level and consequently appraised at a lower price. As a result the factors which govern sales by auction cannot operate.

[^9]Production.

PRICES OF WOOL SOLD IN VICTORIA, 1937-38 TO 1939-40.


In the subjoined table will be found a statement of the

Prices of Live Stock. average and of the range of prices of live stock ruling in metropolitan saleyards at Newmarket during the years 1938-39 and 1939-40. The averages stated are the mean of the
monthly prices realized. Prices of live stock vary each year under the influence of seasonal conditions, prices of wool, \&c. During periods of dry weather, stock are hastened to market and consequently prices decline but, with the advent of relief rains, stock are withheld for fattening, breeding, \&c., and prices rise.
VICTORIA-PRICES OF LIVE STOCK, 1938-39 AND 1939-40.


8tock
The following table shows the numbers of slaughtering slaughtered. establishments and the stock slaughtered in the State during each of the five years, 1936-40:-

VICTORIA-STOCK SLAUGHTERED, 1936 TO 1940.

| Kind of Stock. | Stock Slaughtered in Establishments and on Farms and Stations |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Year Ended June- |  |  |  |  |
|  | 1936. | 1937. | 1938. | 1939. | 1940. |
| Sheep | $\underset{3,106,757}{\text { No. }}$ | $\stackrel{\text { No. }}{3,087,809}$ | $\begin{gathered} \text { No. } \\ 3,474,819 \end{gathered}$ | No. <br> 3,699,566 | No. $3,265,666$ |
| Lambs | 4,584,731 | 4,826,624 | 4,653,725 | 4,028,208 | 3,725,080 |
| Bullocks | 183,140 | 208,569 | 199,032 | 167,826 | 175,550 |
| Cows | 200,779 | 216,073 | 216,495 | 195,426 | 169,328 |
| Young cattle | 80,272 | 86,950 | 89,860 | 81,157 | 61,746 |
| Calves | 310,204 | 393,297 | 465,951 | 367,294 | 330,636 |
| Pigs | 495,499 | 568,477 | 509,041 | 434,368 | 422,535 |
| Number of Slaughterhouses .. | 779 | 769 | 755 | 721 | 687 |

Frozen Mutton The importance of the mutton and lamb export trade to and Lamb sheep owners is indicated by the export figures for the years 1936 to 1940 as shown in the statement hereunder.
Seasonal influences are principally responsible for fluctuations in the various years.

> FROZEN MUTTON AND LAMB EXPORTED FROM VIOTORIAN PORTS.


Cattle-raising has always been one of the more important primary industries in this State, despite the gradual increase in the areas devoted to dairy farming, sheep-raising, and cultivation. This has been due mainly to the considerable improvement in methods of pasture management, including the practice of top-dressing. Vigilant inspection of stock and the rigid quarantine of stock imported from oversea have kept herds in Victoria free from many forms of contagious diseases and animal pests with which stock in other countries are afflicted. The numbers of live stock in each county of the State will be found on page 430 of this issue.

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

The following table gives particulars of the silage made in Victoria during the seasons 1935-36 to 1939-40:-

SILAGE IN VIOTORIA, 1935-36 TO 1939-40.


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

Since the season 1935-36, all beekeepers have been required to furnish returns, the particulars of which are given in the following table : -

VICTORIA—BEE-HIVES, HONEY AND BEESWAX, 1935-36 TO 1939-40.

| Season | Ended May- |  | $\begin{aligned} & \text { Bee- } \\ & \text { keepers. } \end{aligned}$ | Hives. | Production. |  | Gross Value. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Honey. |  | Beeswax. | Honey. | Beeswax. |
|  |  |  |  | No. | No. | 1 l. | li. | $\mathfrak{£}$ | £ |
| 1936 | $\ldots$ | $\ldots$ | 3,330 | 99,650 | 5,901,463 | 61,849 | 92,210 | 4,123 |
| 1937 | . | $\ldots$ | 3,422 | 99,618 | 3,439,262 | 40,612 | 53,738 | 2,707 |
| 1938 | $\ldots$ | . | 3,119 | 92,226 | 4,541,516 | 54,184 | 70,961 | 3,612 |
| 1939 |  | . | 2,445 | 63,986 | 1,340,046 | 22,285 | 27,918 | 1,300 |
| 1940 |  |  | 2,281 | 70,092 | 2,752,125 | 35,630 | 74,537 | 2,969 |

Poultry
A table showing the number of poultry owners and of census. poultry in Victoria, as at the date of the Census in each of the years $1881,1891,1901,1911$ and 1933 was published on page 488 of the 1938-39 issue of the Year-Book.

## Establishment of marketing Buards.

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

Pursuant to such Act, Marketing Boards have been constituted for onions, chicory, maize, and eggs and egg pulp.
Wholesale
Prices of
Principal
Products.

| The following table gives the average of the Melbourne wholesale prices of the princip dairying, and pastoral food products for each month of the year ended June, 1940 :- <br> MELBOURNE—WHOLESALE PRICES-YEAR ENDED JUNE, 1940. |  |  |  |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1939. |  |  |  |  |  | 1940. |  |  |  |  |  |
|  | July. | August. | Sept. | October. | Nov. | Dec. | January. | February. | March. | April. | May. | June. |
|  | d. | s. d. | d. | s. d. | s. d. | s. d. | d. | 8. d. | d | s. d. | s. d. | s. d. |
| $\underset{\text { Wheat .. }}{\text { Agricultural- }} \quad$ per bushel | 24 | $22 \frac{1}{2}$ | 264 | ${ }_{91}$ | 211 | 381 | 4 018 | $4{ }^{4}$ | $4{ }^{4}$ | 42 | 43 | 43 |
| $\underset{\text { Earley-- }}{\text { English }}$ |  |  |  | 210 |  |  |  |  |  |  |  |  |
| Cape $\quad$ E. | ${ }^{2} 888$ | ${ }_{2}^{2} 78$ | ${ }^{2}{ }^{29}$ | ${ }_{2}^{2} 8$ |  | ${ }^{3}$ | ${ }^{3}{ }^{03}$ |  | ${ }^{3} 8$ | 3  <br>   <br> 18  <br> 18  | ${ }^{3} 71{ }^{7} 18$ | 3  <br> 2  <br> 9 61 <br> 1  |
| Oats milling Maize | ${ }_{5}^{2} 8{ }^{8}$ | ${ }_{5}^{2}{ }_{5}^{2110}$ | ${ }_{5}^{2}{ }_{5}^{63}$ |  | ${ }_{5}^{1} 11{ }_{6}^{13}$ | ${ }_{5}^{1}{ }_{5}^{10 \frac{1}{2}}$ | ${ }_{5}^{1} 1198$ | ${ }_{5}^{1} 1198$ | ${ }_{5}^{2} 9{ }^{17}$ | $\begin{array}{ll} \\ 5 & 18 \\ 5\end{array}$ | ${ }_{5}^{1} 119$ | $5{ }_{5}^{2}$ |
| Peas $\quad$ Mase | 8 | ${ }_{9}^{5} 11{ }^{\text {? }}$ | ${ }^{10} 0$ | ${ }^{10} 0^{5} 0^{81}$ | 10 10 30 | 100 | ${ }^{7} 808$ | ${ }_{5}^{5} 9$ | $\begin{array}{r}5 \\ \hline 10 \\ \hline 109\end{array}$ | ${ }^{5} 10^{51}{ }^{71}$ | \% ${ }_{5}^{5} 100^{3}$ |  |
| Bran .. .. per ton | 95 95 95 | ${ }^{95}$ | ${ }_{95}^{95}{ }_{0}^{0}$ | $\begin{array}{ll}86 & 11 \\ 89 \\ 89\end{array}$ | $\begin{array}{ll}80 \\ 80 & 0 \\ 0\end{array}$ | 80 80 0 | 80 80 80 | ${ }_{95}^{95} 7$ | 110 110 0 | $\begin{array}{ll}110 \\ 110 & 0\end{array}$ | $\begin{array}{ll}110 \\ 110 & 0 \\ 0\end{array}$ |  |
|  |  | ${ }_{263}{ }^{9} 6$ | ${ }_{263} 9$ | 2621 |  | 2576 | 2576 | 25611 | 2575 |  | 2576 |  |
| Oatmeal (bulk) $\%$ " | 4678 | 4678 | 4678 | ${ }^{467} 8$ | 4678 | ${ }^{407} 8$ | 2910 | ${ }_{117}^{291} 0$ | 291 <br> 179 <br> 17 |  | ${ }_{222}^{291}$ | $\begin{array}{ll}291 & 0 \\ 218 & 4\end{array}$ |
| Potatoes Onions .. | 30811 502 | 348 <br> 501 <br> 1 | 366 <br> 513 | 4050 | 359 <br> 405 | 218  <br> 130 4 | 183 <br> 120 | $\begin{array}{ll}147 \\ 100 & \\ \end{array}$ | 179 116 | 2186 181 | 20111 | 203 <br> 18 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  | $\begin{array}{rr}31 & 0 \\ 0 & 3\end{array}$ | 2810 0 0 | $\begin{array}{rl}30 & 4 \\ 0 & 3 \\ 3\end{array}$ | $\begin{array}{cc}31 & 6 \\ 0 & 3 \\ 0\end{array}$ | $\begin{array}{ll}31 & 11 \\ 0 & 3 \\ 0\end{array}$ | $\begin{array}{rr}32 & 0 \\ 0 & 3 \frac{1}{2} \\ 0\end{array}$ | $\begin{array}{lll}32 & 3 \\ 0 & 3 \frac{1}{2}\end{array}$ | $\begin{array}{rr}34 & 2 \\ 0 & 3 \\ 0 & 3\end{array}$ | 30 0 | $\begin{array}{ll}37 & \\ 0 & 3 \\ 0 & 3 \\ 0\end{array}$ | ${ }^{40} 0$ |  |
| Pork $\begin{aligned} & \text { Peal } \\ & \text { V }\end{aligned}$ | $\begin{array}{lll}0 & 612 \\ 0 & 4 \\ \\ 4\end{array}$ | $\begin{array}{ll}0 & 71 \\ 0 & 3 \\ 0\end{array}$ | 0 8 \% | ${ }^{0} 88$ |  | $\begin{array}{lll}0 & 83 \\ 0 & 48 \\ 0\end{array}$ |  | 0 7 <br> 0 7 <br> 0 4 <br> 18  | $\begin{array}{ll}0 & 71 \\ 0 & 4\end{array}$ | $\begin{array}{ll}0 & 7 \\ 0 & 7 \\ 4 \\ 4 \\ 4\end{array}$ | 0 7 <br> 0 7 <br> 0 3 | $\begin{array}{ll}0 & 7 \\ 0 \\ 0 & 4 \\ 4\end{array}$ |
| Lamb $\begin{array}{llll}\text { Veal } \\ \text { Le }\end{array}$ |  |  | ( | ${ }_{0} 5$ |  | 0  <br> $6 \frac{1}{2}$  | $\begin{array}{lll}0 \\ 0 & 616\end{array}$ | $0_{0} 7^{476}$ | $1{ }^{1}$ | ${ }_{0} 9$ |  | 0 <br> 68 |
| Dairy and Farmyard Produce- |  |  |  |  |  |  |  |  |  |  |  |  |
| Butter .. Bacon | ${ }_{1}^{1} 5$ | $\begin{array}{ll}1 & 5 \\ 1 & 1\end{array}$ | ${ }_{1}^{1} 5$ | $\begin{array}{ll}1 & 5 \\ 1 & 2 \\ 1\end{array}$ | $\begin{array}{ll}1 & 5 \\ 1 & 2\end{array}$ | 1 1 1 1 | 1 | 1 1 1 | ${ }_{1}^{1}$ |  | $1{ }_{1}^{1}$ |  |
| Ham $\because$ Bace $\because$ | ${ }^{1} 1$ | 1 | ${ }^{1}{ }^{1}{ }^{67}$ | ${ }^{1} \frac{61}{6}$ | ${ }^{1} 1{ }^{6}$ | ${ }_{1}^{1}{ }^{63}$ | $1{ }^{61}$ | ${ }^{1}{ }^{63}$ | $1{ }^{1} 16$ | $1{ }^{1} \frac{61}{2}$ | ${ }^{1}{ }^{6 \frac{1}{2}}$ | 1  <br> 1  <br> 1 62 |
| $\frac{\text { Cheese (matured) }}{\text { Honey }}$ (\% | $\begin{array}{ll}1 & 2 \\ 0 & 5\end{array}$ | $\begin{array}{ll}1 & 2 \\ 0 & 5\end{array}$ | $\begin{array}{ll}1 & 2 \\ 0 & 5\end{array}$ | $\begin{array}{ll}1 & 2 \\ 0 & 5 \\ 0 & 5\end{array}$ | $\begin{array}{ll}1 & 2 \\ 0 & 5\end{array}$ | $\begin{array}{ll}1 \\ 0 & 2 \\ 5\end{array}$ | 1  <br> 0 $\frac{21}{2}$ |  |  |  | 1  <br> 0 2 <br> 61  <br> 1  |  |
|  | ${ }^{0} 503$ | 10 | $1{ }_{1} 1$ | 10 | 10 | 0 | $1 \begin{array}{ll}1 \\ 1 & 178\end{array}$ | 1 | 164 | $1{ }_{1}{ }_{9}{ }^{\text {a }}$ | 1118 | 110 |

Retail
Prices. $\quad$ The following table gives the average of the Melbourne retail prices of certain items of Groceries, \&c.,
MELBOURNE-RETAIL PRICES-YEAR ENDED JUNE, 1940.

| Article. |  | Unit. | 1939. |  |  |  |  |  | 1940. |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | July. | Aug. | Sept. | Oct. | Nov. | Dec. | Jan. | Feb. | March. | April. | May. | June. |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Bread .. . | $\cdots$ | 2 lb . | $5 \cdot 40$ | $5 \cdot 40$ | $5 \cdot 38$ | $5 \cdot 38$ | $5 \cdot 38$ | $5 \cdot 38$ | $5 \cdot 35$ | $5 \cdot 35$ | $5 \cdot 35$ | $5 \cdot 35$ | $5 \cdot 55$ | ¢. 53 |
| Flour, self-raising | . |  | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 15$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ | $7 \cdot 45$ |
| Tea $\quad . \quad$ - |  |  | $26 \cdot 8 \overline{7}$ | $26 \cdot 8.5$ | $27 \cdot 45$ | $30 \cdot 05$ | $30 \cdot 25$ | $30 \cdot 35$ | $31 \cdot 45$ | $32 \cdot 30$ | $32 \cdot 25$ | 31.70 | $29 \cdot 95$ | $30 \cdot 10$ |
| Jam, plum . | . | 1 $\frac{1}{2}$ 1b. | $8 \cdot 40$ | $8 \cdot 45$ | $8 \cdot 55$ | $8 \cdot 60$ | $8 \cdot 60$ | $8 \cdot 60$ | $8 \cdot 75$ | $8 \cdot 95$ | $9 \cdot 00$ | $9 \cdot 10$ | $9 \cdot 20$ | $9 \cdot 30$ |
| Oats, flaked |  |  | $3 \cdot 63$ | $3 \cdot 63$ | $3 \cdot 53$ | $3 \cdot 53$ | $3 \cdot 45$ | $3 \cdot 50$ | $3 \cdot 20$ | $3 \cdot 00$ | $2 \cdot 93$ | $2 \cdot 75$ | $2 \cdot 73$ | $2 \cdot 68$ |
| Raisins, seeded | $\cdots$ |  | $10 \cdot 35$ | $10 \cdot 35$ | $10 \cdot 50$ | $10 \cdot 55$ | $10 \cdot 60$ | $10 \cdot 60$ | $10 \cdot 5.5$ | $10 \cdot 55$ | $10 \cdot 55$ | $10 \cdot 55$ | $10 \cdot 60$ | $10 \cdot 70$ |
| Peaches, canned .. |  | 30 oz . | $9 \cdot 40$ | $9 \cdot 40$ | $9 \cdot 50$ | $9 \cdot 55$ | $9 \cdot 55$ | $9 \cdot 60$ | $9 \cdot 60$ | $9 \cdot 65$ | $9 \cdot 65$ | $10 \cdot 05$ | $10 \cdot 25$ | 10.30 |
| Pears, canned . | . |  | 9.85 | $9 \cdot 95$ | 10.15 | $10 \cdot 25$ | $10 \cdot 35$ | $10 \cdot 40$ | $10 \cdot 40$ | $10 \cdot 45$ | $10 \cdot 35$ | $10 \cdot 90$ | $10 \cdot 95$ | $11 \cdot 10$ |
| Salmon, in tins .. | . | 1 b . | $11 \cdot 30$ | 11-30 | $12 \cdot 25$ | $12 \cdot 65$ | 12.8.9 | $13 \cdot 40$ | 13.95 | $1+45$ | $1+\cdot 60$ | $14 \cdot 75$ | $15 \cdot 00$ | 15.28 |
| Potatoes |  | 7 lb . | 14.42 | $18 \cdot 17$ | $18 \cdot 29$ | $23 \cdot 03$ | 25.87 | $13 \cdot 20$ | $8 \cdot 85$ | $8 \cdot 55$ | 10-39 | 12.70 | $12 \cdot 24$ | 1 $1 \cdot 81$ |
| Onions, brown | $\cdots$ | lb. | $3 \cdot 75$ | $4 \cdot 11$ | $3 \cdot 92$ | $3 \cdot 72$ | $3 \cdot 34$ | $1 \cdot 18$ | $1 \cdot 17$ | $1 \cdot 00$ | $1 \cdot 06$ | $1 \cdot 39$ | $1 \cdot 67$ | 1-83 |
| Dairy Produce - |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Butter, factory | . | lb. | $19 \cdot 50$ | $19 \cdot 50$ | $19 \cdot 50$ | 19.50 | $19 \cdot 45$ | $19 \cdot 50$ | $19 \cdot 50$ | $19 \cdot 50$ | $19 \cdot 50$ | 19.50 | $19 \cdot 50$ | $19 \cdot 50$ |
| Ligge, new laid | . | doz. | $22 \cdot 00$ | $15 \cdot 40$ | $15 \cdot 10$ | $12 \cdot 60$ | $14 \cdot 60$ | $15 \cdot 70$ | $16 \cdot 80$ | $20 \cdot 30$ | 21.50 | $2+80$ | 27.95 | $26 \cdot 70$ |
| Bacon, rashers |  | 1 l . | $19 \cdot 45$ | $19 \cdot 45$ | 19.45 6.90 | 19.75 | $20 \cdot 15$ | $20 \cdot 15$ | $20 \cdot 30$ | $20 \cdot 50$ | $20 \cdot 50$ | $20 \cdot 40$ | $20 \cdot 40$ | $20 \cdot 40$ |
| Milk, fresh | . | quart | $7 \cdot 30$ | $7 \cdot 30$ | $6 \cdot 90$ | $6 \cdot 85$ | $6 \cdot 85$ | $6 \cdot 85$ | $6 \cdot 85$ | 6.85 | $6 \cdot 85$ | $6 \cdot 85$ | $6 \cdot 85$ | $6 \cdot 85$ |
| Meat- |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| Beef, sirloin | . | lb. | $10 \cdot 70$ | $10 \cdot 40$ | $10 \cdot 40$ | $10 \cdot 50$ | $10^{*} 40$ | $10 \cdot 45$ | $10 \cdot 45$ | $10 \cdot 65$ | 11.05 | $11 \cdot 15$ | $11 \cdot 55$ | $1.1 \cdot 55$ |
| , rib ${ }^{\text {a }}$ |  | " | 8.70 | $8 \cdot 30$ | $8 \cdot 20$ | $8 \cdot 40$ | $8 \cdot 40$ | $8 \cdot 55$ | $8 \cdot 55$ | ${ }^{4} \cdot 00$ | $9 \cdot 15$ | 9•10 | $9 \cdot 40$ | $9 \cdot 30$ |
| , steak, rump | $\cdots$ | '" | $15 \cdot 60$ $7 \cdot 10$ | $15 \cdot 50$ 6.90 | 15.40 6.90 | 15.40 6.90 | $15 \cdot 40$ 6.90 | $15 \cdot 50$ 7.10 | 15.60 7.00 | 10.80 | $16 \cdot 00$ | $16 \cdot 30$ | $16 \cdot 30$ | 16.50 8.00 |
| ", sausages | $\because$ | ", | $5 \cdot 56$ | $5 \cdot 44$ | $5 \cdot 9$ | $5 \cdot 4$ | $5 \cdot 9$ | 7.10 | $7 \cdot 00$ | $7 \cdot 15$ | $7 \cdot 55$ | $7 \cdot 65$ | 7.85 | $8 \cdot 00$ |
| ", corned, silverside | $\because$ | ", | $8 \cdot 80$ | $8 \cdot 65$ | 8.70 | $8 \cdot 85$ | $8 \cdot 85$ | $9 \cdot 00$ | $9 \cdot 00$ | 9.85 | ${ }_{9}{ }^{6} \cdot 175$ | $6 \cdot 28$ $9 \cdot 50$ | ${ }_{9}^{6 \cdot 50}$ | $6 \cdot 50$ $9 \cdot 65$ |
| ", , , brisket | $\ldots$ | " | 6-65 | $6 \cdot 70$ | $6 \cdot 70$ | $6 \cdot 70$ | $6 \cdot 70$ | $6 \cdot 85$ | 6.85 | $7 \cdot 25$ | $7 \cdot 30$ | $7 \cdot 30$ | $7 \cdot 45$ | $7 \cdot 45$ |
| Mutton, leg .. | . | " | $7 \cdot 85$ | $7 \cdot 35$ | $7 \cdot 60$ | $7 \cdot 65$ | $7 \cdot 75$ | 7.85 | $7 \cdot 80$ | $8 \cdot 25$ | $8 \cdot 30$ | $8 \cdot 35$ | $8 \cdot 50$ | 8.40 |
| ., forequarter | . | , | $4 \cdot 80$ | $4 \cdot 50$ | $4 \cdot 55$ | $4 \cdot 5$ | $4 \cdot 50$ | 4.55 | $4 \cdot 65$ | $4 \cdot 90$ | $4 \cdot 95$ | $5 \cdot 10$ | $5 \cdot 20$ | $5 \cdot 20$ |
| " loin je. | $\cdots$ | ," | $7 \cdot 30$ | $7 \cdot 05$ | 7-20 | $7 \cdot 25$ | $7 \cdot 25$ | $7 \cdot 45$ | $7 \cdot 35$ | $7 \cdot 45$ | $7 \cdot 55$ | $7 \cdot 70$ | $7 \cdot 90$ | 7.75 |
| " chops, loin | . | " | $8 \cdot 60$ | 7.95 | $8 \cdot 15$ | $8 \cdot 05$ | $8 \cdot 05$ | $8 \cdot 30$ | $8 \cdot 10$ | $8 \cdot 55$ | $8 \cdot 70$ | $8 \cdot 60$ | $8 \cdot 75$ | $8 \cdot 70$ |
| "", leg | $\cdots$ |  | $8 \cdot 85$ | 8.45 | $8 \cdot 35$ 12.80 | $8 \cdot 55$ | $8 \cdot 55$ | $8 \cdot 80$ | $8 \cdot 80$ | $8 \cdot 95$ | $9 \cdot 05$ | $9 \cdot 05$ | $9 \cdot 30$ | $9 \cdot 30$ |
| Pork, leg chops .. | . | " | $12 \cdot 30$ $13 \cdot 05$ | $12 \cdot 20$ $13 \cdot 10$ | $12 \cdot 80$ 13.80 | $13 \cdot 20$ | $13 \cdot 50$ $14 \cdot 10$ | $13 \cdot 75$ | $13 \cdot 40$ | $13 \cdot 20$ | $13 \cdot 10$ | $12 \cdot 90$ | $13 \cdot 10$ | $12 \cdot 90$ |
| " chops | $\cdots$ | " |  | $13 \cdot 10$ | $13 \cdot 80$ |  | 14•10 | 14•15 | $13 \cdot 95$ | $13 \cdot 90$ | 14.00 | $14 \cdot 00$ | 14-10 | $13 \cdot 90$ |

## FORESTRY.

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

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

Area of
Permanentiy Reserved Forest.

At the 31.st December, 1939, the forest area of the State was $4,845,824$ acres, of which $4,121,871$ acres were classified as permanent forests, and 723,953 acres as timber reserves. Of this area, $2,089,657$ acres have been assessed by survey, of which $1,267,366$ acres have been brought under working plans for more intense management: The area of indigenous forest improved or regenerated was $1,037,478$ acres.

## Protected Forests.

In addition to the $4,845,824$ acres aforementioned, 330,027 acre resered Staterest and Timber Reserves under the Land Acts. Including these reserves, but excluding areas reserved as sites for Gardens, Parks and Recreation Purposes, all remaining Crown lands have been proclaimed " Protected Forests." It should not be assumed, however, that all of these lands are "forests" as the term is generally understood, as over $6,000,000$ acres comprise roads, water frontages, beds of rivers and lakes, and unsold land in cities, towns and boroughs. In addition, on the area of more than $8,000,000$ acres in occupation under grazing and other leases, much of the timber is of little or no commercial value because of remoteness, inaccessibility, or other causes.

Statements in respect of the disposition of Crown lands will be found on pages 379 and 381 ante.

## Nurseries.

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

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

Revenue and The revenue derived from forest sources during the Expenditure. financial year 1939-40 was $£ 218,962$, and the expenditure
 Relief Fund, $£ 134,025$ out of the Consolidated Revenue, $£ 116,342$ out of loan funds, and the balance- $£ 77,026$-from the Forestry Fund.

Forests The output from State Forests in 1939-40 was 8,336,000 output. cubic feet of sawn timber. In addition, $13,301,000$ cubic feet of fuel timber and $1,042,000$ cubic feet of miscellaneous timber were produced.

Particulars of sawn timber and firewood, from all sources, will be found on pages 477 and 478 of this volume.

Silviculture of
Indigenous
The various types of silvicultural operations in the Forests. indigenous forests over the period 1936-37 to 1939-40 are indicated in the following table:-

VICTORIA -SILVICULTURAL OPERATIONS IN STATE FORESTS, 1936-37 TO 1939-40.

| Nature of Work. |  | $1936-37$. | $1937-38$. | $1938-39$. | $1939-40$. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |

Plantations of Exotic Timbers.

The total area planted during the 1939 planting season was 3,168 acres, comprising extensions to existing plantations, 45 acres; restocking cut-over areas, 32 acres ; restocking burned areas, 2,722 acres; experimental, 3 acres; and renewals, 366 acres. The area planted according to species during the 1939 season and the total area of coniferous plantations at the end of that season are shown in the following table :-

VICTORIA-CONIFEROUS PLANTATIONS, 1939.

| - |  | Area Planted 1939 Season. | Total Area of Coniferous Plantations. |
| :---: | :---: | :---: | :---: |
|  |  | Acres. | Acres. |
| Montercy Pine (Pinus Radiata) | . | 1,223 | 27,058 |
| Western Yellow Pine (Pinus ponderosa) |  | 1,480 | 5,783 |
| Douglas Fir (Pseudotsuga taxifolia) |  | 239 | 2,703 |
| Corsican Pine (Pinus laricio) |  | 182 | 4,422 |
| Naritime Pine (Pinus Pinaster) |  |  | 2,871 |
| Prickle Pine (Pinus Muricata). | . |  |  |
| Sitka Spruce (Picea sitchensis) Other species | . . | 44 | 1,316 |
|  |  | 3,168 | 44,153 |

Plantation Output.

The plantation output of felled softwood timber in superficial feet and $£ 10,824$. Approximately 70 per cent. of the 1939-40 output consisted of thinnings and the balance of clear fellings.

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

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

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

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

The Wood Pulp Agreement Act 1936 (No. 4451) passed

The WoodPulp Agreement Act. on 27th December, 1936, is " an Act to ratify validate approve and otherwise give effect to an agreement between the Minister of Forests, the Forests Commission, and Australian Paper Manufacturers Limited with respect to the establishment of the wood-pulp industry." The agreement which is for fifty years provides inter alia that the Company (Australian Paper Manufacturers Limited) on its part shall, within three years of date of agreement, expend $\mathfrak{f} 300,000$ in establishing the wood-pulp manufacturing industry and, on the part of the Forests Commission, the terms and conditions on which the Commission will provide the minimum annual supply to the Company of the variety of pulp-wood timber prescribed in the agreement. The Commission is required to provide and the Company to take, on an ascending yearly scale, such supply of pulp-wood as will produce, in the first year of commercial production, 10,000 tons of wood-pulp, increasing to 25,000 tons in the fifth year and thereafter.

The first manufacturing unit-the Pilot Mill--erected

Production of Wood Pulp. in accordance with the above-mentioned agreement came into production in January, 1938, with a capacity production of 3,000 tons of air-dried pulp per annum. The main mill, which commenced production in October, 1939, has a capacity output of approximately 30,000 tons of kraft pulp per annum.

Consignment of pulp-wood from the State forests to

Supply of
Pulp-wood from state Forests. the mill at Maryvale commenced in October, 1937. During the year 1939-40, deliveries to the mill, from State forests only, totalled 496,648 cubic feet as compared with 63,758 cubic feet in 1938-39.

Timber
Following upon the disastrous bush fires of 1939 Salvage from
Burnt-out
(references to which appeared on pages 5, 286, 494, and Areas. 495 of the 1938-39 issue of the Year-Book) it was estimated that, of the $2,000,000,000$ superficial feet of fire-killed timber, $916,000,000$ superficial feet could be recovered. Under the provisions of the State Forests (Timber Salvage) Loan and Application Act 1939, salvage of Mountain Ash and Alpine Ash timber is proceeding. Up to the 30 th June, 1940, the quantity salvaged amounted to $131,000,000$ superficial feet.

## FISHERIES.

The numbers of men and boats engaged in the fishing Numbers of
men and industry at the different fishing stations throughout the boats engaged State are given in the following table for the year
in fishing. 1939-40 :-

> VICTORIAN FISHERIES—MEN AND BOATS EMPLOYED, $$
\begin{array}{l}1939-40 .\end{array}
$$



The quantities and values of fish sold in the Melbourne Fish market. Fish Market during each of the years 1938-39 and 1939-40 were as shown in the next table :-

## FISH SOLD IN THE MELbOURNE FISH MARKET, 1938-39 AND 1939-40.

|  |  | 1938-39. |  | 1939-40. |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Quantity. | Value. | Quantity. | Value. |
|  |  |  | $\mathfrak{£}$ |  | £ |
| Fresh Fish (Vietorian) | lb. | 12,508,391 | 217,750 | 11,681,145 | 241,410 |
| Crayfish | doz. | 42,307 | 42,307 | 40,339 | 50,424 |
| Imported Fish (fresh or frozen) | lb. | 2,989,476 | 110,358 | 2,941,232 | 118,500 |
| Oysters . | bags | 14,281 | 34,622 | 13,858 | 40,020 |
| Total | . | . | 405,037 | $\ldots$ | 450,354 |

In addition to the above, $42,750 \mathrm{lb}$. of prawns were sold in this market in 1939-40.

Yictorian
The quantity and value of fish caught in Victorian fish sold. waters and sold in the Melbourne and Ballarat markets and in other towns in Victoria in 1939-40 were as follows :-

| VICTORIAN |  | FISH SOLD IN 1939-40. |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Markets. |  | Quantity. |  | Value. |  |
|  |  | Fish. | Crayfish. | Fish. | Crayfish. |
|  |  | lb. | doz. | £ | $£$ |
| Melbourne | . | 11,681,145 | 5,699 | 241,410 | 6,554 |
| Ballarat | . | 189,839 | 136 | 3,773 | 156 |
| Other towns in Victoria | . | 15,194 | 66 | 302 | 76 |
| Total | - | 11,886,178 | 5,901. | 245,485 | 6,786 |

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

> VICTORIA-FISH IMPORTED FROM OVERSEA, $1938-39$ AND 1939-40.


## RABBITS, ETC.

Large quantities of frozen rabbits and hares and of
 exported. countries, as shown hereunder, for each of the past five years:-

VICTORIA-RABBITS AND HARES AND RABBIT AND HARE SKINS EXPORTED OVERSEA 1935-36 TO 1939-40.

| Year ended 30th June- |  |  | Frozen Rabbits and Hares. |  | Rabbit and Hare Skins. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Quantity. | Value. | Quantity. | Value. |
|  |  |  | pairs. | £ | 1 l. | £ |
| 1936 | - | $\cdots$ | 2,180,524 | 99,495 | 3,856,069 | 556,942 |
| 1937 | $\cdots$ | . | 1,340,572 | 58,331 | 2,972,466 | 573,354 |
| 1938 | $\cdots$ | $\cdots$ | 1,976,473 | 118,295 | 2,137,549 | 382,412 |
| 1939 | $\cdots$ | - | 2,062,183 | 127,591 | 2,608,931 | 221,538 |
| 1940 | -• | * | 2,284,537 | 135,397 | 3,591,899 | 405,646 |

Rabbits, \&ce., The quantities of rabbits and hares and wild-fowl sold
Melbourne
Fish Market. at the Melbourne Fish Market in each of the past five years were as shown in the following statement:-

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

|  | Year ended 30th June- |  |  |  | Rabbits and Hares. | wild-fowl. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1935 | .. | - | . | .. | $\begin{gathered} \text { pairs. } \\ 1,007,952 \end{gathered}$ | $\begin{aligned} & \text { brace. } \\ & \mathbf{1 , 7 7 6} \end{aligned}$ |
| 1936 | .. | . | . | . | 744,584 | -• |
| 1937 | . | .. | . | . | 498,888 | 2,316 |
| 1938 | . | . | . | . . | 536,256 | 3,000 |
| 1939 | . | . | $\cdots$ | . | 502,560 | 1,020 |
| 1940 | .. | .. | .. | .. | 559,428 | 6,444 |

## MINING.

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

> Miners' The taking out of a "Miner's Right " entitles the holder Rights. to prospect for gold on Crown lands. The " Right" may be had for any number of years not exceeding fifteen on payment of a fee at the rate of 2 s .6 d . per annum. The holder is entitled to take possession for mining purposes of a defined parcel of Crown lands which is called a "claim." "Claims" may also be taken up under certain conditions on private land. The revenue in 1939-40 from " Miners' Rights" was $£ 478$.

Leases of Crown land and of private land for the Mining Leases. purpose of mining for gold are granted for a term not exceeding fifteen years at a yearly rental of 2 s . 6 d . per acre, except for land that was alienated before 29th December, 1884, where the rental is 6 d . per acre. For mining leases of land to be worked by means of dredging or hydraulic sluicing, the yearly rental is 5 s. per acre. Other mineral and coal-mining leases are also issued at varying rates. The revenue from these sources in 1939-40 was $£ 9,506$.

Under the Mines (Petroleum) Acts petroleum mineral
Petroleum
Leases and Licences. leases of not more than 100 square miles and petroleum prospecting licences covering a maximum area of 200 square miles are granted, over Crown lands and land alienated since 1 st March, 1892, at yearly rentals of 6d. and ld. per acre, respectively. The revenue from these two sources in 1939-40 was $\mathfrak{f} 890$.

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

The area of Crown and private lands occupied under Area
occepied for the Mines Acts on 31st December, 1939, was 351,715 Mining. acres. The subjoined table shows the area being worked for different minerals under such Acts.

VICTORIA-AREA OCCUPIED UNDER THE MINES ACTS, 31st DECEMBER, 1939.
(Crown Land and Private Land.)


* Includes State Coal Mine Area, 7,575 acres.
$\dagger$ Includes State Electricity Commission Area, 2,800 acres.
f Includes Petroleum Prospecting Licences, 269,345 acres.

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

Oertain mineral leases include the right to mine for gold.

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

Advances to mining companies have since been made under the joint Commonwealth-State scheme for the development of metalliferous mining, the amount so expended between 1st July, 1935, and 30th June, 1940, being $£ 81,089$.

## VICTORIA-STATE EXPENDITURE AND REVENUE CONNECTED WITH MINING, 1935-36 TO 1939-40.



Total The mineral production of the State from lands mineral
proauction. occupied under the Mines Act (excluding stone raised in quarries and salt) for the year 1939 is summarized in the subjoined statement:-

VICTORIA-MINERAL PRODUCTION, 1939.


* Coucentrates. $\quad+$ Not available for publication.

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

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

GOLD PRODUCTION IN VICTORIA, 1851 TO 1939.

| Period. |  | Quantity <br> - (Gross ozs.). | Period. |  |  | Quantity (Fine ozs.). |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1851-40 | $\cdots$ | 23,334.263 | 1929 | - | . | 26,275 |
| 1861-70 | . | 16,276,566 | 1930 | . | . | 24,119 |
| 1871-80 | $\cdots$ | 10,156,297 | 1931 | - | . | 43,637 |
| 1881-90 |  | 7,103,448 | 1932 | . | . | 47,745 |
| 1891-1900 | . | 7,476,038 | 1933 |  | . | 58,183 |
| 1901-10 | -• | 7,095,061 | 1934 | . | . | 70,196 |
| 1911-15 | . | 2,161,349 | 1935 | $\cdots$ | $\cdots$ | 87,609 |
| 1916-20 | . | 905,561 | 1936 | . | . | 117,596 |
| 1921-25 | . | 421,250 | 1937 | $\cdots$ | . | 145,799 |
| 1926 | . | 49,078 | 1938 | . | . | 144,243 |
| 1927 | . | 38,538 | 1939 | - | . | 156,522 |
| 1928 | - | 33,917 |  |  |  |  |

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

From 1906 until 1930 the yield of gold continued to decrease, that for 1930 being the lowest since 1851. Since 1930, when both the State and Commonwealth Governments undertook a campaign to encourage prospecting and mining, particularly amongst the unemployed, there has been a gradual increase in the production of gold throughout the State. A steady increase in the world price of gold and the depreciation of the Australian currency in terms of gold have further stimulated the mining industry, the production for the past three years in particular having substantially increased. The average Australian mint price of gold for the year 1939 was $£ 9$ 2s. 9d. per fine oz.

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

The yields in fine ounces in the other principal gold-producing States in 1939 were 1,214,238 ounces in Western Australia, 147,248 ounces in Queensland, and 87,189 ounces in New South Wales.

The total production of the Commonwealth in fine ounces was 713,882 in 1932, 830,332 in $1933,887,490$ in 1934, 914,736 in 1935, $1,178,581$ in 1936, 1,381,135 in 1937, 1,592,034 in 1938, and 1,645,697 in 1939.

The total production of gold in the world in fine ounces, as shown in the United States Mint Report, was 24,098,676 in 1932, 25,400,295 in 1933, $27,372,374$ in 1934, 29,999,245 in 1935, 32,930,554 in 1936, $35,118,298$ in 1937, $37,703,334$ in 1938, and $39,651,307$ in 1939.

The yield of gold (given in gross ounces) for 1938 and
Mining
district
Eold yields. 1939 in each mining district of the State, as estimated by
the mining registrars, is shown in the following table :-
VICTORIA-DISTRIC'T YIELDS OF GOLD (ALLUVIAL AND QUARTZ) 1938 AND 1939.

| Mining District. | 1938. |  |  | 1939. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Alluvial. | Quartz. | Total. | Alluvial. | Quartz. | Total. |
|  | oz. | oz. | oz. (gross) | oz. | oz. | $\stackrel{\text { oz. }}{(\text { gross })}$ |
| Ararat and Stawell .. | 534 | 1,531 | 2,065 | 347 | 1,076 | 1,423 |
| Ballarat | 3,987 | 10,248 | 14,235 | 2,825 | 6,874 | 9,699 |
| Beechworth | 16,064. | 19,051 | 35,105 | 10,595 | 28,521 | 39,116 |
| Bendigo $\therefore$ | 2,346 | 36,552 | 38,898 | 2,671 | 50,698 | 53,369 |
| Castlemaine | 7,011 | 33,525 | 40,536 | 20,439 | 28,392 | 48,83.1 |
| Gippsland | 8,403 | 359 | 8,762 | 3,904 | 434 | 4,338 |
| Maryborough | 5,882 | 15,631 | 21,513 | 6,709 | 8,620 | 15,329 |
| Total | 44,217 | 116,897 | 161,114 | 47.490 | 124,615 | 172,105 |

Government batteries, cyanidation, and dredging and sluicing.
VICTORIA-GOVERNMENT BATTERIES, CYANIDATION, AND DREDGING AND SLUICING, 1934 TO 1939.

| Year. | Government Batteries. |  |  | Cyanidation. |  |  | Dredging and Sluicing. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Bat- } \\ \text { teries. } \end{gathered}$ | Quantity of Ore Treated. | $\begin{gathered} \text { Yield } \\ \text { of } \\ \text { Gold. } \end{gathered}$ |  | Quantity of Tailings Treated. | $\begin{gathered} \text { Yield } \\ \text { of } \\ \text { Gold. } \end{gathered}$ | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Plants. } \end{gathered}$ | Quantity of Materlal Treated. | $\begin{gathered} \text { Yield } \\ \text { of } \\ \text { Gold. } \end{gathered}$ |
| 1934 | 34 | $\begin{aligned} & \text { tons. } \\ & 17,721 \end{aligned}$ | $\stackrel{\text { Oz. }}{\text { cher }}$ | 86 | tons. <br> 421,104 | $\xrightarrow{\text { Oz. }}$ | 12 | cub. yds. $1,509,756$ | 62 |
| 1935 | 34 | 18,070 | 10,298 | 121 | 630,318 | 22,460 | 13 | 2,328,859 | 9,343 |
| 1936 | 32 | 16,659 | 8,547 | 141 | 794,640 | 28,565 | 23 | 3,198,883 | 12,544 |
| 1937 | 32 | 16,495 | 7,785 | 157 | 1,233,914 | 41,923 | 20 | 4,353,976 | 19,032 |
| 1938 | 32 | 15,497 | 5,580 | 132 | 1,202,623 | 40,384 | 17 | 4,871,563 | 22,013 |
| 1939 | 31 | 12.161 | 4,328 | 150 | 1,358,304 | 43,458 | 31 | [5,349,845 | 32,093 |

The first Government battery was erected in 1897. Since that date Government batteries have crushed 221,852 tons of ore for 120,784 ounces of gold.

Up to the end of $1939,21,784,853$ tons of tailings had been treated by the cyanide and other processes, and $1,484,744$ ounces of gold had been won therefrom.

Since the inception of dredge and sluice mining 2,007,691 ounces of gold have been won by these systems.
coai.
Bituminous coal was mined during 1939 at Wonthaggi, Jumbunna, Korumburra and Kilcunda, and brown coal at Morwell and Gelliondale. The coal resources of Victoria have been described in detail in previous issues of the Year Book.

Production of The average annual production and value per ton of Black coal, black and brown coal, and the production of briquettes up and briquettes. to the end of 1939 are given in the following table :-

VICTORIA-COAL PRODUCTION AND VALUE PER TON.

| Period. | Black Coal. |  | Brown Coal. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Annual Production. | Value per Ton at Pit's Mouth. | Annual Production. | Cost of Production per Ton at Mine. | BriquettesAnnual Production. |
|  | tons. | $s . \quad d$. | tons. | s. d. | tons. |
| Prior to 1892 | 77,914 | 188 |  |  |  |
| 1892-1900 | 184,517* | 911 |  | 610 |  |
| 1901-10 | 168,548* | 118 | 81,748† | 610 | . |
| 1911-15 | 608,512* | 92 |  |  |  |
| 1916-20 | 437,833* | 1511 | 76,514* | 69 | . |
| 1921-25 | 520,705* | 228 | 258,094* | 49 | 77,945 $\ddagger$ |
| 1926 | 591,001 | 223 | 957,935 | 311 | 95,477 |
| 1927 | 684,245 | 224 | 1,455,482 | 30 | 121,644 |
| 1928 | 658,323 | $22 \quad 2$ | 1,591,858 | 26 | 131,349 |
| 1929 | 703,828 | 231 | 1,741,176 | 21 | 146,548 |
| 1930 | 703,487 | 230 | 1,831,507 | 111 | 180,905 |
| 1931 | 571,342 | 128 | 2,194,452 | 23 | 290,558 |
| 1932 | 432,353 | 129 | 2,612,512 | 21 | 319,979 |
| 1933 | 523,000 | 127 | 2,580,060 | 25 | 310,767 |
| 1934 | 356,958 | 121 | 2,617,534 | 20 | 316,594 |
| 1935 | 476,495 | 1110 | 2,221,515 | 23 | 317,200 |
| 1936 | 426,725 | 1111 | 3,044,897 | 22 | 355,088 |
| 1937 | 257,945 | 120 | 3,393,919 | 111 | 390,493 |
| 1938 | 307,258 | $12 \quad 3$ | 3,675,450 | 111 | 414,059 |
| 1939 | 364,895 | 1210 | 3,651,014 | 21 | 414,598 |

[^10]The quantities of coal which were produced in the other States in 1939 were as follows:-New South Wales, 11,195,832 tons; Queensland, 1,317,488 tons; Western Australia, 557,535 tons; and Tasmania, 99,392 tons.

> Tin Production in Victoria.

According to records supplied to the Mines Department by the various Mining Companies, the amount of tin concentrates obtained in Victoria up to 31st December, 1939, was 17,951 tons, valued at $£ 1,133,029$. A large proportion of this yield was obtained as an incidental return from gold-mining operations

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

The numbers of fatal and of non-fatal accidents in

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

VICTORIA-MINING ACCIDENTS, 1935 TO 1939.


- Estimated in 1939-alluvial, 2,820; quartz, 3,349.

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

VICTORIA-QUARRIES, 1934-35 TO 1939-40.

| Yea | Number of Returns. | Main kinds of stone extracted. |  |  |  | Approximate Yalue of Stone Ralsed. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  |  |  |
|  |  | Bluestone. | Sandstone. | Granite. | Limestone. |  |
|  |  | c. yds. | c. yds. | tons. | tons. | $\pm$ |
| 1935 | 77 | 1,026,859 | 6,667 | 5.917 | 273,951 | 374,454 |
| 1936 | 76 | 1,206,255 | 4,180 | 7,389 | 307,058 | 387,554 |
| 1937 | 76 | 1,306,078 | 6,272 | 8,329 | 274,795 | 462,359 |
| 1938 | 72 | 1,154,852 | 30,200 | 6,824 | 296,735 | 403,838 |
| 1939 | 81 | 1,150,303 | 31,477 | 7,383 | 305,904 | 414,311 |
| 1940 | 86 | 1,222,818 | 23,600 | 5,646 | 353,031 | 466,834 |

[^11]In considering the preceding table, however, it should be borne in mind that stone, particularly that erushed, is not all obtained from registered quarries, which are those quarries with a fixed plant in regular and permanent production. At irregular intervals, many unregistered quarries are exploited, with mobile or portable crushing plants, by contractors who require material from a source as adjacent as possible to the work for which they are suppliers. Outcrops of stone, mine-tailings heaps, \&c., are also worked by such crushers.

Much of the sand and gravel used in road, railway, and general building is likewise obtained from sources other than regular sand and gravel pits.

The Municipalities, Country Roads Board, and Railways Departnent have furnished returns from which the table hereunder has been compiled.

VICTORIA-QUANTITY OF STONE, ETC., USED BY MUNICIPALITIES, COUNTRY ROADS BOARD, AND RAILWAYS DEPARTMENT FOR ROAD MAKING, REPAIR, and maintenance.

| Material. | Municipalities. |  | Railways. |  | Country Roads Board. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1938-39. | 1939-40. | 1938-39. | 1939-40. | 1938-39.* | 1939-40. |
|  | c. yds. | c. yds . | c. yds. | c. yd s. | c. yds . | c. yds. |
| \&c. | 736,944 | 698,742 | 97,836 | 85,083 |  | L18,480 |
| Salamander | 5,017 | 12,54.8 | . . | . . |  | 6,880 |
| Scoria . | 89,314 | 47,745 |  |  | - | 1,197 |
| Sandstone | 65,729 | 78,488 | 2,593 | 2,929 | - | 23,110 |
| Limestone | 238,859 | 320,781 | . . | . . | . | 40,640 |
| Quartzite-Quartz | 19,094 | 28,438 |  |  |  | 11,360 |
| Toscanite | 14,280 | 3,440 | 20,082 | 8,775 | - | 18,990 |
| Tronstone | 6,072 | 5,269 | . . | . . | - |  |
| Shale | 10,652 | 6,356 | $\cdots$ | . | . | 23,600 |
| Schist | 1,622 | 9,229 |  |  | . |  |
| Granite | 16,152 | 13,760 | 7,453 | 6,504 | . | 19,600 |
| Other stone | 11,729 | 41,469 |  |  | . | 1,000 |
| Gravel | 916,725 | 999,182 | 59,130 | 62,380 |  | 319,130 |
| Sand | 264,102 | 361,42l |  |  | . | 60,320 |
| Totals | 2,396,291 | 2,626,868 | 187,094 | 165,671 | $\cdots$ | 644,307 |

[^12]
## THE SEARCH FOR OIL IN VICTORIA.

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

The search was continued during 1940, when six additional bores were completed, including one to the greatest depth yet attained by Government plants in Victoria-4,004 feet. This bore is situated at Holland's Landing, in the parish of Bengworden South, on the western shore of Lake Victoria. The other bores were in the Lakes Entrance district, but only one obtained any trace of oil, and no new or outstanding discoveries were recorded.

At the end of 1940 , the total number of bores drilled under the Commonwealth-State scheme was 41 for a total footage exceeding . 56,000 feet.

The total quantity of oil produced to 31st December, 1939, from oil wells drilled in the Lakes Entrance and Metung areas was 111,283 gallons. Production for the year 1940 is not available for publication.

## MANUFACTURING IN VICTORIA.

## Industrial Progress.

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

A constant upward trend then continued until 1938-39 when export prices began to fall and, unfortunately, at the same time, Victoria experienced a severe drought. The manufacturing industries were adversely affected and employment showed a tendency to decline until the outbreak of war in September, 1939, when the trend was again reversed.

The stabilization of wool prices at a higher level for the period of the war and the substantial purchases of other primary products by the British Government affected the local price structure considerably. Manufacturing was stimulated by large orders of equipment for the armed forces, and production of civilian goods reflected an increased demand from workers previously unemployed.

A comparison between the year 1930-31, the worst year of the depression, with the latest statistical year 1939-40 shows that the number of factories has iucreased by 1,016 ( $12 \cdot 4$ per cent.), the persons employed therein by 86,445 ( $68 \cdot 6$ per cent.), the total salaries and wages paid by $£ 18,641,037$ ( $80 \cdot 1$ per cent.), the value of materials by $£ 43,012,697$ ( $85 \cdot 4$ per cent.), and the value of output by $£ 80,878,606$ ( $86 \cdot 6$ per cent.).

It will therefore be seen that, not only have Victorian maniufacturing industries fully recovered from the depression of 1930 and following years, but that they have since made further progress. When consideration is given to the many advantages possessed by this State as a manufacturing field, it is reasonable to anticipate that, with efficient organization both of production and of the markets therefor, this progress should continue. Victoria has a comparatively compact territory producing a variety of raw materials, a temperate climate, an intelligent labour supply, large power resources, a growing home market, an extensive network of State-owned railways served by constantly improving feeder roads, and a good system of highways and main roads. The Commonwealth Government's policy of protection, by tariffs, for local industries has no doubt been of assistance in attracting capital for investment in manufacturing industries in this State.

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

## VICTORIA-GROWTH IN THE MANUFACTURING INDUSTRIES.

\begin{tabular}{|c|c|c|c|c|c|c|}
\hline Year.

1 \& $$
\begin{gathered}
\text { Number } \\
\text { of }
\end{gathered}
$$

Factories \& Number of Persons employed. \& | Value of Plant, Machinery, Land, and Buildings. |
| :--- |
| 4 | \& Amount of Salaries and Wages paid.

\[
5

\] \& | Value of Materials used (including containers). |
| :--- |
| 6 | \& | Value of Output. |
| :--- |
| 7 | <br>

\hline \& \& \& £ \& £ \& $\pm$ \& $\mathfrak{f}$ <br>
\hline 1919-20.. \& 6,038 \& 136,522 \& 30,804,520 \& 17,702,173 \& 65,563,104 \& 101,475,363 <br>
\hline 1920-21.. \& 6,532 \& 140,743 \& 35,392,735 \& 21,377,216 \& 65,401,425 \& 106,008,294 <br>
\hline 1921-22.. \& 6,753 \& 144,876 \& 40,992,280 \& 23,846,495 \& 60,352,561 \& 106,243,181 <br>
\hline 1922-23.. \& 7,096 \& 152,625 \& 46,423,240 \& 25,457,192 \& 62,568,163 \& 111,286,343 <br>
\hline 1923-24.. \& 7,289 \& 156,162 \& 53,196,475 \& 27,472,084 \& 62,217,874 \& 113,921,927 <br>
\hline 1924-25.. \& 7,425 \& 154,158 \& 61,031,975 \& 29,057,052 \& 65,205,233 \& 118,177,398 <br>
\hline 1925-26. . \& 7,461 \& 152,959 \& 60,396,500 \& 29,329,400 \& 67,164,445 \& 119,986,439 <br>
\hline 1926-27.. \& 7,690 \& 161,639 \& 63,850,005 \& 31,822,589 \& 69,816,935 \& 127,397,951 <br>
\hline 1927-28.. \& 8,245 \& 160,357 \& 67,507,020 \& 32,087,851 \& 69,637,778 \& 128,465,317 <br>
\hline 1928-29.. \& 8,197 \& 156,568 \& 69,909,370 \& 31,533,586 \& 70,100,456 \& 127,897,463 <br>
\hline 1929-30. \& 8,195 \& 151,009 \& 72,011,020 \& 30,517,535 \& 66,770,302 \& 122,811,099 <br>
\hline 1930-31.. \& 8,199 \& 126,016 \& 70,990,071 \& 23,279,689 \& 50,380,110 \& 93,425,795 <br>
\hline 1931-32. \& 8,204 \& 128,265 \& 68,350,575 \& 21,258,599 \& 51,727,685 \& 93,388,617 <br>
\hline 1932-33. \& 8,612 \& 144,428 \& 67,827,428 \& 23,096,512 \& 56,757,681 \& 102,085,429 <br>
\hline 1933-34. \& 8,896 \& 156,334 \& 68,834,279 \& 24,819,143 \& 59,776,270 \& 108,496,310 <br>
\hline 1934-35. \& 9,100 \& 169,691 \& 70,591,677 \& 27,318,815 \& 63,387,061 \& 117,182,857 <br>
\hline 1935-36.. \& 9,160 \& 183,390 \& 71,872,906 \& 30,593,707 \& 74,568,265 \& 134,043,170 <br>
\hline 1936-37.. \& 9,165 \& 191,383 \& 75,161,894 \& 33,192,904 \& 78,233,032 \& 142,692,192 <br>
\hline 1937-38.. \& 9,241 \& 201,789 \& 77,207,830 \& 37,228,543 \& 85,926,478 \& 157,050,725 <br>
\hline 1938-39.. \& 9,250 \& 201,831 \& 80,652,988 \& 38,305,885 \& 80,721,680 \& 152,967,611 <br>
\hline 1939-40.. \& 9,215 \& 212,461 \& 84,610,062 \& 41,920,726 \& 93,392,807 \& 174,304,401 <br>
\hline
\end{tabular}

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

Factories and
Wages Board
Legislation.

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

## Statistics Act 1928.

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

## Added Value.

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

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

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

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

The subjoined table shows the value added per person employed in each class of manufacturing industry for the year ended 30th June, 1940.

As the extent of the mechanization of particular industries affects the value added by manufacturing, comparisons between the different classes of industry would have to take into account interest on the capital employed and depreciation of plant and machinery.
VIOTORIA-VALUE ADDED BY PROCESS OF MANUFACTURE, 1939-40.

| Class of Industry. | Average Number of Persons Employed. | Value Added. | Value Added per l'erson Employed. |
| :---: | :---: | :---: | :---: |
|  |  | £ | $\mathfrak{\text { ¢ }}$ s. $d$. |
| 1. Treatment of non-metalliferous mine and quarry products | 3,051 | 1,605,052 | $526 \quad 1 \quad 6$ |
| 2. Bricks, pottery, glass, \&c. .. | 4,384 | $1,615,02]$ | $368 \quad 710$ |
| 3. Chemicals, dyes, explosives, paint, oils, and grease | 11,827 | 5,614,825 | 47414 11 |
| 4. Industrial metals, machines, implements and conveyances .. | 53,963 | 17,872,805 | $331 \quad 4 \quad 1$. |
| 5. Precious metals, jewellery, and plate | 2,423 | 625,099 | $25719 \quad 9$ |
| 6. Textiles and textile goods (not dress) | 29,379 | 8,233,305 | 280411 |
| 7. Skins and leather (not clothing or footwear) | 4,607 | 1,561,268 | $\begin{array}{llll}338 & 17 & 10\end{array}$ |
| 8. Clothing .- . . . | 39,442 | 8,245,028 | $209 \quad 0 \quad 10$ |
| 9. Food, drink, and tobaceo | 28,112 | 14,096,240 | 50188 |
| 10. Woodworking and basketware | 7,948 | 2,651,394 | 3331110 |
| 11. Furniture, bedding, \&c. .. | 4,750 | 1,368,567 | $288 \quad 2 \quad 5$ |
| 12. Paper, stationery, printing, bookbinding, \&c. | 13,928 | 5,174,707 | $\begin{array}{llll}371 & 10 & 8\end{array}$ |
| 13. Rubber | 3,167 | 1,807,281 | $57013 \quad 2$ |
| 14. Musical instruments | 99 | 31,820 | 32183 |
| 15. Miscellaneous products | 3,058 | 883,481 | $28818 \quad 2$ |
| 16. Heat, light, and power | 2,323 | 2,642,538 | 1,137111 |
| Total | 212,461 | 74,028,431 | 348 8 8 |

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

VICTORIA—VALUE ADDED BY PROCESS OF MANUFAOTURE.

| Year. 1. | Value of Output. <br> 2. | Expenses of Manufacturing.* 3. | Valine Added <br> 4. | Average Number of Persons Employed. <br> 5. | Value Added per Person Employed. <br> 6. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | £ | $\mathfrak{£}$ | £ |  | £ s. $d_{\text {d }}$ |
| 1929-30 | 122,811,039 | 71,5ă1,731 | 61,259,368 | 151,009 | $339 \quad 811$ |
| 1930-31 | 93,425,795 | 54,011,827 | 39,413,968 | 126,016 | $31215 \quad 5$ |
| 1931-32 | $\mathbf{9 3 , 3 8 8 , 6 1 7}$ | 55,568,989 | 37,819,628 | 128,265 | $29417 \quad 1$ |
| 1932-33 | 102,085,429 | 61,004,327 | 41,081,102 | 144,428 | 284810 |
| 1933-34 | 108,496,310 | 64,294,665 | 44,201,645 | 156,334 | 282149 |
| 1934-35 | 117,182,857 | 68,420,266 | 48,762,591 | 169,691 | $287 \quad 7 \begin{array}{lll} \\ & \end{array}$ |
| 1935-36 | 134,043,170 | 79,999,480 | 54,043,690 | 183,390 | 2941310 |
| 1936-37 | 142,692,192 | 83,979,911 | $58,712,281$ | 191,383 | 306157 |
| 1937-38 | 157,050,725 | 92,161,335 | 64,889,390 | 201,789 | 321115 |
| 1938-39 | 152,967,611 | 86,971,542 | 65,996,069 | 201,831 | 32619 |
| 1939-40 | 174,304,401 | 100,275,970 | 74,028,431 | 212,461 | 34888 |

[^13]Production of The classification of industries, as adopted in 1930, different
industries, is set out in the next table. The data shown was 1938-39. compiled from returns rendered compulsorily by all factory proprietors in Victoria.

VICTORIAN FACTORIES-POWER, WORKERS, MANUFAC

| Nature of Industry. | Factories. | Rated <br> Horse- <br> power of <br> Engines. | Average Number Employed. |  | Salaries and Wages Paid. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Males. | Females. |  |
|  | Fo. | H.P. | No. | No. | $\pm$ |
| Class 1.-Non-metalliferous Mine and Quarry Products | 172 | 32,730 | 2,965 | 86 | 732,310 |
| Lime, plaster, and asphalt | 78 | 3,768 | $9+8$ | 37 | 230,648 |
| Marble, slate, \&c. | 41 | 1,637 | 374 | 8 | 102,792 |
| Cement and cement goods | 42 | 8,914 | 1,292 | 18 | 29, 675 |
| Other.. .. .. | 11 | 18,411 | 351 | 22 | 101,195 |
| class 2.-Bricks, Pottery, Glass, \&c. | 111 | 18,104 | 4,016 | 368 | 944,339 |
| Bricks, tiles, and firebricks | 60 | 12,842 | 2,060 | 86 | 472,019 |
| Earthenware, china, and porcelain | 23 | 1,613 | 969 | 165 | 213,540 |
| Glass, including bottles <br> Modelling, \&c... | 25 3 | 3,6+7 | 970 17 | 117 | 254,652 4,128 |
| Class 3.-Chemicals, Dyes, Explosives, Paint, Oils and Grease | 234 | 30,253 | 8,691 | 3,136 | 2,572,493 |
| Chemicals, drugs, and medicines.. | * 65 | 2,918 | $*^{973}$ | 959 | 387,928 |
| White lead, paints, and $\stackrel{\rightharpoonup}{\text { varnish }}$ | $4 ?$ | 1,263 | 340 | 51 | 89,51 4 |
| Oils, vegetable (including oilcake) | 21 | 314 | 170 |  | 32,386 |
| Oils, mineral . . . .. |  |  |  |  |  |
| Boiling-down, tallow refining, and bone milling works .. | 24 | 2,517 | 341 | 18 | 84,153 |
| Soap and candles . | 16 | 2,1+2 | 544 | 169 | 141,652 |
| Chenical fertilizers | 7 | 8,681 | 982 | 12 | 246,325 |
| Tnks, polishcs, de. | 29 | 928 | $\stackrel{247}{249}$ | 170 467 | 89,070 117,334 |
| Matches | 27 | 1,017 | $\begin{array}{r}249 \\ 4,845 \\ \hline\end{array}$ | 1467 1,286 | 1,384,131 |
| Other | 27 | 10,443 | 4,845 | 1,286 | 1,384,1.31 |
| Class 4.-Industrial Metals, Machines, Implements, and Conveyances | 2,497 | 91,638 | 5C,720 | 3,243 | 12,242,348 |
| Smelting, refining, \&c., of iron and steel | * | * | * | * | * |
|  | 395 | 25,299 | 9,736 | 349 | 2,448,981 |
| Extracting and refining of other metals and alloys |  |  |  |  | $\sim^{*}$ |
| Electrical apparatus . . . | 131 | 3,920 | 3,724 | 619 | 763,568 |
| Tram and railway workshops | 25 | 5,827 | 5,811 | 5 | 1,478,938 |
| Motor vehicles and cycles- <br> (i) Construction and assembly | 25 |  | 1,443 | 109 | +20, +83 |
| (ii) Repairs .. .. .. | 952 | +1,235 | 5.031 | 236 | 1,134,012 |
| Motor-bodies | 91 | +,75 | 2.959 | 50 | 708,179 |
| Horse-drawn velicles | 1.03 | +69 | 370 | 15 | 69,179 |
| Cycle and motor accessories | 40 | 2.373 | 1.215 | 119 | 27t, 151 |
| Aeroplanes |  |  |  |  |  |
| Ship and boat building and repairing, marine engineering.. | c |  |  |  |  |
| Cutlery and small tools (not |  |  |  |  |  |
| machine tools) <br> Agricultural implements | 39 79 |  | 614 3,618 | 163 | 1298,420 |
| Agricultural implements <br> Brass and copper |  | $\cdots$ |  |  |  |
| Galvanized-iron working and tilismithing | * |  | * |  |  |
| Wireworking (including nails) |  |  |  |  |  |
| Art metal works | 18 | 458 | 300 | 10 | 73, 124 |
| Stoves and ovens | 23 | 1,911 | 1,121 | 80 | 260,583 |
| Gas fittings and meters |  | 28 | ${ }^{2} 212$ |  | $\stackrel{56,469}{*}$ |
| Lead mills - |  |  |  | 200 |  |
| Wireless apparatus | 18 | 571 185 | 1997 | 18 |  |
| Die sinking and engraving Other metal works | 5 | 135 27.744 | 16.311 | ${ }_{\text {1,238 }}^{1,28}$ | 3,256,173 |

[^14]TUR[NG COSTS AND VALUE OF PRODUCTION, 1939-40.

| Fuel and Light Used. | Tubricating Oil and Water. | Repairs to Plant, \&e. | Materials Used, Including Containers. | Articles Produced or Work Done. | Value Added. | $\begin{gathered} \text { Land } \\ \text { and } \\ \text { Buildings. } \end{gathered}$ | $\begin{gathered} \text { Plant } \\ \text { and } \\ \text { Machinery. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| £ | £ | $\pm$ | £ | $£$ | £ | $\mathcal{E}$ | $\pm$ |
| 231,409 | 14,487 | 102,881 | 1,164,211 | 3,118,040 | 1,605,052 | 782,555 | 1,611,636 |
| 36,022 | 3,219 | 14,735 | 514,705 | 1,071,971 | 503,230 | 167,016 | 201,742 |
| 4,722 | 938 | 4,172 | 55,101 | 210,394 | 145,461 | 47,741 | 28,474 |
| 133,359 | 4,394 | 72,270 | 421,818 | 1,356,614 | 724,833 | 329,788 | 702,176 |
| 57,306 | 5,996 | 11,704 | 172,527 | 479,061 | 231,528 | 238,010 | 669,244 |
| 307,046 | 18,000 | 91,081 | 394,261 | 2,423,409 | 1,615,021 | 822,681 | 853,810 |
| 183,294 | 10,611 | 43,345 | 97,192 | 1,027,857 | 693,415 | 363,764 | 459,888 |
| 55,949 | 1,582 | 19,541 | 59,583 | 459,645 | 322,990 | 180,121 | 147,563 |
| 67,671 | 3,762 | 28,151 | 236,156 | 928,871 | 593,131 | 272,629 | 245,453 |
| 132 | 45 | 44 | 1,330 | 7,036 | 5,485 | 6,167 | 906 |
| $\mathbf{2 5 5 , 4 6 3}$ | 44,500 | 223,402 | 6,154,753 | 12,292,943 | 5,614,825 | 3,517,205 | 3,304,899 |
| 34,288 | 5,910 | 1.6,169 | 1,172,465 | 2,472,169 | 1,243,337 | 576,577 | 363,624 |
| 6,278 | 645 | 4,827 | 334,996 | 566,192 | 219,446 | 144,114 | 51,416 |
| 3,992 | * 519 | 3,001 | 207,728 | 284,324 | $\underset{*}{69,084}$ | $\stackrel{39,149}{*}$ | 27,306 |
| 21,086 | 2,239 | 8,136 | 276,789 | 453,285 | 145,035 | 146,876 | 82,193 |
| 38,426 | 5,208 | 34,608 | 542,553 | 1,398,010 | 777,215 | 207,550 | 2+2,964 |
| 41,016 | 5,691 | 61,379 | 998,676 | 1,663,523 | 556,761 | 546,577 | 856,109 |
| 4,255 | 910 | 2,308 | 482,992 | 795,703 | 355,238 | 134,379 | 47,433 |
| 5,565 | 694 | 6,193 | 263,288 | 511,577 | 235,837 | 115,898 | 174,923 |
| 100,557 | 22,684 | 86,781 | 1,925,266 | 4,148,160 | 2,012,872 | 1,606,085 | 1,458,931 |
| 608,205 | 57,745 | 561,457 | 14,834,630 | 33,932,842 | 17,872,805 | 10,077,568 | 6,913,678 |
| * | * | * | * | * | * | * | * |
| 93,181 | 12,936 | 108,645 | 3,140,829 | 7,157,802 | 3,802,211 | 1,623,464 | 1,632,491 |
| * | * | * | * | * | * | * | * |
| 26,389 | 2,367 | 29,089 | 966,240 | 2,298,888 | 1,274,803 | 638,066 | 310,388 |
| .51,486 | 1,460 | 35,074 | 1,143,183 | 3,013,439 | 1,782,236 | 1,513,211 | 1,142,015 |
| 15,717 | 1,504 | 16,988 | 246,879 | 834,937 | 553,849 | 469,849 | 87,177 |
| 42,464 | 7,127 | 29,603 | 893,562 | 2,532,008 | 1,559,252 | 1,520,898 | 384,555 |
| 15,721 | 2,500 | 27,206 | 1,195,240 | 2,413,362 | 1,172,695 | 644,852 | 260,188 |
| 3,552 | 562 | 2,032 | 42,476 | 134,069 | 85,447 | 96,401 | 21,024 |
| 15,061 | $\underset{*}{2,477}$ | 16,919 | $\underset{\sim}{238,437}$ | 716,901 | 444,007 | $\underset{*}{253,497}$ | $\underset{*}{190,326}$ |
| * | * | * | * | * | * | * | * |
| 7,844 | 701 | 5,809 | 156,927 | 338,889 | 167,608 | 116,966 | 130,860 |
| 55,431 | 4,724 | 55,187 | 890, 220 | 2,142,634 | 1,137,072 | 613,775 | 563,275 |
| * | * | * | * | * | * | * | * |
| * | * | * | * | * | * | * | * |
| 2,327 | 123 | 1,903 | 78,128 | 187,571 | 105,090 | 49,672 | 29,339 |
| -32,077 | 1,362 | 14,090 | 296,916 | 780,870 | 436,425 | 113,197 | 149,687 |
| 2,043 | -81 | 2,655 | 35,466 | 116,045 | 75,800 | 23,794 | 4,911 |
| 3,849 | 024 | 8,317 | 317,221 | 535,157 | 205,146 | 161,227 | 66,067 |
| 794 | 116 | 1,345 | 26,905 | 79,700 | 50,540 | 33,153 | 18,562 |
| 238,269 | 19,081 | 206,595 | 5,166,001 | 10,650,570 | 5,020,624 | 2,305,546 | 1,922,813 |

Victorian Factories-Power, Workers, Manufacturing*

| Nature of Industry. | Factories. | Rated <br> Horse- <br> power of <br> Engines. | Average Number Employed. |  | Salaries and Wages Paid. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Males. | Females. |  |
|  | No. | H.P. | No. | No. | £ |
| Class $\begin{gathered}\text { 5.--Precious } \\ \text { Jewellery, }\end{gathered}$ | 143 | 2,805 | 2,059 | 364 | 463,479 |
| Jewellery | 65 | 428 | 464 | 159 | 117,189 |
| Watches and clocks | 16 | 244 | 319 | 100 | 81,735- |
| Gold, silver, and electroplate | 56 | 1,984 | 1,217 | 102 | 250,959 |
| Other. . | 6 | 149 | 59 | 3 | 13,596 |
| Class 6.-Textiles and Textile Goods (not dress) .. | 393 | 51,536 | 12,151 | 17,228 | 4,590,2233 |
| Cotton . . . . | 22 | 6,601 | 749 | 1,333 | 339,44i |
| Wool, worsted and shoddy (iiseluding wool scouring) | 56 | 30,917 | 5,478 | 5,561 | 1,823,1360 |
| Hosiery and other knitted goods | 231 | 6,733 | 4,295 | 9,071 | 1,928,655 |
| Silk, natural and artificial .. |  | 1,241 | 183 | 454 | 89,902 |
| Rope and cordage .. |  |  |  |  |  |
| Canvas goods, tents, de. | 22 | 95 | 120 | 128 | 49,809 |
| Bass and sacks Other | 33 | 5,989 | 1,396 | 681 | 359,280. |
| Class 7.-Skins and Leather (not Clothing or Footwear) | 201 | 10,776 | 3,598 | 1,009 | 940,629 |
| Furriers and fur dressing | 75 | 409 | 449 | 404 | 149,038 |
| Felluongery . . . | 21 | 1,987 | 447 |  | 120,040 |
| Tanning and leather dressing | 40 | 8,038 | 2,153 | 29 | 496,068 |
| Saddlery, harness, and whips | 10 | 50 | 65 | 17 | 15,438 |
| Machine lelting .. | 6 | 105 | 69 | 3 | 18,264 |
| Bags and trums | 40 | 141 | 372 | 491 | 124,589 |
| Other leather goods | 9 | 46 | 43 | 65 | 17,192 |
| Class 8.--Clothing | 1,778 | 11,976 | 10,746 | 28,696 | 5,748,340 |
| Tailoring and slop clothing | 367 | 1,064 | 1,974 | 6,390 | 1,237,387 |
| Waterproof and oilskin clothing.. | 8 | 147 | 103 | 378 | 71,126. |
| Dressmaking | 445 | 1,048 | 617 | 7,669 | 1,032,676 |
| Millinery .. | 60 | 135 | 101 | 1,149 | 148,309 |
| Shirts, collars, and underclothing | 96 | 990 | 419 | 4,286 | 583,197 |
| Stays and corsets .- .. | 11 | 329 | 177 | 1,004 | 137,934 |
| Handkerchiefs, ties, and scarves.. | 19 | 44 | 41 | 372 | 49,259 |
| Hats and caps | 34 | 1,229 | 687 | 880 | 268,044 |
| Gloves |  | 13 | 24 | 75 | 11,137 |
| Poots and shoes | 168 | 4,518 | 5,099 | 5,382 | 1,783,144 |
| Boot repairing. . . | 489 | 625 | 683 | 13 | 118,428. |
| Boot accessories .- | 13 | 209 | 157 | 127 | 46,048 |
| Unlmrellas and walking sticks | 3 | 7 | 19 | 32 | 9,452 |
| byeworks and cleaning.. | 43 | 1,509 | 566 | 570 | 194,374 |
| Other.. | 15 | 109 | 79 | 359 | 57,825. |
| Class    <br> Tobacco ..-Food, Drink, and | 1,471 | 90,162 | 20,096 | 8,016 | 6,023,176 |
| Grain milling | 36 | 8,440 | 1,016 | 38 | 283,595 |
| Cereal foods and starch | 23 | 6,760 | 630 | 366 | 203,681 |
| Cattle and poultry foods | 6 | 233 | 29 | 2 | 8,500 |
| Chaff-eutting and corn crushing. | 96 | 2,278 | 377 | 7 | 76,397 |
| Bakeries .. .. | 597 | 2,673 | 2,831 | 560 | 721,435 |
| Biscuits | 10 | 1,750 | 557 | 585 | 155,196- |
| Confectionery | 61 | 6,819 | 1,131 | ¢,581 | 442,584 |
| Jam, frnit, and vegetable canning | 29 | 3,327 | 1,539 | 1,547 | 508,498 |
| Pickles, sauces, and vinegar | 16 | 801 | $\stackrel{28}{ }$ | 147 | 66,520 |
| Bacon curing | 18 | 3,814 | 524 | 29 | 128,968 |
| Butter and cheese factories, dc. | 167 | 14,594 | 2,749 | 445 | 806,298 |
| Margarine and butterime ${ }^{\text {a }}$ | 11 | 456 | 112 | 6 | 29,176 |
| Meat and tish preserving, weat extracts | 9 | 535 | 163 | 150 | 60,631 |
| Condinnents, coifee, spices, \&c. | 70 | 2,040 | 498 | 575 | 175,112 |
| lce and refrigerating .. | 87 | 14,964 | 2,258 | 130 | 501,396 |
| $\underset{\text { Salt refining . . }}{\text { Aerated waters, cordials, }}$. | 89 | 522 991 | ${ }_{613}^{145}$ | 74 | 244,913 |
| Aerated waters, cordials, do. Breweries | 89 9 | 991 6,611 | 1613 1,576 | 26 | 559,634 |

* Figures not a vailable for publication.

Costs and Value of Production, 1939-40-continued.

| Fuel and Light Used. | Lubricating Oil and Water. | Repairs to Plant, \&c. | Materials Used, Including Containers. | Articles Produced or Work Done. | Valle Added. | $\begin{gathered} \text { Land } \\ \text { and } \\ \text { Buildings. } \end{gathered}$ | Plant and Machinery. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| £ | $£$ | $\mathfrak{E}$ | $\mathfrak{E}$ | £ | $\pm$ | £ | $\pm$ |
| 18,371 | 1,892 | 10,675 | 519,806 | 1,175,843 | 625,099 | 352,062 | 135,713 |
| 2,790 | 178 | 1,448 | 185,575 | 363,821 | 173,835 | 125,295 | -26,088 |
| 1,518 | 210 | 2,123 | 69,578 | 171,107 | 97,678 | 45,266 | 16,818 |
| 12,345 | 1,389 | 6,350 | 174,078 | 527, 429 | 333,267 | 178,483 | 85,281 |
| 1,718 | 120 | 754 | 90,575 | 113,486 | 20,319 | 5,018 | 7,526 |
| 389,379 | 63,837 | 374,826 | 3,922,579 | 18,983,926 | 8,233,305 | 3,557,103 | 3,846,599 |
| 33,448 | 3,044 | 27,101 | 925,753 | 1,730,323 | 8,230,977 | +9+,399 | 500,441 |
| 219,869 | 37,579 | 176,242 | 4,248,982 | 7,955,722 | 3,273,050 | 1,314,754 | 1,722,679 |
| 93,883 | 16,794 | 131,005 | $3,420,147$ | 6,851,475 | 3,189,646. | 1,250,498 | 1,162,954 |
| 7,440 | * 555 | 5,385 | 155,180 | 338,023 | $\underset{*}{169,463}$ | 106,694 | 117,113 |
| *955 | * 252 | 1,143 | 145,533 | $\underset{*}{248,630}$ | 100,747 | 56,427 | 6,597 |
| 33,784 | 5,613 | 33,950 | 1,026,984 | 1,859.753 | 759,422 | $33 \pm, 331$ | 336,815 |
| 58,759 | 18,757 | 43,585 | 2,927,823 | 4,610,192 | 1,561,268 | 962,878 | 369,781 |
| 2,470 | 656 | 2,248 | 403,110 | 655,007 | 246,523 | 207,868 | 23,603 |
| 15,246 | 4,986 | 7,253 | 539,284 | 738,702 | 17],033 | 179,963 | 78,662 |
| 38,329 | 12,801 | 31,870 | 1,647,685 | 2,581,623 | 850,965 | 411,915 | 237,601 |
| 130 | 58 | 68 | 17,345 | 41,507 | 23,906 | 18,230 | 1,914 |
| 536 | 28 | 349 | 59,726 | 102,821 | 42,182 | 27,150 | 10,541 |
| 1,590 | 203 | 1,410 | 235,320 | 445,215 | 206,692 | 99,592 | 11,835 |
| 495 | 25 | ,387 | 25,373 | 45,317 | 19,067 | 23,225 | ,, 565 |
| 134,360 | 13,701 | 137,433 | 9,764,371 | 18,294,893 | 8,245,028 | 4,438,275 | 1,255,788 |
| 24,794 | 1,561 | 16,569 | 2,284,768 | 3,931,818 | 1,604,126 | 870,906 | 140,899 |
| 2,714 | 1230 | 1,469 | 112,072 | , 244, 891 | 128,406 | 54,499 | 14,630 |
| 16,545 | 668 | 9,547 | 1,692,970 | 3,093,175 | 1,373,445 | 1.164,102 | 107,940 |
| 6,042 | 197 | 1,466 | 204,038 | 450,860 | 242,117 | 129,169 | 14,277 |
| 11,361 | 1,530 | 13,454 | 1,308,904 | 2,249,803 | 914,554 | 418,684 | 115,582 |
| 3,178 | 389 | 4,969 | 1,333,968 | -680,136 | 337,632 | 134,380 | 44,345 |
| \%859 | 62 | 454 | 135,760 | 239,519 | 102,384 | 67,913 | 3,895 |
| 13,903 | -2,069 | 11,868 | 326,452 | 732,882 | 378,590 | 189,633 | 92,311 |
| , 225 | , 10 | 136 | 15,793 | -29,885 | 13,721 | 14,125 | 4,642 |
| 31,058 | 3,350 | 64,522 | 2,96t,461 | 5,512,542 | 2,449,151 | 658,803 | 503,400 |
| 3,265 | 296 | 675 | -91,398 | -260,489 | 164,855 | +42,031 | 34,113 |
| 1,549 | 303 | 4,040 | 88,116 | 181,842 | 87,834 | 39,348 | ]6,425 |
| 127 | ${ }^{3}$ | 19 | 17,149 | 34,622 | 17,324 | 14,190 | 321 |
| 20,098 | 2,763 | 7,386 | (66,085 | 430,532 | 334,200 | 167,272 | 149,279 |
| 1,642 | 270 | 859 | 122,187 | 221,897 | 96,689 | 73,220 | 13,829 |
| 793,694 | 111,270 | 486,600 | 34,481,171 | 49,968,975 | 14,096,240 | 10,057,636 | 7,282,727 |
| 55,863 | 6,230 | 28,981 | 3,361,425 | 4,007,867 | 555,368 | 698,045 | -501,585 |
| 50,219 | 6,816 | 34,397 | 1,012,631 | 1,653,829 | 549,766 | 455,663 | 496,043 |
| . 648 | -69 | 244 | 1, 54,114 | 699,713 | 14,638 | 19,052 | 5,382 |
| 7,636 | 1,271 | 4,069 | 376,062 | 490,651 | 101,613 | 106,688 | 48,775 |
| 87,407 | 5,540 | 31,069 | 2,224,652 | 3,689,027 | 1,340,359 | 1,266,693 | 451,758 |
| 20,745 | 1,516 | 5,427 | 2,384,352 | 703,660 | -291,620 | 1,200,847 | 167,331 |
| 37,716 | 3,895 | 11,653 | 1,162,713 | 2,128,960 | 912,983 | 478,084 | 466,926 |
| 36,279 7 | 8,633 | 27,600 | 2,661,854 | 4,021,853 | 1,287,487 | 583,669 | 284,447 |
| 7,045 16,631 | 1,703 | 4,090 | 290,865 | 417,556 | 183,853 | 130,979 | 73,954 |
| 16,631 | 2,403 | 6,113 | 916,359 | 1,149,538 | 208,032 | 227,021 | 117,888 |
| 1.88,821 | 17,437 | 88,814 | 12,034,986 | 14,741,260 | 2,411,202 | 1,207,093 | 1,286,131 |
| 2,505 | 952 | 2,256 | 199,865 | 298,579 | -92,911 | 24,389 | 14,294 |
| 4,560 | 1,049 | 4,931 | 391,382 | 573,563 | 171,641 | 88,878 | 27,458 |
| 15,197 | 3,002 | 9,041 | 901,909 | 1,335, 432 | 406,283 | 370,523 | 168,342 |
| -87,571 | 10,703 | 43,155 | 100,915 | -976,178 | 733,834 | 1,192,084 | 693,262 |
| 2,279 | 192 | 3,875 | 29,459 | 108,616 | 72,811 | 212,955 | 52,802 |
| 6,765 | 3,442 | 9,625 | 268,509 | 612,053 | 323,712 | 249,437 | 99,709 |
| 66,928 | 21,168 | 131,066 | 1,367,625 | 3,101,825 | 1,515,038 | 791,995 | 934,377 |

## Victorian Factories-Power, Workers, Manufacturing

| Nature of Industry. | Factories. | Rated <br> Horsepower of <br> Engines. | Average Number Employed. |  | Salaries and Wages Pald. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | Males. | Fernales. |  |
|  | No. | H.P. | No. | No. | £ |
| Giass 9.-continued. Distilleries | 8 | 831 | 78 | 4 | 24,426 |
| Malting | 20 | 1,246 | 349 | 8 | 114,197 |
| Bottling | 13 | 327 | 175 | 33 | 51,768. |
| Tobacco, cigars, cigarettes | 11 | 1,983 | 862 | 1,337 | 434,991 |
| Dried fruits | 24 | 1,352 | 609 | 201 | 153,585. |
| Ice Cream | 24 | 1,660 | 1.67 | 106 | 53,854 |
| Sausage skius | 10 | 137 | 321 | 7 | 84,096 |
| Other.. | 18 | 4,818 | 579 | 45 | 148,822: |
| Class 10.-Woodworking and Basketware | 716 | 33,971 | 7,698 | 250 | 1,802,619: |
| Sawmills (forest) | 193 | 8,592 | 1,901 | 9 | 417,401 |
| Sawmills (town) | 127 | 13,962 | 2,130 | 47 | 509,542. |
| Bark mills .. | 3 | 47 | 7 | 1 | 1,453 |
| $J$ Jinery | 199 | +,094 | 1,648 | 68 | 399,805- |
| Cooperage | 13 | 682 | 279 | 3 | 91,161 |
| Boxes and cases | 64 | 4,595 | 821 | 23 | 188,000 |
| Woodturning, woodcarving, dc. .. | $7 \overline{1}$ | 1,450 | 506 | 27 | 109,346- |
| Basket, wicker, banboo, de. | 17 | 1.36 | 164 | 3 | 29,955- |
| Perambulators | 12 | 65 | 123 | 22 | 26,828 |
| Other. . | 11 | 348 | 119 | 47 | 29,128- |
| Class 11.-Furniture, Bedding, \&c. | 414 | 8,565 | 3,761 3,068 | $\begin{array}{r}989 \\ \hline 189\end{array}$ | 888,614- |
| Bedding and mattresses | 47 | 2,106 | -488 | 315 | 144,199. |
| Furnishing, drapery .. .. | 39 | 147 | 98 | 426 | 69,405 |
| Picture frames .. .. | 7 | 17 | 36 | 17 | 7,929 |
| Blinds, window, verandah, \&c... | 9 | 60 | 71 | 42 | 18,968. |
| Class 12.-Paper, stationery, Printing, Bookbinding, \&e. | 673 | 63,850 | 9,875 | 4,053 | 3,101,226. |
| Newspapers, de. . . . | 111 | 4,867 | 2,326 | 110 | 708,985 |
| Printing-Government, \&c. | 3 | 924 | 679 | 287 | 216,987 |
| General printing, \&c. .. | 426 | 6,764 | 4,109 | 1,685 | 1,229,190 |
| Stationery and paper products .. | 32 | 1,227 | 433 | 522 | 173,005 |
| Stereotyping and elcetrotyping .. | 10 | 198 | 86 | 11 | 22,182. |
| Process and photo eugraving | 16 | 161 | 343 | 25 | 101,823. |
| Cardboard boves, cartons, de. | 35 | 1,750 | 611 | 948 | 257,628 |
| Paper bags .. | 11 | 155 | 89 | 178 | 35,438. |
| Other paper and printing | 29 | 47,804 | 1,199 | 287 | 356,038 |
| Class 13.-Rubber Goods | 98 | 20,118 | 2,335 | 832 | 674,695- |
| Class 14.-Musical Instruments .. | 16 | 83 | 97 | 2 | 22,582: |
| Class 15.-Miscellaneous Produets | 181 | 4,086 | 2,114 | 944 | 516,454 |
| Celluloid and similar compositions | 18 | 875 | 504 | 113 | 98,818. |
| Buttons .. .. . | 10 | 143 | 129 | 50 | 21,641 |
| Brooms and brishes .. ... | 18 | 379 | 289 | 162 | 74,391 |
| Surgical, and other scientific instruments.. .. | 55 | 237 | 324 | 38 | 80,783 |
| Toys, games, and sports requisites | 52 | 923 | 505 | 247 | 124,075 |
| Artificial flowers | 7 | 12 | 56 | 194 | 25,723 |
| Other. . | 21 | 1,517 | 307 | 140 | 91,023. |
| Class 16.-Heat, Light, and Power | 117 | 527,115 | 2,316 | 7 | 656,599 |
| Electric light and power- <br> (a) Government | 8 | 471,715 | 1,087 | 3 | 317,005 |
| (b) Local authority | 38 | 43,941 | ${ }^{1} 269$ |  | 78,352 |
| (c) Companies | 32 | 5,531 | 86 |  | 23,154 |
| Gas works- |  |  |  |  |  |
| (a) Local authority | 10 29 | $\begin{array}{r} 71 \\ \mathbf{5}, 857 \end{array}$ | $\begin{array}{r}73 \\ 801 \\ \hline\end{array}$ | $\stackrel{2}{2}$ | $\begin{array}{r} 17,265- \\ 20,823 \end{array}$ |
| Total all Classes | 9,215 | 997,768 | 143,238 | 63,223 | 41,920,724 |

Costs and Value of Production, 1939-40-continued.

| Fuel and Light Used. | Lubricat- <br> ing Oil and Water | Repairs to Plant, \&e. | Materials Used, Including Containers | Articles Produced or Work Done. | Value Added. | $\begin{gathered} \text { Land } \\ \text { and } \\ \text { Buildings. } \end{gathered}$ | $\begin{gathered} \text { Plant } \\ \text { and } \\ \text { archinery. } \end{gathered}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| £ | £ | L | £ | $\mathcal{L}$ | £ | £ | £ |
| 7,866 | 1,265 | 1,624 | 65,961 | 166,570 | 89,854 | 216,885 | 150,159 |
| 21,098 | 3,670 | 4,516 | 448,729 | 712,983 | 234,970 | 391,457 | 70,093 |
| 2,586 | 482 | 1,071 | 94,876 | 180,908 | 81,913 | 146,433 | J.6,121 |
| 8,227 | J,958 | 10,432 | 2,32R,084 | 3,769,376 | 1,422,675 | 345,932 | 292,039 |
| 6,280 | 716 | 6,594 | -145,318 | 376,085 | 217,177 | 134,542 | 114,588 |
| 9,903 | 1,171 | 4,070 | 158,686 | 3¢1,378 | 187,543 | 180,447 | 122,253 |
| 1,748 | 1,342 | 841 | 221,832 | 343,927 | 118,164 | 48,077 | 10,279 |
| 41,10] | 4,645 | 11,046 | 3,350,008 | 3,977,588 | 570,788 | 389,816 | 616,831 |
| 80,699 | 18,027 | 76,512 | 3,185,564 | 6,012,196 | 2,651,394 | 1,089,672 | 940,949 |
| 24,775 | 9,690 | 32,772 | 424,200 | 1,044,035 | 552,598 | 67,781 | 421,616 |
| 23,332 | 3,961 | 18,382 | 1,395,312 | 2,249,444 | 808,457 | 368,233 | 237,996 |
| 88 |  | 16 | 21,088 | 24,794 | 3,594 | 2,782 | 474 |
| 11,143 | 1,306 | 7,946 | 553,303 | 1,147,950 | 574,252 | 318,509 | 88,281 |
| 3,046 | 1885 | 2,823 | 69,293 | 208,804 | 132,757 | 34,131 | 38,663 |
| 9,877 | 1,397 | 8,464 | 434,991 | 708,317 | 253,588 | 120,494 | 75,746 |
| 3,941 | 583 | 3,663 | 142,702 | 329,496 | 178,607 | 102,357 | 59,755 |
| 579 | 77 | 655 | 33,552 | 84,432 | 49,569 | 19,422 | 2,359 |
| 485 | ${ }^{96}$ | 257 | 55,423 | 92,648 | 36,457 | 22,360 | 2,940 |
| 3,433 | 94 | 1,534 | 55,700 | 122,276 | 61,515 | 33,603 | 13,119 |
| 24,398 | 3,064 | 19,901 | 1,800,645 | 3,216,575 | 1,368,567 | 937,804 | 213,670 |
| 15,613 | 2,049 | 10,008 | 965,871 | 1,920,853 | 927,312 | 664,449 | 140,748 |
| 7,408 | 737 | 8,640 | 545,276 | 828,108 | 266,047 | 166,325 | 60,909 |
| 953 | 218 | 792 | 222,236 | 353,158 | 128.959 | 75,710 | 8,129 |
| 119 | 20 | 33 | 10,920 | 23,741 | 12,543 | 16,280 | 1,137 |
| 305 | 10 | 428 | 56,342 | 90,715 | 33,600 | 15,040 | 2,747 |
| 216,736 | 26,786 | 143,023 | 4,321,550 | 9,882,802 | 5,174,707 | 3,631,443 | 3,359,462 |
| 26,615 | 5,532 | 9,188 | 930,906 | 2,038,666 | 1,066,4.25 | 810,050 | 647,151 |
| 6,186 | 763 | 3,953 | 163,372 | 435,728 | 261,454 | 204,400 | 68,836 |
| 30,425 | 5,403 | 30,936 | 1,381,871 | 3,335,472 | 1,886,837 | 1,451,414 | 1,102,934 |
| 6,881 | 670 | 10,392 | 450,688 | 985,092 | 516,461 | 186,272 | 168,316 |
| 1,430 | 32 | 476 | 10,656 | 47,440 | 34,846 | 30,460 | 23,815 |
| 2,147 | 299 | 1,22] | 24,625 | ]66,415 | 138,123 | 83,295 | 44,869 |
| 9,533 | 1,763 | 7,705 | 490,212 | 1,042,233 | 533,020 | 306,720 | 278,249 |
| 828 | 216 | 1,159 | 129,679 | 191,202 | 59,329 | 59,192 | 43,734 081,558 |
| 132,691 | 12,108 | 77,993 | 739,541 | 1,640,554 | 678,22.1 | 499,649 | 981,558 |
| 127,382 | 12,501 | 87,020 | 2,348,886 | 4,383,070 | 1,807,281 | 647,614 | 785,749 |
| 425 | 25 | 79 | 7,700 | 40,049 | 31,820 | 32,546 | 2,928 |
| 32,788 | 2,879 | 21,433 | 867,130 | 1,807,711 | 883,481 | 530,837 | 302,649 |
| 7,787 | 1,081 | 7,248 | 128,406 | 331,048 | 186,526 | 83,332 | 84,768 |
| 1,065 | 61 | 215 | 23,843 | 57,875 | 32,691 | 23,160 | 9,729 |
| 1,949 | 316 | 1,953 | 182,067 | 312,753 | 126,468 | 53,580 | 28,357 |
| -2,451 | 223 | 1,960 | 89,211 | 225,977 | 132,132 | 115,689 | 27,845 |
| 5,113 | 456 | 3,510 | 153,747 | 375,442 | 212,616 | 100,341 | 46,772 |
| 320 |  | 393 | 28,820 | 60,986 | 31,452 | 24,306 | 3,176 |
| 14,103 | 741 | 6,154 | 261,036 | 443,630 | 161,596 | 130,429 | 102,002 |
| 643,853 | 31,981 | 144,836 | 697,727 | 4,160,935 | 2,642,538 | 2,353,297 | 9,725,848 |
| 547,433 | 3,190 | 50,389 | 1,880 | 2,290,863 | 1,687,971 | 1,677,886 | 6,555,389 |
| 71,951 | 5,744 | 9,721 | 1,328 | 298,641 | 209,897 | 246,583 | 705,461 |
| 19,640 | 3,103 | 3,300 | 15 | 83,847 | 57,789 | 20,684 | 116,288 |
| 2,083 | 651 | 2,025 | 37,609 | 76,818 | 34,450 | 27,544 | 109,980 |
| 2,746 | 19,293 | 79,401 | 656,805 | 1,410,766 | 652,431 | 380,600 | 2,148,730 |
| 3,920,967 | 437,452 | 2,524,744 | 93,392,807 | 174,304,401 | 74,028,431 | 43,731,176 | 40,905,886 |

13473/40.-33

## INDIVIDUAL INDUSTRIES.

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

Tanning was one of the earliest industries established Tanneries. in Victoria; in the year 1850 there were thirteen tanneries in the State. Particulars relating to the industry for the year 1930-31 and the past four years are given in the following table :-

VICTORIA-TANNERIES.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 53 | 41 | 40 | 41 | 40 |
| Number of persons engaged | 1,406 | 2,460 | 2,316 | 2,221 | 2,182 |
| Horsepower of engines used | 3,676 | 7,460 | 8,057 | 7,903 | 8,038 |
| Value of plant and machinery $£$ | 309,960 | 241,453 | 241,226 | 243,067 | 237,601 |
| Value of land and buildings $£$ | 455,415 | 418,191 | 420,363 | 422,437 | 411,915 |
| Salaries and wages paid £ | 322,373 | 506,810 | 514,937 | 489,647 | 496,068 |
| Fuel, light, and power £ | 28,641 | 36,166 | 40,056 | 36,680 | 38,322 |
| Value of materials used £ | 988,910 | 1,610,687 | 1,622,917 | 1,268,331 | 1,647,665 |
| Value of output $\quad$. | 1,517,087 | 2,517,926 | 2,436,346 | 2,113,299 | 2,581,623 |
| Value added to materials £ | 482,447 | 823,082 | 730,246 | 770,538 | 850,965 |
| Materials treated- |  |  |  |  |  |
| Cow and ox hides No. | 504,528 | 921,075 | 895,171 | 793,069 | 847,697 |
| Calf hides | 276,672 | 334,578 | 430,347 | 377,126 | 486,110 |
| Other skins and pelts | 1,024,903 | 1,115,689 | 1,035,055 | 996,618 | 831,399 |
| Bark used $\quad$ - tons | 8,725 | 10,559 | 10,209 | 10,600 | 11,218 |
| Sole leather produced lb, | 10,334,659 | 12,808,892 | 13,030,832 | 11,342,423 | 13,461,162 |

The value of leather imported into Victoria from oversea countries during the year ended 30th June, 1940, was $£ 26,203$; the value of leather exported in the same period was $£ 558,606$.

The manufacture of soap was also one of the earliest
${ }_{\text {soandes, }}^{\text {soap. }}$. of Victorian industries. In the year 1850 the recorded production of the four establishments then operating was
5.840 cwt. of soap. The following table indicates the development which has since taken place.

VICTORIA-SOAP FACTORIES.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 18 | 19 | 18 | 18 | 16 |
| Number of persons engaged | 625 | 700 | 723 | 711 | 713 |
| Horsepower of engines used | 569 | 1,327 | 1,356 | 1,839 | 2,142 |
| Value of plant and machinerye | 225,097 | 206,879 | 255,201 | 260,361 | 242,964 |
| Value of land and buildings $£$ | 193,885 | 203,741 | 206,326 | 213,789 | 207,550 |
| Salaries and wages paid $£$ | 122,380 | 128,422 | 143,482 | 137,232 | 141,652 |
| Fuel, light and power \& | 26,947 | 27,793 | 33,443 | 33,182 | 38,426 |
| Value of materials used £ | 499,679 | 586,545 | 576,483 | 497,178 | 542,553 |
| Value of output $\quad$ - | 1,030,955 | 1,243,208 | 1,323,103 | 1,237,505 | 1,398,010 |
| Value added to materials e | 481,430 | 1,295,056 | 673,282 | 666,713 | 777.215 |
| Materials treated- |  |  |  |  |  |
| Tallow .. .. ewt. | 186,843 | 217,831 | 206,349 | 190, 245 | 220,195 |
| Alkali .. .. , | 75,339 | 100,649 | 101,216 | 109,048 | 115,912 |
| Copra oil | 25,421 | 47,393 | 49,382 | 52,726 | 49,737 |
| Output- " |  |  |  |  |  |
| Soap, household cwt. | 281,194 | 199,166 | 185,886 | 192,283 | 202,221 |
| ,' Sand | 29,450 | -34,121 | 185,342 | 137,875 | -31,422 |
| " Toilet | 14,887 | 19,192 | 20,705 | 17,863 | 23,018 |
| Soda crystals .. ", | 30,950 | 30,629 | 36,829 | 28,401 | 22,647 |

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

The imports from oversea countries in 1939-40 included $175,098 \mathrm{lb}$. of soap and $292,094 \mathrm{lb}$. of soap substitutes, valued at $£ 7,984$ and $£ 9,126$ respectively, and $32,689 \mathrm{lb}$. of candles, \&c., valued at $£ 2,011$.

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

VICTORIA-BRICKS, POTTERY, PIPES AND TILES.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments .. Number of persons engaged .. | 65 | 79 | 81 | 83 | 83 |
|  | 1,167 | 2,969 | 3,166 | 3,255 | 3,280 |
| Horse-power of engines used.. | 8,200 | 12,922 | 13,780 | 14,123 | 14,455 |
| Value of plant and machinery $\mathrm{t}^{\text {a }}$ | 468,456 | 524,667 | 566,624 | 606,389 | 607,451 |
| Value of land and buildings ${ }_{\text {S }}$ | 534,554 | 547,025 | 564,158 | 525,804 | 543,885 |
| Salaries and wages paid $£$ | 221.333 | 563,858 | 607,613 | 651,974 | 685,559 |
| Fuel, light, and power $£$ | 73,296 | 190,029 | 217,217 | 229,675 | 239,243 |
| Value of materials used $\quad$ f | 49,288 | 140,341 | 153,200 | 149,473 | 156,775 |
| Value of output .. | 470,843 | 1,259,323 | 1,381,198 | 1,448,203 | 1,487,502 |
| Value added to materials | 331,749 | 859,506 | 934,428 | 993,077 | 1,016,405 |
| Production- |  |  |  |  |  |
| Bricks, common .. (1,000) | 25,450 | 183,727 | 190,666 | 197,245 | 186,835 |
| Firebricks .. $(1,000)$ | 314 | 5,187 | 4,631 | 4,551 | 4,186 |
| Roofing tiles $\quad . \quad(1,000)$ | 861 | 10,232 | 12,069 | 13,737 | 13,288 |
| Pipes . . . § | 80,045 | 151,681 | 196,357 | 214,229 | 220,531 |
| Pottery .. £ | 75,022 | 242,987 | 297,211 | 291,483 | 294,451 |

Forest Detailed information in regard to the forest sawmills Forest
Sawmills. $\quad$ of the State for the six years $1934-35$ to $1939-40$ is given in the table which follows:-

VIOTORIA-FOREST SAWMILLS.

| Vear. | Number of Mills. | Value of Machinery and Plant in Use. | Persons Employed | Salaries and Wages Paid. | Sawn Timber Produced. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | Quantity. | Value. |
|  |  | £ |  | f | super fi | $\pm$ |
| 1934-35 | 202 | 392,217 | 2,368 | 422,798 | 97,110,074 | 642,058 |
| 1935-36 | 193 | 380,800 | 2,486 | 462,042 | 105,934,903 | 719,714 |
| 1936-37 | 192 | 395,419 | 1,951 | 371,772 | 122,907,580 | 865.789 |
| 1937-38 | 203 | 434,935 | 1,935 | 387,940 | 121,782,570 | 893,991 |
| 1938-39 | 205 | 383,608 | 1,797 | 375,504 | 111,383,079 | 862,828 |
| 1939-40 | 193 | 421,616 | 1,910 | 417,401 | 119,585,488 | 981,912 |

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

In addition to the forest sawmills there were 523 other factories in the wood working group. Particulars relating to these for the year 1939-40 are given on page 474 .

The quantity of timber sawn in firewood sawnills in
Firewood. the year 1939-40 was 313,116 tons, valued at the sawmills at $£ 240,711$. There is also a large amount of firewood taken from the forests which does not pass through these sawmills and its value cannot be reliably estimated. Statistics collected from factories, mines, and quarries show that, during 1939-40, 492,000 tons of firewood, which cost $£ 222,661$, were consumed.

Agricultural and Dairying Machinery Works.

The Agricultural Implement Industry, in 1938-39 and 1939-40, was affected by the decreased production, due to very dry seasons, as well as a substantial fall in prices of primary products.

## VICTOR1A-AGRICULTURAL AND DAIRYING MACHINERY WORKS.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 73 | 74 | 80 | 79 | 79 |
| Number of persons employed | 2,034 | 3,486 | 4,539 | 3,999 | 3,781 |
| Horse-power of engines used | 2,590 | 7,939 | 8,721 | 9,421 | 9,971 |
| Value of land and buildings $£$ | 314,200 | 342.503 | 405,089 | 600,327 | 613,775 |
| Value of plant and machinery $£$ | 309,770 | 360,033 | 401,625 | 562,705 | 563,275 |
| Salaries and wages paid $\underbrace{2}$ | 418,845 | 757,743 | 1,04 3,214 | 900,844 | 908,420 |
| Value of materials used $£$ | 357.492 | 855,674 | 1,135,453 | 914,487 | 890,220 |
| Fuel, light, and power used $£$ | 28,97.4 | 49,118 | 64,475 | 51,165 | 55,431 |
| Value of output $\quad$. | 938,990 | 1,903,662 | 2,691,479 | 2,180,881 | 2,142,634 |

In the following table particulars of bacon and ham Bacon curing. curing establishments are given for the year 1930-31 and the past four years.

VICTORIA-BACON FACTORIES.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 19 | 20 | 19 | 18 | 18 |
| Nnmber of persons employed | 498 | 554 | 545 | 539 | 553 |
| Horse-power of engines used | 1.974 | 3,954 | 3,783 | 3,804 | 3,814 |
| Value of land, buildings, plant, \&c. | 349,195 | 360,320 | 361.933 | 348,206 | 344,909 |
| Salaries and wages paid f | 130,602 | 120,440 | 124,020 | 199,111 | 128,968 |
| Value of materials used $\mathscr{L}^{\text {d }}$ | 650.101 | 789,851 | 800,605 | 893,987 | 916,359 |
| Value of fuel and light $\pm$ | 20.190 | 17,606 | 16,510 | 16,412 | 16,631 |
| Falue of output . . £ | 954.873 | 985,645 | 1,040,253 | 1,039,391 | 1,149,538 |
| Pigs slaughtered for curing No. | 208,593 | 193,048 | 172,535 | 170,189 | 170,905 |
| Bacon and ham cured- |  |  |  |  |  |
| In factories .. lb. | 17,310,287 | 16,652,906 |  | 16,024,626 | $17,385,848$ |
| On farms .. lb. | 891.932 | 918,886 | 689,995 | 485,511 | 500,457 | factories.

The number of butter, cheese, and kindred factories in 12 powdered milk, 9 casein, and 4 milk sugar. There were also 14 creameries attached to the factories. The following table gives some indication of the value of this industry to the State:-

VICTORIA-BU'i'TER AND CHEESE FACTORIES.

| Year. |  | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { oactories. } \end{gathered}$ | Talue of Machinery, Plani, Land, and buildings. | Persons Employed. | Salaries and Wages Paid. |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | $£$ |  | $£$ | £ |
| 1929-30 | $\cdots$ | 163 | 2,040,058 | 2,387 | 586,395 | 8,753,102 |
| 1930-31 | $\cdots$ | 165 | 2,025,267 | 2,235 | 542,374 | 8,077,608 |
| 1931-32 | $\ldots$ | 169 | 2,005,965 | 2,346 | 516,619 | 8,353,481 |
| 1932-33 | .. | 174 | 2,061,690 | 2,455 | 514,584 | 7,998,432 |
| 1933-34 | . | 175 | 2,088,195 | 2,509 | 506,109 | 6,745,845 |
| 1934-35 | $\cdots$ | 179 | 2,116,447 | 2,711 | 543.372 | 8,213,097 |
| 1935-36 | . | 176 | 2,163,363 | 2,680 | 560,621 | 10,251,289 |
| 1936-37 | . | 175 | 2,315,765 | 2,859 | 629,230 | 10,825,003 |
| 1937-38 | $\ldots$ | 172 | 2,340,384 | 3,017 | 694,356 | 12,407,723 |
| 1933-39 |  | 174 | 2,437,090 | 2,926 | 707,527 | 11,453,619 |
| 1939-40 | . | 167 | 2,493,296 | 3,194 | 806,298 | 14,741,260 |

Further particulars relating to butter and cheese factories will be found under the heading of Dairying on pages 432 and 433.

BAKERIES (INCLLDING BREAD, PASTRY, CAKES, E'TC.).
The statistical definition of a factory (see page 467) excludes from enumeration many small bakeries. Of the 1,752 bakehouses registered at the Factories Department during the year 1939, only 597 come within the definition and are embraced by the
table hereunder. It must be explained that the value quoted is the wholesale selling value of the goods at the factory exclusive of all selling and delivery costs.

VICTORIA-BAKERIES.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of factories | 468 | 556 | 549 | 576 | 597 |
| Number of persons employed | 2,871 | 3,374 | 3,213 | 3,281 | 3,391 |
| Horse-power of engines used.. | 1,980 | 2,289 | 2,502 | 2,679 | 2,673 |
| Value of land and buildings $£$ | 1,036,675 | 1,158 299 | 1,184,892 | 1,231,844 | 1,266,693 |
| Value of plant and machinery f | 336,796 | 377,886 | 376,595 | 415,927 | 451,758 |
| Salaries and wages paid $£$ | 652,387 | 651,183 | 657,061 | 675,377 | 721,435 |
| Value of materials used $\mathfrak{x}$ | 1,566,851 | 1,867,858 | 1,920,579 | 2,032,906 | 2,224,6.52 |
| Fuel, light, and power used $£$ | 75,878 | 79,869 | 81,127 | 83,768 | 87,407 |
| Repairs, oil and water used $£$ | 19,205 | 35,736 | 33,056 | 35,683 | 36,609 |
| Total output .. £ | 2,745,322 | 3,114,907 | 3,235,506 | 3,479,340 | 3,689,027 |
| Value added .. $£$ | 1,083,388 | 1,131,444 | 1,200,744 | 1,326,983 | 1,340,359 |
| Value added per worker $£$ | 377 | 335 | 374 | 404 | 395 |
| Flour used-tons (2,000 lb.) | 93,116 | 94,742 | 92,191 | 92,770 | 105,944 |
| Bread made--4-1b. loaves | 54,343,878 | 56,683,427 | 55,485,924 | $55,386,952$ | 57,017,198 |
| Cakes, pastry, pies £ | * | 1,635,766 | 1,522,674 | 1,581,795 | 1,695,367 |

* Not available.

Meat freezing Details of the production of frozen and preserved and preserving meat for the past five years are shown in the following works. table :-
VICTORIA-MEAT FREEZING AND PRESERVING WORKS.

| ltem. |  | 1935-36 | $\underset{+}{1936-37}$ | $1937-38 .$ | $\underset{\dagger}{1938-39 .}$ | $1939-40 .$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Frozen nleat- |  |  |  |  |  |  |
| Cattle and calves | grs. | 107,496 | 438,926 | 955:502 | 1,037,204 | 1,184.672 |
| Sheep and Lambs | No. | 3,784,083 | 4,049,966 | 5,077,313 | 4,609,034 | 4,413,180 |
| Rabbits and hares | " | 4,475,210 | 3,913,437 | 5,791,622 | 4,647,300 | 4,885,745 |
| Ponltry | " | 323,451 | 257,741 | 261,392 | 249,701 | 355,696 |
| Pigs | " | 37,863 | 86,504 | 126,412 | 78,324 | 67,319 |
| Preserved meat . | cwt. | 45,722 | 49,448 | 52,740 | 66,256 | 65,496 |

[^15]Imports and
exports of
meats,
Victoria.

The following statement shows the imports from and exports to oversea countries of frozen, chilled, and preserved meats during the year ended 30th June, 1940.

## VICTORIA-MEAT IMPOR'TED AND EXPORTED OVERSEA, 1939-40.

| Meats. | *Imports. |  | *Exports. |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Quantity. | Value. | Quantity. | value. |
|  |  | £ |  | £ |
| Preserved by cold process- |  |  |  |  |
| Beef . . . . . | lb. | $\cdots$ | 1 b. | * |
| Game .. . |  | * | , | * |
| Lamb |  | . | ," | * |
| Mutton |  | . | ," | * |
| Pork . . . . . |  | . | $\because$ | * |
| Poultry .. .. | $\because$ | . | pr. * | * |
| Rabbits and Hares .. | . | $\cdots$ | ,, * | * |
| Veal . . |  |  | lb. * | * |
| Other . | ", | $\cdots$ | " | * |
| Bacon and Hams |  | * | " | * |
| Potted and Concentrated | ", | * | , | * |
| Preserved in tins, \&c. . . | ", | * | " | * |
| Sausage Casings .. | cwt. * | * | cwt. * | * |
| Other .. | " | * | , * | * |
| Total value | . . | 98,072 | - | 4,249,996 |

* Not avallable for publication.

Victorian flour mills produce ample flour, \&c., to Flour mills. supply all local requirements and a considerable surplus for export. The following table gives particulars of the industry for the year $1930-31$ and for the past four years :-

VICTORIA-FLOUR MILLS.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishnients | 35 | 38 | 38 | 38 | 36 |
| Number of persons engaged | 888 | 1,112 | 1,101 | 1,099 | 1,054 |
| Horse-power of engines used | 5,422 | 6,911 | 7,115 | 8,174 | 8,440 |
| Value of plant and machinery $£$ | 527,055 | 508,072 | 493,838 | 492,065 | 501,585 |
| Valne of land and buildings $£$ | 421,723 | 546,587 | 943,861 | 595,565 | 598,045 |
| Salaries and wages paid f | 229,601 | 955,397 | 274,725 | 288,537 | 283,595 |
| Fuel, light and power £ | 52,165 | 56,037 | 55,543 | 57,944 | 55,863 |
| Value of materials used $\ddagger$ | 2,802,160 | 4,975,111 | 4,814,257 | 3,378,044 | 3,361,425 |
| Value of output $\quad \because \quad \pm$ | 3,461,548 | 5,574,290 | 5,409,048 | 3,972,336 | 4,007,867 |
| Value added to nuaterials ${ }_{\text {c }}$ | 585,662 | 511,878 | 510,315 | 503,309 | 555,368 |
| Wheat ground into flour bushels | 17,578,614 | 20,007,887 | 20,175,007 | 21,026,412 | 19,099,585 |
| Flour produced $\quad(2,000 \mathrm{lb}$ ) | 369.966 | 420,364 | 424,177 | 436,828 | 397,698 |
| Bran produced . . ", | 78,685 | 89,832 | 86,975 | 95,237 | 83,954 |
| Pollard produced .. | 76,028 | 91,978 | 91,910 | 90,180 | $90,915$ |
| Wheatmeal produced cwt. | 63,609 | 122,100 | 139,200 | 152,804 | 163,179 |

Jam, pickle, and sauce works.

Particulars relating to jam, pickle, sauce, fruit and vegetable canning factories are given in the table hereyear 1930-31 and for the past four years.

VICIORIA—JAMS, PICKLES, SAUCES, PRESERVES, ETC.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 40 | 45 | 46 | 43 | 45 |
| Number of persons engaged .. | 1,647 | 2,868 | 3,225 | 2,949 | 3,441 |
| Horse-power of engines used.. | 2,034 | 3,153 | 3,797 | 4,018 | 4,328 |
| Value of plant and machinery $f$ | 283,697 | 326,249 | 354,841 | 342,749 | 358,401 |
| Value of land and buildings $f$ | +55,929 | 635,774 | 682,800 | 675,362 | 714,648 |
| Salaries and wages paid $\mathrm{f}^{\text {d }}$ | 276,754 | 487,947 | 580,312 | 545,758 | 635,018 |
| Fuel, light, and power used $\boldsymbol{f}$ | 22.306 | 34,641 | 37,055 | 38,671 | 43,324 |
| Value of materials used | 1.022,284 | 1,907,845 | 2,297,776 | 2,211,283 | 2,882,719 |
| Value of output . . f | 1,617,563 | 3,023,10t | 3,533,091 | 3,390,421 | 4,439,409 |
| Fresh Fruit used . . cwt. | 574,931 | 913,275 | 1,089,549 | 900,833 | 1, 022,991 |
| Sugar used | 199,576 | 315,240 | 1,326,180 | 290,100 | 403,260 |
| Output of-- |  |  |  |  |  |
| Jams and jellies .. ewt. | 246,205 | 324,452 | -27.5,086 | 257,193 | 462,672 |
| Fruit preserved in liquid ," | 245,690 | 677,085 | 913,796 | 814,706 | 786, 266 |
| Fruit pulp .. | 52,175 | 82, $4+2$ | 88,591 | 64,332 | 140,266 |
| Sauce . . . pints | 6,736,916 | S,410,984 | 9,895,651 | 9,299,365 | 11,128,988 |
| Pickles .. .. , | 1,058,754 | 2.189 .510 | $\dot{+} 2,949,+28$ | $\dagger 2.537 .772$ | +2, +51,985 |

$\dagger$ Includes Chatney.

Beet Sugar Industry.

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

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

Prices paid to growers for beet vary annually in accordance with the sugar content and the Australian price of sngar. The prices per tow for the past five years were as follows :-1935-36, 41s. ; 1936-37, 42s. ; 1937-38, 40s.; 1938-39, 40s.; 1939-40, 46s.

VTGTORIA—BEET SUGAR PRODUCTION.

| Year. | Area. | Beet <br> Purchased | Sugar Content. | Sugar Produced. |
| :---: | :---: | :---: | :---: | :---: |
|  | acres. | tons. | $\%$ | tons. |
| 1930--31 | 3,045 | 38,291 | $16 \cdot 48$ | 5,095 |
| 1931-32 | 3,173 | 43,209 | $15 \cdot 91$ | 5,428 |
| 1932-33 | 3,1.55 | 36,741 | $19 \cdot 25$ | 5,701 |
| 1933-34 | 3,234 | 50,625 | $13 \cdot 91$ | 5,303 |
| 1934-35 | 3,097 | 40,788 | $15 \cdot 06$ | 4,998 |
| 1935-36 | 3,165 | 37,634 | 17•12 | 5,115 |
| 1936-37 | 3,475 | 31,079 | $17 \cdot 58$ | 4,180 |
| - 1937-38 | 4,046 | 48,594 | $15 \cdot 46$ | 5,625 |
| 1938-39 | 4,268 | 13,454 | $14 \cdot 83$ | 1,507 |
| 1939-40 | 4,234 | 42.898 | $18 \cdot 65$ | 6,250 |

Breweries and Particulars regarding breweries and distilleries for the Distilleries. year 1930-31 and the past four years are set forth in the succeeding tables.

VICTORIA-BREWERIES.

| 1tem. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of brewerjes | 9 | 9 | 9 | 9 | 9 |
| Number of persons engaged .. | 1,083 | 1,325 | 1,420 | 1,516 | 1,602 |
| Horse-power of engines | 4,006 | 6,815 | 6,860 | 6,611 | 6,611 |
| Value of plant and machinery $£$ | 1,007,249 | 842,958 | 840,581 | 932,992 | 934,877 |
| Value oil land and buildings $£$ | 699,267 | 766,377 | 769,562 | 789,404 | 791,995 |
| Salaries and wages paid fid | 369,463 | 456,312 | 495,493 | 517,505 | 559,634 |
| Fuel, light and power used $£$ | 51,378 | 54,566 | 60,587 | 63,203 | 66,928 |
| Value of materials used $\boldsymbol{f}$ | 808,133 | 987,897 | 1,243,561 | 1,269,269 | 1,367,625 |
| Value of output . . | 1,935,542 | 2,499,494 | 2,891,604 | 2,966,119 | 3,101,825 |
| Value added to materials $£$ | 1,062,086 | 1,345,467 | 1,467,503 | 1,485,990 | 1,515,038 |
| Materials used- |  |  |  |  |  |
| Sugar . . . ewt. | 83,153 | 106,042 | 121,427 | 124,918 | 128,053 |
| Malt . . . bush. | 648,248 | 863,330 | 992,860 | 1,014,010 | 1,036,711 |
| Hops . . . Ib. | 602,277 | 746,794 | 854,087 | 846,801 | 842,939 |
| Beer and stout made gals. | 20,345,800 | 27,246,234 | 30,570,063 | 31,541,886 | 32,318,251 |

## VIOTORIA-DISTILLERIES.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of distilleries | 8 | 7 | 7 | 8 | 8 |
| Number of persons engaged . | 122 | 81 | 74 | 90 | 82 |
| Horse-power of engines .. | 756 | 405 | 403 | 978 | 831 |
| Value of plant and machinery $£$ | 222,915 | 112,381 | 106,043 | 160,418 | 150,159 |
| Value of land and buildings $f$ | 222,153 | 188,848 | 186,494 | 220,579 | 216,885 |
| Salaries and wages paid £ | 33,495 | 18,755 | 18,667 | 25,549 | '24,426 |
| Fuel, light and power £ | 12,230 | 7,300 | 7,242 | 9,551 | 7,866 |
| Value of materials used $£$ | 120,497 | 69,926 | 69,913 | 73,901 | 65,961 |
| Value of output . $£$ | 291,299 | 170,121 | 192,227 | 222,077 | 166,570 |
| Materials used- |  |  |  |  |  |
| Wine . . .. gals. | 706,574 | 2,147,674 | 1,181,601 | 789,185 | 648,534 |
| Malt . . .. bush. | 183,245 | 34,160 | 57,008 | 72,704 | 51,722 |
| Other grain .. bush. | 173,311 | 58,091 | 97,325 | 84.728 | 71,051 |
| Molasses . . lb. | 909,888 | 1,723,120 | 1,447,040 | 1,217,552 | 387,856 |
| Spirits distilled in distilleries proof gals. | 1,010,727 | 594,134 | 745,063 | 583,837 | 647,109 |
| Spirits distilled by vinegrowers proof gals. | 21,295 | 36,798 | 38,882 | 22,883 | 14,568 |

The number of tobacco, cigar, and cigarette factories
Tobacco
Factories. licensed in 1939-40 was twenty-three, of which twelve were too small to be classified statistically as factories and are consequently not included in the statistical tabulation on page 472. In the year mentioned the remaining eleven gave employment to 2,199 persons, who were paid $£ 434,991$ in wages and who used machinery, plant, land, and buildings valued at £637,971. The subjoined table shows the quantity of tobacco leaf used by and the
output of the full number of licensed establishments for the past ten years :-

VICTORIA-TOBACCO FACTORIES.

| Year. |  | Unmanufactured Leaf Operated on. |  | Quantity Manufactured. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Australian. | Imported. | Tobacco. | Cigars. | Cigarettes. |
|  |  | Ib. | lb. | 1b. | number. | number. |
| 1930-31 | $\cdots$ | 1,818,722 | 3,551,324 | 5,575,051 | 20,592,865 | 278,304,141 |
| 1931-32 | . | 1,441,938 | 3,991,979 | 5,548,931 | 15,020,743 | 375,371,651 |
| 1932-33 | . | 1,574,135 | 4,184,640 | 5,829,704 | 18,503,055 | 412.015,592 |
| 1933-34 | . | 1,589,744 | 3,737,635 | 5,034,477 | 18,932,673 | 473,677,018 |
| 1934-35 | . | 1,494,725 | 3,784,672 | 4,815,978 | 19,479,242 | 550,359.781 |
| 1935-36 | .. | 1,543,839 | 4,132,698 | 5,121,360 | 22,226,147 | 615,493,655 |
| 1936-37 | - | 1,509,120 | 4,150,400 | 4,906,102 | 22,744,652 | 670,676,576 |
| 1937-38 | . | 1,565,159 | 4,727,731 | 5,229,385 | 23,076,385 | 837,549,346 |
| 1938-39 | . | 1,592,449 | 5,093,062 | 5,296,000 | 22,797,977 | 1,032,768,141 |
| 1939-40 | $\cdots$ | 1,753,752 | 5,069,611 | 5,043,425 | $21,654,357$ | 1,219,518,315 |

Victorian manufacturers supply nearly half of the $\underset{\text { mills }}{\text { Won }}$ Australian requirements in woollen piece goods. They have also developed an oversea export trade in wool tops. and noils.

## VICTORIA—WOOLLEN MILLS.

| Item. | 1930-31. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 46 | 52 | 52 | 53 | 56 |
| Number of persons employed | 6,182 | 10,036 | 9,813 | 9,896 | 11,039 |
| Horse-power of engines | 14,539 | 23,874 | 26,767 | 27,797 | 30.917 |
| Vaiue of plant and machinery $£$ | 1,781,097 | 1,776,088 | 1,777,059 | 1,773,475 | 1,722,679 |
| Value of land and buildings $f$ | 1,183,670 | 1,252,528 | 1,284,491 | 1,298,132 | 1,314,754 |
| Salaries and wages paid f | 905,987 | 1.320,125 | 1,437,060 | 1,506,078 | 1,823,136 |
| Fuel, light and power £ | 132,807 | 159,801 | 168,709 | 173,703 | 219,869 |
| Value of materials used $\quad$ d | 1,629,668 | 3,689,537 | 3,879,806 | 3,248,754 | 4,248,982 |
| Value of output . $\pm$ | 3,289,288 | 6,156,701 | 6,325,824 | 5,956,106 | 7,955,722 |
| Added value $\quad$. ${ }^{\text {a }}$ | 1,459,262 | 2,161,754 | 2,130,84 | 2,380,714 | 3,273.050 |
| Scoured wool used .. lib. | 9,569,421 | 16,250,885 | 17,894,590 | 19,257,012 | 22,006,636 |
| Cotton used | 464,277 | 839,356 | 848,040 | -866,270 | 958,130 |
| Tweed and cloth made sq. yds. | 5,431,704 | 12,757,001 | 12,973,069 | 13,133,128 | 15,482,349 |
| Flannel made . , ", | 4,065,138 | 3,217,803 | 1,791,011 | 1,852,585 | 1,307,599 |
| Blankets .. .. pairs | 107,962 | 317,348 | 289,848 | 297,378 | 645,324 |
| Rugs and shawls .. No. | 71,951 | 129,340 | 92,588 | 77,513 | 104,734 |

Early records show that, in the year 1886-87, there were Hosiery and
Knitting. three hosiery factories in Victoria, employing 56 hands. The capital value of land, buildings and machinery was $\mathfrak{£ 2 , 0 8 0}$. The following table shows the main details relating to this industry for the past five years :-

VICTORIA—HOSIERY AND KNITTING.

| Item. | 1935-36. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments .. Number of persons employed- | 225 | 208 | 216 | 221 | 231 |
|  |  |  |  |  |  |
| Male | 3.296 | 3,632 | 3,959 | 4,048 | 4,225 |
| Female | 7,354 | 7,964 | 8,432 | 8,451 | 9,071 |
| Salaries and wages paid £ | 1,272,176 | 1,427,980 | 1,643,609 | 1,681,591 | 1,928,655 |
| Value of land and buildings $\mathfrak{f}$ | 1,138,108 | 1,181,990 | 1,157,824 | 1,221,375 | 1,250,498 |
| Value of plant and machinery $£$ | 1,143,572 | 1,273,751 | 1,265,179 | 1,271,787 | 1,162,954 |
| Value of naterials used \& | 2,369,985 | 2,504,249 | 2,790,791 | 2,618,243 | 3,420,147 |
| Fuel, light, and power £ | 66,413 | 64,993 | 74,879 | 79,810 | 93,883 |
| Value of output .. ${ }_{\text {¢ }}$ | 4,969.671 | 5,213,388 | 5,655,022 | 5,464,417 | 6,851,475 |
| Added value .. £ | 2,437,339 | 2,460,934 | 2,674,686 | 2,650,062 | 3,189,646 |
| Yarn used- |  |  |  |  |  |
| Woolle ${ }^{\text {a }}$.. Jb. | 4,140,712 | 3,674,751 | 3,858,639 | 3,802,763 | 4,957,438 |
| Cotton | 2,515,851 | 2,406,832 | 2,649,711 | 2,979,849 | 3,804,668 |
| Silk | 683,866 | , 767,090 | 1,154,939 | 919,595 | 718,592 |
| Artificial silk | 2,541,557 | 2,803,599 | 2,993,386 | 2,766,684 | 3,493,879 |
| Stockings made doz. pair | 1,194,036 | *1,359,548 | *1,550,15 ${ }^{\text {+ }}$ | *1,615,701 | *1,805,444 |
| Socks made | 954,655 | $\dagger 1,006,454$ | $\dagger 1,094,752$ | -1,158,222 | $\dagger 1,318,437$ |
| Garments made $\quad .$. Number | 16,966,933 | 16,406,904 | 17,915,280 | 16,553,520 | 21,508,080 |

[^16]Boots and Shoes.

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

VICTORIA--BOOTS AND SHOES.

| Item. | 1930-31. | 1936-37. | 193「-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of establishments | 175 | 165 | 162 | 158 | 168 |
| Number of persons employed | 8,622 | 9,362 | 9,497 | 9,609 | 10,491 |
| Horse-power of engines used. . | 2,812 | 3,219 | 3,440 | 3,710 | 4,518 |
| Value of plant, machinery, land, and buildings | 1,218,654 | 1,045,991 | 1,057,287 | 1,087,513 | 1,162,203 |
| Salaries and wages paid £ | 1,400,624 | 1,354,623 | 1,515,390 | 1,589,323 | 1,783,144 |
| Fuel, light, aud power f | 29,857 | 27,948 | 27,406 | 27,442 | 31,058 |
|  | 1,917,444 | 2,395,438 | 2,477,930 | 2,409,106 | 2,964,461 |
| Value of output .. $£$ | 3,974,195 | 4,288,431 | 4,603,609 | 4,600,365 | 5,512,542 |
| Boots and shoos made pairs | 7,238,276 | 8,253,084 | 7,877,630 | 7,463,770 | 8,016,146 |
| Slippers made .. pairs | \$2,548,326 | 4,173,599 | 4,378,935 | 4,218,245 | 4,212,039 |

[^17]The value of the output of establishments connected
Drass (exclusive of boot) factories. with the manufacture of dress, i.e., clothing, tailoring, dressmaking, millinery, underclothing, hats and caps, \&c., but exclusive of boots and shoes, was $£ 19,811,880$ in $1939-40$, as compared with $£ 11,698,487$ in 1930 31. During the period 1930-31 to 1939-40 the persons employed increased by 53 per cent., the salaries and wages paid by 68 per cent., the value of materials used by 65 per cent., and the value of the output by 69 per cent. Particulars of the industry for each of the past ten years are as follows:-

VICTORIA—DRESS (EXCLUSIVE OF BOO'i') FACTORIES.

| Year. | $\begin{gathered} \text { Number } \\ \text { of } \\ \text { Factories. } \end{gathered}$ | Number of Persons Employed. |  |  | Salaries and Wages Paid. | Value of Materials Used. | Value of Output. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Fernales. | Total. |  |  |  |
| - |  |  |  |  | ${ }^{\text {f }}$ | $\pm$ | £ |
| 1930-31 | 1,405 | 5,361 | 22,162 | 27,523 | 3,492,542 | 6,333,943 | 11,698,487 |
| [931-32 | 1,371 | 5,924 | 24,255 | 30,179 | 3,496,808 | 7,105,835 | 12,856,708 |
| 1932-33 | 1,445 | 6,760 | 27,432 | 34,192 | 3,791,163 | 7,744,205 | 13,920,069 |
| 1933-34 | 1,493 | 7,168 | 28,529 | 35,697 | 3,936,233 | 8,149,015 | 14,820,538 |
| 1934-35 | 1,540 | 7,694 | 30,246 | 37,940 | 4,236,961 | 8,228,047 | 15,082.449 |
| 1935-36 | 1,515 | 8,277 | 31,235 | 39,512 | 4,581,706 | 8,884,171 | 16,571,245 |
| 1936-37 | 1,417 | 9,828 | 30,981 | 40,809 | 4,770,768 | 8,831,838 | 16,655,155 |
| 1937-38 | 1,479 | 9,231 | 32,225 | 41,456 | 5,352,401 | 9,700,508 | 18,027,490* |
| 1938-39 | 1,441 | 9,350 | 31,840 | 41.190 | 5,471,374 | 9,164,940 | 17,703,544 |
| 1939-40 | 1,411 | 9,462 | 32,607 | 42,069 | 5,868,961 | 10,426,504 | 19,811,880 |

Electric
light and
Particulars relating to the electric light and power
power works. works of the State are given in the next table:-
VICTORLA-ELECTRIC LIGHT AND POWER WORKS.


The reduction shown in the number of persons employed after 1935-36 was probably due to a more rigid exclusion of employees engaged in the transmission and distribution of electricity: the increase in the value of output to an alteration in the method of computing value at the generating station. In addition to the power stations shown above for the year 1939-40, there were 48 factories which generatcd electricity mostly for their own use, the total thus generated for the year mentioned amounted to $136,847,000 \mathrm{kwh}$. Prior to 1937-38 the power generated in such factories was included in the production of electricity shown on the previous page.

## STATE ELECTRICITY COMMISSION OF VICTORIA.

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

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

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

A comprehensive transmission system has been established, based upon the brown coal deposits at Yallourn. From Yallourn, two 132,000 -volt lines transmit electricity to receiving stations at Richmond and Yarraville. A third station (Thomastown) receives electricity from the Sugarloaf-Rubicon hydro-electric generating group in the north-eastern district.

There are generating stations at Newport ("B"), Richmond, Geelong, and Ballarat. All these generating sources are electrically interconnected.

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

There are six main receiving stations in addition to which there are 24 main metropolitan sub-stations; 13 distribution sub-stations at line voltage; and 2,891 metropolitan and rural sub-stations. High and low tension lines aggregate 4,357 and 3,703 route miles respectively, excluding 732 cable miles of underground cables. The Commission supplies practically the whole of the electricity requirements of the metropolitan area of Melbourne, excluding the railways. It retails direct in twenty-two of the metropolitan municipalities, in addition to outer metropolitan centres.

The rural centres supplied by the Commission number 457, of which 378 had no supply previously. These figures exclude the provincial cities of Ballarat, Bendigo, and Geelong, where the Commission also operates tramways.

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

Particulars in regard to gasworks are given below for

## gasworks.

 each of the past five years.VICTORIA—GASWORKS.


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

Oil was used as well as coal in the manufacture of gas, the number of gatlons consumed being $1,210,733$ in $1934-35,1,128,140$ in $1935-36$, $1,292,206$ in 1936-37, $1,203,294$ in 1937-38, 1,785,500 in 1938-39, and 1,683,945 in 1939-40.

Factory output by classes.

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

> VICTORIA-VALUE OF AR'TICLES PRODUCED IN FAGTORIES.

| Class of Industry. | 1935-36. | 1036-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | £ | $£$ | £ | $\pm$ | £ |
| 1. Treatment of non-metalliferous mine and quarry |  |  |  |  |  |
| products .. . | 2,308,109 | 2,445,353 | 2,808,306 | 2,993,612 | 3,118,040 |
| 2. Bricks, pottery, glass, de | 1,878,773 | 2,018,926 | 2,241,357 | 2,294,715 | 2,423,409 |
| 3. Chemicals, dyes, explosives, paint, oils, and grease | 7,850,284 | 9,073,976 | 9,970,909 | 10,115,983 | 12,292,943 |
| 4. Industrial metals, machines, implements. and conveyances | 22,565,640 | 26,849,850 | 31,140,916 | 30,718,898 | 33,932,842 |
| 5. Precious metals, jewellery, . and plate | 904,487 | 917,674 | 1,022,471 | 1,010,767 | 1,175,843 |
| 6. Textiles and textile goods (not dress) | 13,087,825 | 14,262,943 | 15,298,559 | 14,523,484 | 18,983,926 |
| 7. Skins and leather (not clothing or footwear) | 4,257,914 | 4,547,047 | 4,237,259 | 3,721,705 | 4,610,192 |
| 8. Clothing . . | 16,123,208 | 16,021,980 | 17,281,253 | 17,174,627 | 18,294,893 |
| 9. Food, drink, and tobacco | 42,817,086 | 41,770,149 | 45,912,799 | 44,109,455 | 49,968,975 |
| 10. Woodworking and basket ware | 4,290,263 | 5,066,362 | 6,527,505 | 5,320,115 | 6,012,196 |
| 11. Furniture, bedding, \&c. . . | 2,448,374 | 2,573,992 | 2,825,221 | 2,924,892 | 3,216,575 |
| 12. Paper, stationery, printing, bookbinding, \&c. | 7,725,011 | 8,182,693 | 9,141.044 | 9,070,629 | 9,882,802 |
| 13. Rubber . . | 3,047,269 | 3,455,116 | 4,094,017 | 3,677,837 | 4,383,070 |
| 14. Musical instruments | -33,078 | 30,888 | -38,052 | 30,282 | 40,049 |
| 15. Miscellaneous products | 1,522,377 | 1,472,254 | 1,591,388 | 1,496,017 | 1,807,711 |
| 16. Heat, light, and power | 3,183,472 | 4,002,989 | 3,919,669 | 3,784,593 | 4,160,935 |
| Total | 134,043,170 | 142,692,192 | 157,050,725 | 152,967,611 | 174,304,401 |

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

The table of monthly employment in factories (see page 512) is designed to show seasonal employment.

VICTORIA-AVERAGE NUMBER OF PERSONS EMPLAOYED IN FACTORIES.


The above table shows that there has been a substantial recovery in factory employment since the year 1930-31, when severely depressed conditions prevailed. Since then the number of persons employed in factories has increased by 69 per cent.

An interesting feature of the next table is the steady

Size of factories. increase shown in factories of over 50 hands and of the persons employed therein. In 1935-36 the total number employed in factories of this size group was 111,707 , representing 61 per cent., whilst in $1939-40$ this total had increased to 137,504 , or 65 per cent. of the total number employed in factories.

VIOTORIA-FAOTORIES ACCORDING TO NUMBER OF HANDS EMPLOYED.


## VICTORIA—PROPORTION OF FACTORIES OF DIFFERENT SIZES.

| Size of Factory. | Percentage to Total. |  |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | 1935-36. |  | 1936-37. |  | 1937-38. |  | 1938-39. |  | 1939-40. |  |
|  |  |  |  | $\begin{aligned} & \dot{\Phi} \\ & \stackrel{\oplus}{0} \\ & \stackrel{0}{2} \\ & \stackrel{\rightharpoonup}{2} \\ & \text { 至 } \end{aligned}$ |  |  |  |  |  |  |
| Under 4 hands | 36.2 | $3 \cdot 4$ | $35 \cdot 6$ | $3 \cdot 2$ | 35.0 | $3 \cdot 0$ | 34.7 | $3 \cdot 0$ | 34.0 | $2 \cdot 8$ |
| $4{ }^{4}$. | $9 \cdot 0$ | $1 \cdot 8$ | $8 \cdot 5$ | $1 \cdot 6$ | 8.0 | 1.5 | $8 \cdot 5$ | $1 \cdot 5$ | $8 \cdot 5$ | $1 \cdot 5$ |
| 5 to 10 ., | $23 \cdot 9$ | $8 \cdot 3$ | $23 \cdot 9$ | $7 \cdot 9$ | $24^{\circ} 0$ | $7 \cdot 6$ | $23 \cdot 5$ | $7 \cdot 5$ | $23 \cdot 4$ | $7 \cdot 1$ |
| 11 to 20 - | $12 \cdot 4$ | 9.1 | $13 \cdot 1$ | $9 \cdot 2$ | 13.7 | $9 \cdot 2$ | 13.8 | 9•3 | $13 \cdot 8$ | $8 \cdot 7$ |
| 21 to 50 | $10 \cdot 9$ | 17'1 | $10 \cdot 9$ | $16 \cdot 5$ | $10 \cdot 9$ | $15 \cdot 9$ | 11.0 | 16.1 | 11.5 | $15 \cdot 6$ |
| 51 to 100 | $4 \cdot 0$ | $13 \cdot 6$ | $4 \cdot 2$ | 13.8 | 4.4 | 13.9 | $4 \cdot 5$ | 14.2 | $4 \cdot 6$ | $13 \cdot 9$ |
| 101 and over | $3 \cdot 6$ | $46^{\circ} 7$ | $3 \cdot 8$ | $47 \cdot 8$ | ${ }^{\cdot} \cdot 0$ | $48^{\circ} 9$ | $4 \cdot 0$ | $48 \cdot 4$ | $4 \cdot 2$ | $50 \cdot 4$ |
| Total | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ | $100 \%$ | $100 \cdot 0$ | $100 \cdot 0$ | $100 \cdot 0$ |

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

VIOTORIA-OGCUPATIONS OF PERSONS EMPLOYED IN FACTORIES.

| Occupations. |  | 1935-36. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Working proprietors | No. | 8,040 | 8,032 | 7,919 | 7,760 | 7,730 |
| Managers, overseers | " | 6,025 | 6,402 | 6,749 | 6,867 | 7,295 |
| Accountants, clerks | ," | 8,483 | 9,588 | 10,382 | 11,008 | 11,883 |
| Engine-drivers, firemen | ," | 1,808 | 1,877 | 1,823 | 1,814 | 1,944 |
| Workers in factory or works | " | 156,494 | 163,099 | 172,695 | 172,083 | 181,105 |
| Outworkers.. | " | 142 | 176 | 148 | 120 | 143 |
| Carters, messengers | " | 1,444 | $\} 2,209$ | 2,073 | 2,179 | 2,361 |
| Others | , | 954 | $\int 2,200$ | 2,073 | 2,179 | 2,361 |
| Total | -• | 183,390 | 191,383 | 201,789 | 201,831 | 212,461 |

The term " outworkers" used in the above table relates outworkers. 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 so registered.

The average numbers of males and females employed
Sex distribution in in factories and their proportions to the male and female populations, for the years 1930-31 to 1939-40, were as follows :-

VICTORIA-EMPLOYMENT OF MALES AND FEMALES IN FACTORIES.

| Year. |  | Males. |  | Fernales. |  | 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 |
| 1930-31 | . | 82,949 | 936 | 43,067 | 476 | 126,016 | 704 |
| 1931-32 | . | 81,618 | 917 | 46,647 | 612 | 128,265 | 712 |
| 1932-33 | $\cdots$ | 91,899 | 1,020 | 52,529 | 575 | 144,428 | 796 |
| 1933-34 | . | 100,959 | 1,115 | 55,375 | 602 | 156,334 | 857 |
| 1934-35 | . | 110,910 | 1,219 | 58,781 | 634 | 169,691 | 924 |
| 1935-36 | . | 121,734 | 1,335 | 61,656 | 652 | 183,390 | 995 |
| 1936-37 | - | 128,457 | 1,403 | 62,926 | 672 | 191,383 | 1,033 |
| 1937-38 | $\cdots$ | 136,160 | 1,481 | 65,629 | 697 | 201,789 | 1,084 |
| 1938-39 | . | 136,218 | 1,470 | 65,6I3 | 692 | 201,831 | 1,076 |
| 1939-40 | -• | 143,238 | 1,633 | 69,223 | 724 | 212,461 | 1,124 |

Of the total persons employed, males formed $65 \cdot 8$ per cent. in 1930-21 and 67.4 per cent. in 1939-40. During the period 1930-31 to $1939-40$ the number of males employed increased by 60,289 , or $72 \cdot 7$ per cent., and the number of females employed, by 26,156 , or $60 \cdot 7$ per cent.

Of the total number of females in factories, $66 \cdot 3$ per cent.
Employment
of females. are engaged in the textile and clothing industries and $11 \cdot 6$. per cent. in the preparation of food and drink. The extent of female employment in certain industries is shown in the next. table :-

VIC'TORIA—FEMALE EMPLOYMEN'T IN FACTORIES, 1939-40.

| Industry. | Number Employed. |  | Females per 100 Males. |
| :---: | :---: | :---: | :---: |
|  | Males. | Females. |  |
| Chemicals, drugs, \&c. | 973 | 959 | 99 |
| Explosives .. | * |  |  |
| Matches . | 249 | 467 | 188 |
| Cotton | 749 | 1,333 | 178 |
| Woollen mills | 5,478 | 5,561 | 102 |
| Hosiery and knitting | 4,225 | 9,071 | 215 |
| Silk, natural and artificial | 183 | 454 | 248 |
| Rope, cordage . | * | * | * |
| Furriers and fur dressing | 449 | 404 | 90 |
| Bags, trunks, \&c... | 372 | 491 | 132 |
| Tailoring and slop clothing | 1,974 | 6,390 | 324 |
| Clothing, waterproof | 103 | 378 | 367 |
| Dressmaking | 617 | 7,669 | 1,242 |
| Millinery | 101 | 1,149 | 1,138 |
| Shirts, underclothing, corsets | 596 | 5,290 | 888 |
| Handkerchiefs, ties, \&c. | 41 | 372 | 907 |
| Hats and caps .. | 687 | 880 | 128 |
| Boots and shoes | 5,099 | 5,392 | 106 |
| Dyeworks and cleaning | 566 | 570 | 101 |
| Biscuits .. | 557 | 585 | 105 |
| Confectionery | 1,131 | 1,581 | 140 |
| Jams, pickles, \&e. | 1,747 | 1,694 | 97 |
| Condiments, grocers' sundrics | 498 | 575 | 116 |
| Tobacco, cigarettes, \&c. | 862 | 1,337 | 155 |
| Furnishing, drapery $\quad$ : | $\begin{array}{r}98 \\ \hline\end{array}$ | 426 | 435 |
| General printing and bookbinding | 4,109 | 1,685 | 41 |
| Envelopes, stationery, \&c... | 433 | 522 | 121 |
| Cardboard boxes, cartons | 611 | 948 | 155 |
| Rubber goods | 2,335 | 832 | 36 |
| All other factories | 108,395 | 12,208 | 11 |
| Total | 143,238 | 69,223 | 48 |

* Figures not available for publication.

The main reason for the small proportion of children

Child labour in factories. engaged in factories is that daily attendance at school is compulsory between the ages of 6 and 14 years.
Another reason is the restriction imposed by the Victorian Factories Act on the employment of female children under the age of 15 years unless a special permit is granted by the Chief Inspector of Factories on the grounds of poverty or hardship.


* Includes working proprietors.

Prior to the year 1936-37, the proportions were based on the average numbers employed over the whole year including working. proprietors. In 1936-37 the annual questionnaire was altered to ask for the number of employees in each age group on 15 th June and working proprietors were excluded from the totals. The effect is simplified compilation and possibly more precise statistics.
Machinery
In the following tables are shown the number of factoriess in factories. using mechanical power, and the value of the machinery and plant for the ten years, $1930-31$ to $1939-40$. The value recorded is the depreciated value or book value less any existing depreciation reserve.

VIC'ORIA--MACHINERY IN FACTORIES.

|  | Year. |  | Number of Factorles equipped with Power driven Machinery | Average Horse-power used. | Value of Machlnery and Plant. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  |  | £ |
| 1930-31 | - | . | 7,519 | 333,066 | 34,771,687 |
| 1931-32 | $\ldots$ | . . | 7,617 | 340,653 | 33,481,615 |
| 1932-33 | - |  | 8,023 | 364,121 | 33,022,441 |
| 1933-34 | $\cdots$ | . | 8,238 | 389,186 | 33,270,400 |
| 1934-35 | $\cdots$ | - | 8,445 | 404,702 | 33,917,056 |
| 1935-36 |  | $\ldots$ | 8,480 | 441,445 | 34,194,608 |
| 1936-37 |  |  | 8,538 | *789,524 | 36,213,626 |
| 1937-38 | $\ldots$ | $\cdots$ | 8,655 | *858,216 | 36,868,289 |
| 1938-39 |  | . . | 8,761 | *862,221 | 38,626,743 |
| 1939-40 | .. | . | 8,741 | *997,768 | 40,905,886 |

[^18]The nature of the motive power used in the factories of the State is set out in the next table. Establishments using more than one kind of mechanical power are included once only in the table, usually under the power which is principally used.

VICTORIA-POWER USED IN FACTORIES.


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

From the table hereunder, it can be calculated that the total rated horse-power used in Victorian factories other than Electric Generating stations, during 1939-40, excluding, to avoid duplication, the horsepower driven by electricity generated in their own works, was 433,112.
VICTORIA-HORSE-POWER OF ENGINES IN FACTORIES, 1939-40.

| Class of Engine. |  | Electric Generating (Maximum Load). | $\begin{gathered} \text { Other } \\ \text { Factories. } \\ \text { Rated } \\ \text { Horse-power } \end{gathered}$ | Total. |
| :---: | :---: | :---: | :---: | :---: |
| Steam- |  |  |  |  |
| Reciprocating | $\cdots$ | 1,214 | 36,993 | 38,207 |
| Turbine | . | 452,215 | 41,385 | 493,600 |
| Internal Combustion- |  |  |  |  |
| Gas | . | 1,436 | 4,983 | 6,419 |
| Petrol or other light oils | . . | 10 | 4,682 | 4,692 |
| Heavy oils | $\cdots$ | 9,341 | 11,329 | 20,670 |
| Water | . | 34,090 | 1,005 | 35,095 |
| Total | $\cdots$ | 498,306 | 1.00,377 | 598,683 |
| Electric motors driven by- |  |  |  |  |
| (a) Electricity generated in own works | $\cdots$ | 22,881 | 43,469 | 66,350 |
| (b) Purchased electricity .. | . | .. | 332,735 | 332,735 |

Reserve or idle horse-power capacity amounted to 90,099 , exclusive of that in heat, light, and power generating stations.

The total amount and the average amount of salaries

Wages in Factories. and wages paid to persons employed in factories are given in the following table for each of the past ten years.

VICTORIA-SALARIES AND WAGES PAID IN FACTORIES.

| Year. | Drawings by Working Proprietors (excluding Profits). |  | Salaries Paid to Managers and Clerks. |  | Wages Paid to Factory Workers. |  | Total Salaries and Wages Paid. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Males. | Females. | Males. | Females. | Males. | Females. |  |
|  |  |  |  |  |  |  |  |



Average Amounts.


[^19]The average annual earnings of all employees (excluding working proprietors) increased by $£ 713 \mathrm{~s}$. 5 d . in 1939-40.

The cost of production and the value of the output in cosst and value
of rodertion each class of manufacturing industry during the year in factories. 1939-40 are given in the subjoined statement :-

VIOTORIA-FAOTORY COSTS AND OUTPUT, 1939-40.

| Class of Industry. | Cost of- |  |  |  | Value of Output. <br> 5. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | Raw Materials Used (including Containers). <br> 1. | Fuel, Light, and Power Used. $2 .$ | Salaries and Wages Paid. <br> 3. | Tools replaced, Repairs to Plant, Oil and Water Used. 4. |  |
|  | $\pm$ | $£$ | $£$ | $£$ | $\pm$ |
| ferous mine and quarry products | 1,164,211 | 231,409 | 732,310 | 117,368 | 3,118,040 |
| 2. Bricks, pottery, glass, \&c. | 394,261 | 307,040 | 944,339 | 107,081 | 2,423,409 |
| 3. Chemicals, dyes, explosives, paint, oils, and grease | 6,154,753 | 255,463 | 2,572,493 | 267,902 | 12,292,943 |
| 4. Industrial metals, machines, implements, and conveyances | 14,834,630 | 606,205 | 12,242,948 | 619,202 | 33,932,812 |
| 5. Precious inetals, jewellery, and plate | 519,806 | 18,371 | 463,479 | 12,567 | 1,175,843 |
| 6. Textiles and textile goods (not dress) | 9,922,579 | 389,379 | 4,590,223 | 438,663 | 18,983,926 |
| 7. Skins and leather (uot clothing or footwear) .. | 2,927,823 | 58,759 | 940,629 | 62,342 | 4,610,192 |
| 8. Clothing .. .. | 9,764,371 | 134,360 | 5,748,340 | 151,134 | 18,294,893 |
| 9. Food, dirink, and tobacco | 34,481,171 | 793,694 | 6,023,176 | 597,870 | 49,968,975 |
| 10. Woodworking and basketware | 3,185,564 | 80,699 | 1,802,619 | 94,539 | 6,012,196 |
| 11. Furniture, bedding, \&c. | 1,800,645 | 24,398 | 888,614 | 22,965 | 3,216,575 |
| 12. Paper, stationery, printing, bookbinding, \&c. . | 4,321,550 | 216,736 | 3,101,226 | 169,809 | 9,882,802 |
| 13. Rubber | 2,348,886 | 127,382 | 674,695 | 90.521 | 4,383,070 |
| 14. Musical instruments | 7,700 | 425 | 22,582 | 104 | 40,049 |
| 15 Miscellaneous products .. | 867,130 | 32,788 | 516,454 | 24,312 | 1,807,711 |
| 16. Heat, light, and power .. | 697,727 | 643,853 | 656,599 | 176,817 | 4,160,935 |
| Total | 93,392,807 | 3,920,967 | 41,920,726 | 2,962,196 | 174,304,401 |

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

VICTORIA-PROPORTIONATE VALUE OF COSTS, ETC., TO PRODUCTION IN FACTORIES, 1939-40.

| Class of Industry. | Percentage of Costs, \&c., to Total Value of Ontput. |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{gathered} \text { Materials } \\ \text { Used, } \\ \text { including } \\ \text { Containers. } \end{gathered}$ | Fuel, Iight, \&c. | Wages. | Tools Replaced, Repairs to Plant, Oil and Water Used. | All other Expenditure, Interest and Profit. |
| T | \% | \% | \% | \% | \% |
| ferous mine and quarry products | 37-3 | $7 \cdot 4$ | $23 \cdot 5$ | $3 \cdot 8$ | $28 \cdot 0$ |
| 2. Bricks, pottery, thass, \&c. | 16.2 | $12 \cdot 7$ | $39 \cdot 0$ | $4 \cdot 1$ | $27 \cdot 7$ |
| 3. Chemicals, dyes, explosives, paint, oils, and яrease | $50 \cdot 0$ | $2 \cdot 0$ | $21 \cdot 0$ | $2 \cdot 2$ | $24 \cdot 8$ |
| 4. Industrial, metals, machines, implements, and conveyances .. | $43 \cdot 7$ | $1 \cdot 8$ | $36 \cdot 1$ | $1 \cdot 8$ | $16^{6}$ |
| 5. Precious metals. jewellery, and plate | $44 \cdot 2$ | $1 \cdot 6$ | $39 \cdot 4$ | $1 \cdot 1$ | $13 \cdot 7$ |
| 6. Textiles and textile goods (not dress) .. .. | $52 \cdot 3$ | $2 \cdot 0$ | $24 \cdot 2$ | $2 \cdot 3$ | $19 \cdot 2$ |
| 7. Slins and leather (not clothing or footwear) .. | $63 \cdot 5$ | $1 \cdot 2$ | $20 \cdot 4$ | $1 \cdot 4$ | $13 \cdot 5$ |
| 8. Clothing | $33 \cdot 1$ | $0 \cdot 7$ | 31.4 | $0 \cdot 8$ | $13 \cdot 7$ |
| 9. Food, drimk, and tobacco | $69 \cdot 0$ | $1 \cdot 6$ | $12 \cdot 0$ | $1 \cdot 2$ | $16^{\prime 2}$ |
| 10. Woodworking and basketware | $53 \cdot 0$ | $1 \cdot 3$ | $30 \cdot 0$ | $1 \cdot 6$ | $14 \cdot 1$ |
| 11. Furniture, bedding, \&c... | $56 \cdot 0$ | $0 \cdot 8$ | $27 \cdot 6$ | $0 \cdot 7$ | $14 \cdot 9$ |
| 12. Paper, stationery, printing, bookbinding, \&c... | $43 \cdot 7$ | $2 \cdot 2$ | $31 \cdot 4$ | $1 \cdot 7$ | $21 \cdot 0$ |
| 13. Rubber .. .. | $53 \cdot 6$ | $2 \cdot 9$ | $15 \cdot 4$ | $2 \cdot 3$ | $25 \cdot 8$ |
| 14. Musical instrments | $19 \cdot 2$ | $1 \cdot 1$ | $56 \cdot 4$ | $0 \cdot 3$ | $23 \cdot 0$ |
| 15. Miscellaneous products .. | $48 \cdot 0$ | 1.8 | $28 \cdot 6$ | $1 \cdot 4$ | $20 \cdot 2$ |
| 16. Heat, hight, and power.. | $16 \cdot 7$ | $15 \cdot 5$ | $15 \cdot 8$ | $4 \cdot 3$ | $47 \cdot 7$ |
| Total .. .. | $53 \cdot 6$ | $2 \cdot 2$ | $24 \cdot 1$ | $1 \cdot 7$ | $18 \cdot 4$ |

There are considerable variations in the proportions which the cost of materials and the expenditure on wages bear to the value of the output in the different classes of industries. These are, of course, due to the difference in the treatment required to convert the raw material to its manufactured form. Thus, in class two, the sum paid in wages represents 39 per cent. and the cost of raw materials 16.3 per cent. of the value of the finished article, whilst, in class nine, the expenditure on wages amounts to $12 \cdot 1$ per cent. and that on raw materials to 69 per cent. of the value of the output.

In the next table the cost of production, the value of Cost of
Production. the output of factories, and the balance available for profit and miscellaneous expenses are compared for the years 1930-31 to 1939-40.

## VICTORIA-COST OF PRODUC'i'ION AND VALUE OF OUTPUT OF FACTORIES.

| Year. | Cost of Production. |  |  |  |  | Total value of Output. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Materials. (including containers). | Fuel, Light, power. | Salaries and Wages. | Tools Replaced, Repairs to Plant, Oii and Water Used. | All other Expenditure Interest, and Profil. |  |
| 1930-31 | $\underset{50,380,110}{\underset{\sim}{f}}$ | $\frac{£}{2,589,475}$ | $\underset{23,279,689}{\stackrel{\text { £ }}{\prime}}$ | $\underset{1,042,242}{\underset{\sim}{s}}$ | $\stackrel{\stackrel{£}{4}}{16,134,279}$ | $\stackrel{\underset{E}{E}}{93,425,795}$ |
| 1931-32 | 51,727,685 | 2,443,539 | 21,258,599 | 1,397,76ă | 16,561,029 | 93,388,617 |
| 1932-33 | 56,757,681 | 2,633,659 | 23,096,512 | 1,612,987 | 17,984,590 | 102,085,429 |
| 1933-34 | 59,776,270 | 2,765,971 | . $24,819,143$ | 1,752,424 | 19,382,502 | 108,496,310 |
| 1934-35 | 63,387,061 | 3,011,127 | 27,318,815 | 2,022,078 | 21,443,776 | 117,182,857 |
| 1935-36 .. | 74,568,265 | 3,145,097 | 30,593,707 | 2,286,113 | 23,449,983 | 134,043,170 |
| 1936-37 | 78,233,032 | 3,302,178 | 33,192,904 | 2,444,701 | 25,519,377 | 142,692,192 |
| 1937-38 | 85,926,478 | 3,627,106 | 37,228,543 | 2,607,751 | 27,660,847 | 157,050,725 |
| 1038-38 .. | 80,721,680 | 3,595,128 | 38,305,885 | 2,654,734 | 27,690,184 | 152,967,611 |
| 1939-40 . | 93,392,807 | 3,920,967 | 41,920,726 | 2,962,196 | 32,107,705 | 174,304,401 |

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

## VICTORIA--PROPORTION OF OUTLAY TO OUTPUT OF FACIORIES.



The ratio of cost of materials to the value of the output of factories was $54 \cdot 3$ per cent. on the average of the last five years, as against $54 \cdot 8$ per cent. in the period 1930-31 to 1934-35. The ratio of salaries and wages to output averaged $23 \cdot 8$ per cent. over the last five years as against $23 \cdot 3$ per cent. over the period 1930-31 to 1934-35. The proportionate outlay on fuel, light, and power was $2 \cdot 6$ per cent. in the earlier and $2 \cdot 3$ per cent. in the later period. After allocating the proportion for repairs to plant and buildings, replacement of tools, and costs of lubricating oil and water, the balance available for miscellaneous expenses, rent, interest, and manufacturers' profit was $£ 1718 \mathrm{~s}$. 6 d . in every $£ 100$ of the total output value in the period 1935-36 to 1939-40, as compared with $£ 17$ 15s. 8d. in the preceding five-year period.

In 1939-40, wages and salaries (including working proprietors' drawings) took 57.0 per cent. of the value added in manufacturing (see page 468), leaving $43 \cdot 0$ per cent. for the payment of miscellaneous expenses, rent, interest, and profits.

In the following statement the amount of capital

Capital
invested in
manufacturing plant and premises. invested in machinery, plant, land and buildings used in connexion with the various classes of manufacturing industries is shown for the year 1939-40.


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

The values of machinery and plant and of land and buildings used in connexion with manufacturing industries are shown in the next table for the years 1930-31 to 1939-40. The value recorded is the depreciated value or the book value less any existing depreciation reserve.

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


It will be seen from these figures that the values of machinery, plant, land and buildings increased by 19 per cent. between 1930-31 and 1939-40.

In the appended table the number of accidents in

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

## VICTORIA-ACCIDENTS IN FACTORIES.

|  | Year. |  | Number of Employees. | Number of Accidents. | Percentage of Accidents to Number of Employees. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 1930 | $\cdots$ | $\cdots$ | 104,926 | 890 | - 848 |
| 1931 | - | . | 110,692 | 677 | -611 |
| 1932 | $\bullet$ | $\cdots$ | 125,670 | 809 | $\cdot 644$ |
| 1133 | - | . | 134,842 | 956 | $\cdot 709$ |
| 1934 | $\cdots$ | $\cdots$ | 148,155 | 1,162 | -784 |
| 1935 |  |  | 159,912 | 1,290 | -807 |
| 1936 | - | . | 170,084 | 1,513 | -889 |
| 1937 |  |  | 179,650 | 2,432 | $1 \cdot 353$ |
| 1938 |  | -• | 184,509 | 2,374 | 1-286 |
| 1939 | $\cdots$ | . | 187,690 | 2,505 | 1-334 |

## ManufacturesPenal and Blind Institute.

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

Factery Although approximately 70 per cent. of the factories 8tatistics by in Victoria are located within the Metropolitan area, municipatities. some of the municipalities outside Greater Melbourne also have important manufacturing industries.

The following table gives factory statistics for the metropolitan and the more important extra-metropolitan municipalities for the year 1939-40.
VICTORIA-FAC'TORY STATISTICS BY MUNICIPALITIES, 1939-40.

| Municipality. |  | Number of F'actories. | Prrsons Employed. |  | Salaries and Wages Paid. | Value of Land and Buildings. | Value of Plant and Machinery. | Talue of Materials Used (including containers). | Value of Articles Produced or Work Done. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Females. |  |  |  |  |  |
|  |  |  |  |  |  | $£$ | $\stackrel{\text { d }}{11,617}$ | $\stackrel{\text { £ }}{6}$ | $\stackrel{\text { ¢ }}{19}$ | $\stackrel{£}{\text { ¢ }}$ |
| Melbourne |  | 2,313 | -29,297 | 22,952 | $10,040,102$ | 11,6I7,664 | 6,927,497 | 19,373,531 | 37,735,805 |
| Brunswick |  | 345 | 6,199 | 5,329 | 1,995,934 | 1,419,486 | 1,162,817 | 3,445,283 | 7,077,185 |
| Essendon |  | 127 | 642 | 246 | 171,780 | 189,502 | 96,960 | 389,427 | 658,447 |
| Coburg |  | 94 | 1,736 | 1,580 | 548,855 | 329,885 | 279,737 | 1,160,583 | 2,226,626 |
| Preston |  | 83 | 1,778 | 411 | 469,503 | 544,064 | 248,626 | 954,298 | 1,672,260 |
| Northcote |  | 118 | 1,262 | 412 | 334,106 | 296,888 | 221,542 | 551,163 | 1,121,717 |
| Fitzroy . |  | 325 | 5,361 | 3,871 | 1,661,396 | 1,392,225 | 896,803 | 3,193,666 | 6,033,459 |
| Collingwood |  | 394 | 10,172 | 8,049 | 3,196,179 | 2,574,954 | 2,126,227 | 6,332,788 | 11,696,541 |
| Kew |  | 41 | 114 | 85 | 35,104 | -64,352 | 21,127 | 69,982 | 117,944 |
| Camberwel] |  | 110 | 485 | 307 | 142,017 | 161,860 | 84,153 | 227,470 | 462,511 |
| Hawthorn |  | 180 | 1,132 | 832 | 331,588 | 422,681 | 194,279 | 497,169 | 1,056,365 |
| Richmond |  | 346 | 10,010 | 5,539 | 2,961,117 | 2,762,713 | 2,052,391 | 5,904,418 | 11,740,366 |
| Prahran | . | 331 | 3,070 | 2,693 | 998,637 | 1,005,819 | 418,017 | 3,008,510 | 5,243,540 |
| Malvern |  | 145 | 601 | 224 | 156,685 | 209,888 | 55,164 | 223,111 | 452,779 |
| Caulfield |  | 139 | 575 | 224 | 148,123 | 178,995 | 64,948 | 239,423 | 472,926 |
| Oakleigh | . | 35 | 575 | 138 | [41,036 | 141,149 | 172,798 | 230,725 | 509,583 |
| Sandringham Brighton | . | 46 | 227 | 233 | 82,420 | 97,986 | 23,153 | 127,255 | 257,851 |
| Brighton St. Kilda | . | 89 | 591 | 354 | 166,980 | 194,997 | 165,033 | 248,437 | 616,317 |
| St. Kilda South Melboume | . | 137 | 1,020 | 462 | 286,760 | 254,944 | 99,188 | 439,247 | 921,716 |
| South Melboume Port Melbourne |  | 457 | 12,693 | 3,696 | 3,558,950 | 3,163,874 | 2,105,318 | 7,086,458 | 14,363,025 |
| Port Melbourne Footscray | . | 92 | 4,514 | 605 | 1,180,097 | ,934,285 | 914,301 | 2,307,208 | 4,648,023 |
| Footscray | $\cdots$ | 234 | 11,641 | 2,620 | 3,047,472 | 2,821,909 | 3,705,545 | 9,369,426 | 15,203,734 |
| Williamstown Braybrook | . | 73 | 6,250 | 310 | 1,584,127 | 2,153,047 | 2,886,52] | 1,907,656 | 4,693,602 |
| Braybrook Heidelberg | . | 57 | 5,541 | 833 | 1,465,943 | 1,686,884 | 1,322,246 | 2,226,696 | 4,670,334 |
| Heidelberg Box Hlll | . | 54 | 792 | 203 | 230,863 | 290,595 | 364,183 | 725,643 | 1,377,864 |
| Box Hlll Moorabbin |  | 43 | 386 | 68 | 93,947 | 91,802 | 117,543 | 159,482 | 310,845 |
| Moorabbin |  | 36 | 288 | 182 | 84,574 | 93,324 | 162,391 | 168,353 | 318,016 |
| Mordialloc |  | 21 | 75 | 19 | 16,899 | 23,733 | 30,661 | 30,793 | 61,560 |
| Chelsea |  | 14 | 109 | 8 | 26,953 | 25,279 | 6,296 | 32,765 | 75,473 |
| Total Metropolitan |  | 6,479 | 117,136 | 62,485 | 35,158,147 | 35,144,784 | 26,925,465 | 70,630,966 | 135,796,414 |

Victoria-Factory Statistics by Municipalities, 1939-40-continued.

| Municipality. | Number of Factories. | Persons Employed. |  | Salaries and Wages Paid. | Value of Land and Buildings. | Value of Plant and Machinery. | Value of Materials Lsed (including containers) | Value of Articles Produced or Work Done |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | Males. | Females. |  |  |  |  |  |
|  |  |  |  | £ | f | £ | £ | f |
| Werribee | 25 | 168 | 13 | 44,289 | 127,654 | 141,881 | 647,395 | 1,004,421 |
| Blackburn and Mitcham | 34 | 566 | 85 | 125,649 | 97,667 | 94,327 | 71,793 | 299,952 |
| Dandenong | 37 | 816 | 83 | 198,182 | 145,179 | 168,998 | 577,200 | 943,880 |
| *Geelong . | 252 | 5,742 | 2,079 | 1,600,522 | 2,194,818 | 2,508,587 | 3,328,014 | 6,949,990 |
| Korumburra | 22 | 123 | 11 | 30,241 | 44,444 | 32,644 | 554,463 | 635,048 |
| Castlemaine | 25 | 620 | 206 | 165,886 | 69,990 | 186,252 | 188,649 | 438,145 |
| Maryborough | 32 | 338 | 322 | 111,821 | 41,124 | 72,202 | 284,665 | 451,475 |
| $\dagger$ Ballarat (including Sebastopol) | 211 | 2,363 | 1,288 | 676,298 | 667,442 | 621,899 | 1,232,400 | 2,423,838 |
| $\dagger$ Colac . | 60 | 455 | 43 | 114,461 | 132,877 | 100,445 | 748,556 | 979,218 |
| Hampden | 35 | 317 | 30 | 86,680 | 92,157 | 91,573 | 769,67I | 949,342 |
| $\dagger$ Warrnambool | 59 | 986 | 350 | 269,564 | 468,322 | 520,966 | 1,358,207 | 1,868,137 |
| Hamilton | 40 | 226 | 29 | 52,886 | 52,660 | 62,664 | 216,855 | 311,789 |
| Horsham | 40 | 209 | 16 | 47,670 | 106,002 | 76,883 | 171,653 | 241,850 |
| $\dagger$ Stawell | 40 | 286 | 146 | 73,435 | 46,688 | 88,180 | 189,594 | 347,748 |
| Warracknabeal | 30 | 128 | 8 | 29,343 | 32,233 | 37,316 | 137,471 | 180,761 |
| $\dagger$ Mildura . | 93 | 900 | 235 | 218,346 | 235,431 | 274,555 | 258,225 | 625,224 |
| $\dagger$ ¢wan Hill | 51 | 234 | 29 | 53,949 | 68,582 | 80,252 | 134,758 | 241,585 |
| Bendigo (including Eaglehawk) | 153 | 942 | 552 | 248,607 | 215,710 | 189,978 | 702,684 | 1,130,786 |
| Eohuca . . . | 32 | 165 | 8 | 38,903 | 42,905 | 29,973 | 179,013 | 248,803 |
| Rodney | 35 | 289 | 210 | 99,216 | 149,263 | 118,079 | 681,652 | 891,619 |
| $\dagger$ Shepparton | 45 | 387 | 170 | 122,775 | 230,460 | 106,931 | 705,112 | 1,015,010 |
| +Wangeratta | 41 | 276 | 126 | 72,964 | 81,539 | 76,117 | 344,434 | 486,223 |
| Bairnsdale | 34 | 174 | 18 | 39,375 | 39,968 | 36,741 | 164,769 | 231,958 |
| Morwell | 23 | 1,192 | 19 | 339,504 | 1,154,364 | 5,183,367 | 310,645 | 2,657,599 |
| Narracan | 36 | 337 | 16 | 81,393 | 44,485 | 91,311 | 384,616 | 527,858 |
| Other Municipalities | 1,251 | 7,863 | 646 | 1,820,620 | 2,064,428 | 2,988,300 | 8,419,347 | 12,425,728 |
| Total Country | 2,736 | 26,102 | 6,738 | 6,762,579 | 8,646,392 | 13,980,421 | 22,761,841 | 38,507,987 |
| Total State . . | 9,215 | 143,238 | 69,223 | 41,920,726 | 43,791,176 | 40,905,886 | 93,392,807 | 174,304,401 |

## VALUE OF VICTORIAN PRODUCTION.

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

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


[^20]The ultimate aim of the valuation of production is to arrive at the sum available for distribution among those concerned in each class of industry, i.e.-
(a) Workers in all grades of the industry.
(b) "Proprietors (including landlords) of any of the instruments of production concerned.
(c) Providers of capital, including debenture holders and mortgagees.

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

VICTORIA-VALUE AT THE PLACE OF PRODUCTION.


[^21]13473/40.-34

Value at the Place of Production-continued.


The values of production of the various classes of Costs of Prodution. industry, as they appear in the previous table for the year 1939-40, are shown hereunder, together with the costs of production where available. The difference between the two figures represents the net value of production or the net return available to the producers for wages, rent, interest and profits. As previously explained, the deductions are incomplete, and depreciation (see bolow) bas been here disregarded, but the margin of error is considered to be small in view of the coniparative unimportance of the industries concerned from the point of view of production costs.

VIUTORIA-COSTO OF PRODUCTION, 1939-40.

| Industry. | value at Place of Production. | Cost of Production. $\dagger$ | Net Value. | Net Value per Head of Population. |
| :---: | :---: | :---: | :---: | :---: |
|  | £ | £ | £ | £ |
| Agriculture | 17,216,550 | 5,309,419 | 11,907,131 | $\begin{array}{lll}6 & 6 & 0\end{array}$ |
| Pastorel | 17,450,772 | 1,016,380 | 16,434,392 | 81310 |
| Dairying | 14,272,171 | 1,939,349 | 12,332,822 | $6 \quad 106$ |
| Poultry and B es | 4,333,648 | 1,170,949 | 3,162,699 | 1136 |
| Miscellaneous | 2,339,094 | *159,733 | 2,179,361 | $1 \begin{array}{lll}1 & 3 & 1\end{array}$ |
| Mining | 2,788,983 | 677,982 | 2,111,001 | 124 |
| Manusacturing | 74,028,431 |  | 74,028,431 | $\begin{array}{llll}39 & 3 & 2\end{array}$ |
| Total | 132,429,649 | 10,273,812 | 122,155,837 | $6412 \quad 5$ |

[^22]Depreciation. While depreciation of assets used must be considered as a legitimate charge against the value of production, the problem of exact measurement presents much difficulty. Depreciation may generally be considered as proportionate to the life of the asset, but this cannot always be accurately measured, particularly with machinery, where obsolescence might be suddenly accentuated by new invention. Care and expertness in handling and propar repairing must influence the effective life of machinery, while managerial policy and methods of determining depreciation affect annual amounts actually written off.

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

The table hereunder shows details of the fixed capital invested in certain of Victorian industries and the estimated depreciation thereon for the year 1939-40 :-
VICTORIAN INDUSTRY-DEPRECIATION OF ASSETS, 1939-40.

| Industry. | Capital Value. | Depreciation. | $\begin{gathered} \text { Per } \\ \text { Cent. } \end{gathered}$ |
| :---: | :---: | :---: | :---: |
|  | £ | £ |  |
| Agriculture-Machinery and implements | 8,750,000 | 875,000 | 10 |
| Pastoral machinery and implements | 860,000 | 43,000 | 5 |
| Dairying machinery | 480,000 | 24,000 | 5 |
| Agriculture, dairying and pastoral-buildings and fences | 41,000,000 | 1,640,000 | 4 |
| Manufacturing-Land, buildings, plant and machinery | 80,652,988 | 3,339,758 | $4 \cdot 1$ |

The estimated percentages of depreciation on agricultural, pastoral, and dairying machinery and on the value of buildings and fences in those industries have been arbitrarily fixed by Australian Statisticians in the interests of uniformity. The amount of depreciation on factory buildings, \&c., is the total written off as shown by the returns rendered by manufacturers.
Employment Every factory in Victoria submits an annual statement in factories. showing the number of persons employed on the 15th day of each month, and from these data an index of employment is constructed.

Supplementary to this annual collection, 175 large factories and all Government factories send to the Government Statist monthly returns which are used for the purpose of estimating the current movement in the employment index until the annual returns covering the whole field come to hand. Although the sample is small it has proved to fluctuate closely with the total annual figures.

The following table shows the monthly index calculated from the figures above-mentioned; the index from July, 1940, is obtained from the samples and is shown on the graph on page 511 by double lines.

INDEX OF FACTORY EMPLOYMENT.
(Base--July, 1933, 136,793 = 1,000.)

| Month. | 1934-35. | 1935-36. | 1936-37. | 1937-38. | 1938-39. | 1939-40. | 1940-41. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| July | 1,115 | 1,202 | 1,272 | 1,352 | 1,393 | 1,403 | 1,565 |
| August | 1,132 | 1,220 | 1,289 | 1,367 | 1,396 | 1,417 | 1,572 |
| September | 1,150 | 1,254 | 1,312 | 1,387 | 1,409 | 1,432 | 1,590 |
| October | 1,192 | 1,282 | 1,342 | 1,414 | 1,43) | 1,474 | 1,619 |
| November | 1,205 | 1,303 | 1,350 | 1,426 | 1,437 | 1,500 | 1,639 |
| December | 1,193 | 1,295 | 1,337 | 1,425 | 1,425 | 1,501 | 1,684 |
| January | 1,150 | 1,261 | 1,291 | 1,378 | 1,372 | 1,496 | 1,673 |
| February | 1,196 | 1,313 | 1,371 | 1,447 | 1,428 | 1,524 | 1,713 |
| March | 1,217 | 1,343 | 1,383 | 1,472 | 1,446 | 1,514 | 1,734 |
| April | 1,209 | 1,311 | 1,393 | 1,458 | 1,433 | 1,553 | 1,722 |
| May | 1,202 | 1,310 | 1,368 | 1,436 | 1,428 | 1,536 | . . |
| .June | 1,191 | 1,286 | 1,349 | 1,416 | 1,406 | 1,519 | . |

Employment
in Retail Trade.

The volume of employment in retail trade is a valuable indicator of economic conditions. Since July, 1933, monthly returns showing the numbers of employees on the payrolls of 102 large retail stores in Victoria have been collected by the Government Statist.

The following table shows the monthly index calculated from such returns. The figures are plotted on the graph which follows :-

INDEX OF RETAIL EMPLOYMENT.
(Base-July, 1933, $17,267=1,000$.)

| Month. | 1934-35. | 1935-36. | 1936-37. | 1937-38. | 1938-39. | 1939-40. | 1940-41. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| July | 1,089 | 1,202 | 1,301 | 1,366 | 1,38! | 1,378 | 1,414 |
| August | 1,092 | 1,197 | 1,282 | 1,327 | 1,367 | 1,367 | 1,396 |
| September | 1,102 | 1,231 | 1,286 | 1,344 | 1,368 | 1,362 | 1,416 |
| October | 1,153 | 1,281 | 1,332 | 1,400 | 1,415 | 1,404 | 1,426 |
| November | 1,221 | 1,309 | 1,384 | 1,428 | 1,456 | 1,461 | 1,473 |
| December | 1,308 | 1,445 | 1,548 | 1,606 | 1,643 | 1,646 | 1,732 |
| January | 1,167 | 1,287 | 1,377 | 1,436 | 1,414 | 1,439 | 1,492 |
| February | 1,167 | 1,302 | 1,368 | 1,386 | 1,410 | 1,393 | 1,441 |
| March | 1,180 | 1,290 | 1,350 | 1,395 | 1,382 | 1,397 | 1,439 |
| April | 1,173 | 1,286 | 1,355 | 1,399 | 1,390 | 1,438 | 1,454 |
| May | 1,207 | 1,322 | 1,373 | 1,406 | 1,401 | 1,452 |  |
| June | 1,227 | 1,,327 | 1,404 | 1,420 | 1,418 | 1,485 | . |

Despite the small size of the sample, which covers approximately 50 per cent. of the total retail employment, the statistics appear to reflect the general trend. The fluctuations over the period 1933 to 1941 exhibit regular periodic movements, and the trend, until the outbreak of war in September, 1939, approximated very closely to that shown by the factory employment index.

Production.
MONTHLY INDEX OF FACTORY AND RETAIL EMPLOYMENT IN VICTORIA: JULY, 1933,
TO APRIL, 1941.
$1,000$.
$1,000$.
ase July, $1933=17,267=1,000$
Factory Index —— Base July, $1933=136,793$
Factory Index

| Index |
| :---: |
| Number |




Monthly employment n factories.

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

VICTORIA -MONTHLY EMPLOYMENT

| Industry. |  |  | Average Number |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | July. | August. | September. | October. |
| Aerated waters |  |  | 502 | 536 | 551 | 608 |
| Agricultural inmplements |  |  | 3.372 | 3,433 | 3,624 | 3,618 |
| Art metal |  |  | 292 | 279 | 277 | 284 |
| Artificial flowers |  |  | 285 | 280 | 256 | 255 |
| Bacon curing .. |  |  | 530 | 518 | 512 | 539 |
| Bugs and sacks .. |  |  | * | * | * |  |
| Bigs, trunks. \&c. |  |  | 827 | 852 | 844 | 848 |
| Bukeries . |  |  | 2,740 | 2,757 | 2,768 | 2,762 |
| B rsketware .. |  |  | 140 | 143 | 151 | 158 |
| B odding and mattress |  |  | 786 | 758 | 741 | 739 |
| Biscuits |  |  | 1,129 | 1,168 | 1,179 | 1,174 |
| Builing down, tallow, \&o. |  |  | 332 | 333 | 355 | 402 |
| B oot accessories |  |  | 242 | 249 | 252 | 274 |
| Brot repairing |  |  | 233 | 237 | 237 | 240 |
| Byots and shoes |  |  | 9,889 | 10,186 | 10,241 | 10,622 |
| Boxes and cases |  |  | 679 | 701 | 758 | 783 |
| Brass and copper |  |  | * | * | * | * |
| Beweries . |  |  | 1,568 | 1,554 | 1,547 | 1,553 |
| Bricks, tiles, firebricks | . |  | 2,158 | 2,183 | 2,137 | 2,152 |
| Brooms and brushware |  |  | 440 | 436 | 435 | 442 |
| Batter and cheese |  |  | 2,819 | 3,016 | 3,268 | 3.546 |
| Battons . |  |  | 134 | 144 | 146 | 145 |
| Cabinet, furniture . |  |  | 2,862 | 2,912 | 2,892 | 2,882 |
| Celluloid and similar composit | ons |  | 487 | 497 | -559 | - 595 |
| Cement and cement goods |  |  | 1,308 | 1,300 | 1,293 | 1,239 |
| Cereal foods |  |  | 936 | 954 | 955 | 972 |
| Chaffeutting |  |  | 319 | 331 | 328 | 325 |
| Chemical fertilizers Chemicals, drugs |  |  | . 928 | 904 | 903 | 921 |
| Chemicals, drugs |  |  | 1,685 | 1,831 | 1.861 | 1,874 |
| Condiments, coffee |  |  | 1,049 | 1,052 | 1.123 | 1,151 |
| Confectionery |  |  | 2,845 | 2.761 | 2,643 | 2,613 |
| Cooperage . | . |  | $\begin{array}{r}277 \\ \hline 198\end{array}$ | , 275 | 271 | 270 |
| Corsets, stays |  |  | 1,198 | 1,174 | 1,159 | 1,166 |
| Cotton $\quad . \quad \cdots$ |  |  | 1,876 | 1,884 | 1,888 | 1,955 |
| Cutlery and small tools |  |  | 540 | 541 | 569 | 571 |
| Cycle and motor accessories |  |  | 1,241 | 1,245 | 1,241 | 1,224 |
| Die sinking and engraving |  |  | 145 | 142 | 146 | 144 |
| Distilleries . | - |  | 77 | 76 | 89 | 88 |
| Dressmaking |  |  | 7,386 | 7,900 | 8,073 | 8,070 |
| Dried fruit . . . . |  |  | 907 | 775 | 674 | 547 |
| Dyeworks and cleaning | . |  | 1.066 | 1,078 | 1,083 | 1,108 |
| Earthenware, china, \&c. |  |  | 1,089 | 1,113 | 1,095 | 1,096 |
| Electric light-Government |  |  | 1,130 | 1,125. | 1,134 | 1,147 |
| ", $\quad$ Local authority |  |  | 262 | 264 | 262 | 259 |
| Electrical apparatusanies |  |  | 78 | 78 | 78 | 78 |
| Electrical apparatus . . |  |  | 3,562 | 3,544 | 3,502 | 3,569 |
| Electrotyping and stereotyping |  | $\cdots$ | 88 | 88 | 87 | 88 |

* Figures not avallable for publication.
messengers and all others engaged in work connected with manufacturing.

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

IN FACTORIES, 1939-40.
of Employees in-

| November. | December. | January. | Febraary. | Marcl. | April. | May. | Jude. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 690 | 707 | 776 | 717 | 840 | 634 | 537 | 516 |
| 3,630 | 3,742 | 3.754 | 3.793 | 3,849 | 3,938 | 3,921 | 3,900 |
| 285 | 288 | 286 | 287 | 292 | 293 | 297 | 297 |
| 242 | 239 | 226 | 246 | 254 | 243 | 241 | 225 |
| 546 | 549 | 542 | 545 | 539 | 565 | 551 | 545 |
| * | * | * | * | * | * | * | * |
| 827 | 808 | 794 | 816 | 818 | 807 | 827 | 809 |
| 2,775 | 2,806 | 2,760 | 2,807 | 2,818 | 2,854 | 2,841 | 2,850 |
| 151 | 159 | 162 | 162 | 151 | 147 | 149 | 151 |
| 754 | 772 | 772 | 772 | 769 | 788 | 773 | 752 |
| 1,115 | 1,121 | 1.074 | 1,104 | 1,119 | 1,130 | 1,160 | 1,107 |
| 396 | 376 | 366 | 325 | 326 | 323 | 325 | 324 |
| 278 | 279 | 274 | 288 | 293 | 287 | 285 | 300 |
| 24.0 | 240 | 236 | 236 | 238 | 239 | 241 | 240 |
| 10,891 | 10,630 | 9,766 | 10,317 | 10,448 | 10,374 | 10,233 | 9,647 |
| 770 | ${ }_{*} 797$ | 787 | 814 | ${ }_{*}^{823}$ | ${ }_{*}^{81}$ | * 84 | 830 $*$ |
| 1593 | * ${ }^{1694}$ | 1,627 | * 1.614 | 1,634 | 1,640 |  | 1,633 |
| 1,593 2,131 | 1,624 2,099 | 1,627 2,127 | 1,614 2,120 | 1,634 2,086 | 1,640 | 1,629 2,048 | 1,633 2,128 |
| -439 | 2,438 | 435 | 440 | 440 | 444 | 442 | 440 |
| 3,665 | 3,635 | 3,423 | 3,173 | 2,969 | 2,809 | 2.857 | 2,847 |
| 150 | 172 | 168 | 162 | 179 | 186 | 189 | 199 |
| 2,921 | 3,024 | 3,025 | 3,04 | 3,047 | 3,092 | 3,065 | 2,927 |
| 585 | 500 | 566 | 594 | 655 | 675 | 723 | 724 |
| 1,255 | 1,265 | 1,258 | 1,262 | 1,283 | 1,313 | 1,343 | 1,320 |
| 960 | 986 | 972 | 986 | 999 | 1,081 | 1,069 | 1,043 |
| 307 | 310 | 351 | 373 | 364 | 371 | 339 | 342 |
| 910 | 945 | 926 | 1,011 | 1,203 | 1,254 | 1,103 | 931 |
| 1,919 | 1,943 | 1,816 | 1,901 | 1,925 | 1,949 | 1,963 | 1,944 |
| 1,115 | 1,031. | 982 | 954 | 942 | 1,016 | 1,100 | 1,078 |
| 2,619 | 2,580 | 2,408 | 2,518 | 2,473 | 2,617 | 2,870 | 2,834 |
| 270 | 276 | 273 | 276 | 288 | 289 | 274 | 276 |
| 1,146 | 1,147 | 1,160 | 1,164 | 1,159 | 1,216 | 1,193 | 1,205 |
| 1,985 | 2,048 | 2,075 | 2,132 | 2,167 | 2,191 | 2,229 | 2,291 |
| 618 | 608 | 628 | 640 | 642 | $\begin{array}{r}644 \\ \hline\end{array}$ | $\begin{array}{r}654 \\ \hline\end{array}$ | 658 1,412 |
| 1,227 | 1,297 | 1,307 | ],342 | 1,406 | 1,402 181 | 1,395 160 | 1,412 171 |
| 145 | 151 | 164 | 160 | 168 | 181 | 160 | 171 |
| 73 | 66 | 72 | 72 | 77 | 102 | 116 | 82 |
| 7,779 | 7,555 | 7,277 | 7,918 | 8,095 | 8,074 | 7,948 | 7,498 |
| 525 | 450 | 495 | 560 | 1,178 | 1,005 | 1,066 | 850 |
| 1,121 | 1,120 | 1,138 | 1,133 | 1,114 | 1,111 | 1,098 | 1,044 |
| 1,117 | 1,153 | 1,118 | 1,130 | 1,085 | 1,119 | 1,128 | 1,139 |
| 1,091 | 1,053 | 1,069 | 1,075 | 1,092 | 1,066 | 1,079 | 1,067 |
| 270 | 270 | 270 | 267 | 268 | 272 | 272 | 272 |
| 78 | 78 | 79 | 79 | 78 | 78 | 77 | 78 |
| 3,584 | 3,607 | 3,592 | 3,648 | 3,646 | 3,727 | 3,818 | 3,806 |
| 87 | 87 | 85 | 84 | 83 | 84 | 83 | 82 |

Victoria-Monthly Employment in

| Industry. | Average Number |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | July. | August. | September | October. |
| Engineering (not marine or electrical) | 9,388 | 9,379 | 9,299 | 9,333 |
| Explosives .. |  |  |  |  |
| Extracting and refining-other metals | * | * | * | * |
| Hellmongery | 290 | 268 | 323 | 645 |
| Furnishing, drapery | 495 | 494 | 485 | 486 |
| Furriers .. | 697 | 694 | 700 | 717 |
| Galvanized iron working | * |  |  |  |
| Gas fittings and meters | 217 | 217 | 211 | 210 |
| Gasworks-Local authorities | 76 | 74 | 74 | 75 |
| Companies | 814 | 812 | 784 | 792 |
| Glass (including bottles) | 1,026 | 1,024 | 1,028 | 1,023 |
| Gold, silver, and electroplating | 1,175 | 1,179 | 1,172 | 1,223 |
| Grain milling | 966 | 914 | 952 | 967 |
| Handkerchiefs, ties, \&c. | 394 | 398 | 459 | 471 |
| Hats and caps | 1,428 | 1,519 | 1,519 | 1,553 |
| Horse-drawn vehicles | 270 | 274 | 270 | 267 |
| Hosiery and knitting. . | 12,108 | 12,367 | 12,448 | 12,755 |
| Ice, refrigerating | 1,657 | 1,657 | 1,887 | 3,258 |
| Ice cream .. | 140 | 163 | 221 | 297 |
| Inks, polishes, \&c. | 377 | 376 | 392 | 395 |
| Jams and fruit preserving | 1,692 | 1,767 | 1,855 | 2,127 |
| Jewellery | 523 | 523 | 534 | 529 |
| Joinery | 1,563 | 1,580 | 1,557 | 1,547 |
| Lime, plaster, and asphalt | 904 | 930 | 938 | 909 |
| Machine belting | 62 | 63 | 62 | 66 |
| Malting | 381 | 373 | 378 | 375 |
| Margarine .. | 110 | 110 | 106 | 104 |
| Marble, slate, \&c. | 315 | 321 | 320 | 314 |
| Matches | 683 | 683 | 696 | 709 |
| Meat and fish preserving | 307 | 264 | 222 | 308 |
| Millinery | 1,259 | 1,304 | 1,302 | 1,281 |
| Modelling | 14 | 15 | 15 | 15 |
| Motor body building | 3,556 | 3,335 | 2,763 | 2,721 |
| Motor construction and assembly | 1,611 | 1,555 | 1,553 | 1,587 |
| Motor repairs | 4,437 | 4,438 | 4,430 | 4,404 |
| Musical instruments | 77 | 80 | 78 | 77 |
| Newspapers | 2,384 | 2,378 | 2,372 | 2,351 |
| Oils, mineral | * | * | * |  |
| Oils, vegetable | 148 | 141 | 126 | 134 |
| Paper, paper bags, and boxes | 2,673 | 2,447 | 2,617 | 2,735 |
| Perambulators | 120 | 122 | 123 | 128 |
| Photo engraving | 360 | 361 | 362 | 359 |
| Pickles and sauces | 267 | 324 | 296 | 286 |
| Picture frames | 41 | 42 | 43 | 48 |
| Printing and bookbinding | 6,247 | 6,294 | 6,282 | 6,348 |
| Rope and cordage | * |  |  |  |
| Rubber tires, \&c. | 2,338 | 2,311 | 2,280 | 2,282 |
| Rubber goods (other) | 596 | 599 | 601 | 596 |
| Saddlery, harness | 69 | 67 | 59 | 58 |
| Salt refining.. | 102 | 108 | 109 | 125 |
| Sausage skins | 232 | 274 | 279 | 407 |
| Sawmills-forest .. | 1,552 | 1,541 | 1,500 | 1,546 |

* Figures not avallable for publication.

Factories, 1939-40-continued.
of Employees In -

| November. | December. | January. | February. | March. | April. | May. | June. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 9,392 | 9,579 | 9,677 | 9,793 | 9,918 | 10,033 | 10,189 | 10,331 |
| , |  |  |  |  |  |  | 10, |
| * | * | * | * | * | * | * | * |
| 672 | 632 | 426 | 365 | 354 | 408 | 379 | 378 |
| 499 | 513 | 499 | 513 | 517 | 517 | 512 | 498 |
| 731 | 757 | 769 | 807 | 824 | 808 | 812 | 774 |
| * | * | * | * | * | * | * | * |
| 211 | 213 | 213 | 213 | - 215 | 218 | 211 | 206 |
| 78 | 76 | 75 | 75 | 73 | 72 | 73 | 73 |
| 785 | 796 | 795 | 793 | 796 | 815 | 818 | 817 |
| 973 | 1,076 | 1,086 | 1,068 | 1,076 | 1,112 | 1,115 | 1,137 |
| 1,234 | 1,246 | 1,257 | 1,283 | 1,294 | 1,308 | 1,345 | 1,330 |
| 1,022 | 1,074 | 1,142 | 1,095 | 1,038 | 1,017 | 1,046 | 1,068 |
| 462 | 449 | 337 | 373 | 371 | 372 | 377 | 371 |
| 1,572 | 1,576 | 1,533 | 1,580 | 1,552 | 1,530 | 1,514 | 1,488 |
| 276 | 268 | 265 | 266 | 264 | 263 | 259 | , 255 |
| 13,001 | 13,058 | 13,125 | 13,329 | 13,394 | 13,540 | 13,691 | 13,622 |
| 3,969 | 3,200 | 2,707 | 1,985 | 1,876 | 1,920 | 1,730 | 1,653 |
| 313 | 314 | 365 | 358 | 335 | 242 | 138 | 140 |
| 405 | 412 | 412 | 409 | 406 | 427 | 441 | 420 |
| 2,167 | 2,004 | 4,066 | 5,341 | 5,881 | 4,833 | 2,770 | 2,112 |
| 565 | 571 | 559 | 583 | 572 | 588 | 612 | 597 |
| 1,543 | 1,552 | 1,533 | 1,543 | 1,543 | 1,559 | 1,564 | 1,581 |
| 932 | 965 | 966 | 937 | 959 | 935 | 948 | 960 |
| 67 | 65 | 62 | 63 | 63 | 63 | 63 | 71 |
| 366 | 366 | 306 | 286 | 298 | 346 | 379 | 385 |
| 101 | 98 | 100 | 102 | 112 | 133 | 119 | 129 |
| 313 | 313 | 313 | 324 | 334 | 341 | 329 | 330 |
| 726 | 719 | 720 | 711 | 715 | 710 | 725 | 734 |
| 304 | 291 | 292 | 296 | 328 | 365 | 393 | 348 |
| 1,232 | 1,078 | 1,105 | 1,203 | 1,219 | 1,208 | 1,183 | 1,028 |
| 16 | 17 | 16 | 15 | 13 | 14 | ${ }^{1} 13$ | 13 |
| 2,708 | 2,850 | 2,984 | 2,979 | 3,031 | 2,819 | 2,757 | 2,499 |
| 1,528 | 1,674 | 1,553 | 1,508 | 1,576 | 1,509 | 1,421 | 1,499 |
| 4,406 | 4,470 | 4,503 | 4,507 | 4,503 | 4,572 | 4,555 | 4,476 |
| 80 | 77 | 80 | 78 | 75 | 78 | 78 | 78 |
| 2,322 | $\underset{*}{2,335}$ | 2,325 | $\underset{*}{2,306}$ | $\underset{*}{2,313}$ | $\underset{*}{2,314}$ | 2, ${ }_{*}^{296}$ | 2,293 |
| ${ }^{*} 139$ | * 108 | * 163 | * 185 | * 190 | $\stackrel{*}{*} 203$ | * 220 | ${ }^{*}$ |
| 2,891 | 2,942 | - 2,910 | 3,078 | 3,098 | 3,204 | 3,192 | 3,230 |
| 135 | 139 | 130 | 130 | 130 | 129 | 121 | 121 |
| 353 | 345 | 329 | 333 | 334 | 333 | 322 | 310 |
| 285 | 270 | 412 | 401 | 429 | 419 | 382 | 290 |
| 51 | 50 | 45 | 45 | 51 | 54 | 53 | 49 |
| 6,460 | 6,373 | 6,238 | 6,243 | 6,237 | 6,342 | 6,313 | 6,229 |
| * | * | * | * | * | * | * | * |
| 2,418 | 2,479 | 2,477 | 2,481 | 2,524 | 2,540 | 2,602 | 2,675 |
| 622 | 638 | 678 | 674 | 669 | 682 | -677 | 647 |
| 56 | 70 | 70 | 74 | 80 | 80 | 84 | 85 |
| 134 | 153 | 170 | 189 | 180 | 164 | 159 | 146 |
| 433 | 374 | 342 | 326 | 310 | 311 | 314 | 302 |
| 1.671 | 1,712 | 1,734 | 1,813 | 1,825 | 1,834 | 1,841 | 1,775 |


| Industry. |  | Average Namber |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | July. | August. | $\begin{gathered} \text { Septem- } \\ \text { ber. } \end{gathered}$ | October. |
| Sawmills-town | . | 2,006 | 2,034 | 2,047 | 2,038 |
| Ship and boat building | . | 403 | 358 | 643 | 751 |
| Shirts, collars, \&c. |  | 4,640 | 4,726 | 4,753 | 4,781 |
| Silk, natural and artificial | $\cdots$ | 677 | 679 | 670 | 647 |
| Smelting, iron rolling |  | * | * | * | * |
| Soap and candle . | - | 680 | 683 | 702 | 707 |
| Stationery . . |  | 952 | 932 | 931 | 944 |
| Stoves and ovens |  | 1,178 | 1,145 | 1,116 | 1,116 |
| Surgical instruments. |  | 309 | 313 | 311 | 310 |
| Tailoring |  | 7,527 | 7,655 | 7,725 | 7,888 |
| Tanning and leather dressing |  | 2,118 | 2,088 | 2,043 | 2,067 |
| Tents and sailmaking |  | 205 | 202 | 204 | 224 |
| Tobacco and cigarettes |  | 2,163 | 2,185 | 2,192 | 2,207 |
| Toys, games, \&c. |  | 744 | 769 | 769 | 758 |
| Tram and railway workshops |  | 5,711 | 5,715 | 5,696 | 5,696 |
| Umbrellas |  | 47 | 47 | 41 | 46 |
| Watches and clocks |  | 395 | 406 | 427 | 438 |
| Waterproof clothing | - | 458 | 452 | 468 | 470 |
| White lead, paint, \&e. | $\cdots$ | 340 | 344 | 342 | 336 |
| Window blinds, \&c. | . | 101 | 98 | 103 | 105 |
| Wireless apparatus | . | 888 | 795 | 757 | 892 |
| Wireworking |  | * | * | * | * |
| Wood turning |  | 423 | 433 | 431 | 427 |
| Woollen mills |  | 10,112 | 10,192 | 10,293 | 10,798 |
| Other factories |  | 21,689 | 22,200 | 23,323 | 24,347 |
| All Industries | Total | 192,345 | 194,2]7 | 196,256 | 202,032 |

* Figures not available for publication.

BUILDING STATISTICS, 1939-40.
In view of the great importance of statistics of building and $c^{\text {onstruction, their collection was undertaken in Victoria in } 1929 .}$

The particulars given below for the year 1939-40 were obtained from returns furnished by 983 builders.

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

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

Factories, 1939,40 -continued.
of Employees in-

| November. | December. | January. | February. | March. | April. | May. | June. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 2,083 | 2,094 | 2,095 | 2,105 | 2;109 | 2,149 | 2,151 | 2,143 |
| -.-786 | 736 | 770 | 628 | 622 | 712 | 671 | 700 |
| '.. 4,824 | 4,635 | 4,516 | 4,531 | 4,554 | 4,580 ${ }^{\text {. }}$ | 4,600 | 4,539 |
| 654 | 668 | 629 | 608 | 614 | 613 | 576 | 571 |
| * | * | * | * | * | * | * | * |
| . 726 | 734 | 681 | - 707 | 708 | 728 | 731 | 713 |
| 936 | 942 | 931 | 919 | 918 | 926 | 922 | 901 |
| 1,140 | 1,162 | 1,190 | 1,175 | 1,197 | 1,226 | 1,260 | 1,229 |
| 313 | 315 | 325 | 329 | 334 | 332 | 336 | 345 |
| 8,041 | 8,061 | 7,791 | 8,026 | 8.140 | 8,120 | 8,155 | 8,190 |
| 2,131 | 2,158 | 2,239 | 2,305 | 2,312 | 2,314 | 2.280 | 2,191 |
| 240 | 248 | 240 | 241 | 24.0 | 241 | 239 | 236 |
| 2,205 | 2,216 | 2,144 | 2,152 | 2,169 | 2,201 | 2,223 | 2,242 |
| 752 | 731 | 667 | 665 | 647 | 700 | 721 | 743 |
| -5,680 | 5,775 | 5,561 | 5,989 | 5,838 | 5,991 | 6,010 | 6,154 |
| 46 | 45 | 46 | 48 | 50 | 51 | 52 | 52 |
| - 438 | 377 | 369 | 363 | 369 | 394 | 418 | 430 |
| $\because 474$ | 481 | 477 | 490 | 479 | 480 | 496 | 493 |
| 349 | 363 | 366 | 365 | 371 | 377 | 371 | 362 |
| 104 | 105 | 103 | 101 | 111 | 102 | 105 | 102 |
| 966 | 911 | 907 | 858 | 812 | 887 | 956 | 970 |
| * | * | * | * | * | * | * | * |
| 452 | 458 | 475 | 482 | 479 | 491 | 503 | 484 |
| 10,891 | 10,992 | 11,022 | 11,168 | 11,353 | 11,409 | 11,533 | 11,660 |
| 25,414 | 26,048 | 26,132 | 26,480 | 26,811 | 27,390 | 27,483 | 28,105 |
| 205,544 | 205,683 | 205,001 | 203,856 | 211,454 | 212,788 | 210,487 | 208,148 |

VICTORIA-VALUE OF BUILDING WORK.

| -- | 1935-36. | 1936-37. | 1937-38. | 1938-39. | 1939-40. |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Number of returns | 965 | 982 | 962 | 953 | 983 |
| New buildings | $\begin{gathered} \mathfrak{£} \\ 4.759,178 \end{gathered}$ | $\begin{gathered} \underset{5,378.287}{£} \end{gathered}$ | $\underset{5,951,979}{£}$ | $\underset{6,480.488}{£}$ | $\underset{7,230,073}{£}$ |
| Repairs and additions | 1.369,274 | 1,417,867 | 1,651,290 | 1,426,982 | 1.336,439 |
| Other construetion .. | 138,679 | 226,111 | 211,511 | 315,723 | 255,301 |
| Total | 6,267,131 | 7,022,265 | 7,814,780 | 8,223,193 | 8,821,813 |

The number of persons employed and the total salaries and wages paid are shown hereunder for the year 1939-40.

| $\dagger$ Persons Employed. |  | Number. | Salaries and Wages Pald. | Average Salary or Wage. |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  | £ | £ | $s$. | d. |
| Working proprietors |  | 989 | 283,479 |  | 12 | 8 |
| Managers |  | 159 | 61,412 | 386 | 4 | 9 |
| Clerks- |  |  |  |  |  |  |
| Male |  | 98 | 21,743 |  | 17 | 4 |
| Female |  | 79 | 8,633 | 109 | 5 | 7 |
| Others | . | 6,506 | 1,641,897 | 252 | 7 | 4 |

$\dagger$ Excluding Sub-contractors and their Employees.

VICTORIA-PAYMENTS TO SUB-CONTRACTORS, 1939-40.

| Plasterers, inoluding | fibrous | £ | Bricklayers | $\cdots$ | £ |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | 390,164 |  |  | $\cdots$ | 193,053 |
| Plumbers |  | 381,008 | Tilers . | $\cdots$ |  | 116,999 |
| Painters. |  | 190,493 | Others | . |  | 679,251 |
| Electricians |  | 176,906 |  |  |  |  |
| Carpenters and Joiners | s | 221,957 | Total | . |  | 2,349,831 |

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

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


In addition to payments for wages, materials, and sab-contracts, there are numerous other expenses incidental to building, such as fuel, insurance, building fees of various kinds, \&c. These have been included under the heading of "Other expenses," and totalled $£ 59,496$ in $1935-36, £ 73,629$ in 1935-37, $£ 78,921$ in 1937-38, $£ 118,607$ in 1938-39, and $£ 139,230$ in 1939-40.

Capital invested in plant and machinery amounted to $£ 83,695$ in 1935-36, £103,390 in 1936-37, £114,759 in 1937-38, £147,623 in 1938-39, and to $£ 164,151$ in 1939-40; capital invested in land and buildings used as workshops amounted to $£ 68,514$ in $1935-36, £ 78,349$ in $1936-37, £ 74,418$ in 1937-38, $£ 96,905$ in 1938-39, and to $£ 156,140$ in 1939-40.

The following table is an analysis of the buildings completed during the years $1936-37$ to 1939－40．As some of these buildings were doubtless commenced in the previous year，the total value is not a measure of the value of building construction for each respective year． The table published at the beginning of this review shows the total value of construction and repair work done for those years．

VIOTORIA－BUILDINGS OOMPLETED，1936－37 TO 1939－40．

| － | 1936－37． |  | 1937－38． |  | 1938－39． |  | 1939－40． |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & \text { 萢 } \\ & \text { 蒠 } \end{aligned}$ |  | $\begin{aligned} & \text { 安 } \\ & \text { 夏 } \end{aligned}$ | 范 |  | 范 | $$ | 需 |
| Business premises | 484 | $\stackrel{\text { £ }}{1,514,018}$ | 513 | £ $1,790,363$ | 405 | $\stackrel{£}{\text { ¢ }}$ | 421 | $\stackrel{\text { ¢ }}{\text { 2，171，172 }}$ |
| Other buildings | ．． | 1，141，676 | ． | 1，218，497 | ．． | 1，298，362 | ．． | 1，854，402 |
| ）wellings－ |  |  |  |  |  |  |  |  |
| Brick ． | 1，388 | 1，729，927 | 1，376 | 1，756，265． | 1，461 | 1，824，240 | 1，563 | 2，009，852 |
| Wood | 1，316 | 818，424 | 1，577 | 992，120 | 1，544 | 902，070 | 1，367 | 897，604 |
| Total Falue | $\cdots$ | 5，204，045 |  | 5，757，245 |  | 5，980，934 | － | 6，933，030 |

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

The table hereunder summarizes the result．

VICTORIA－DWELLINGS CONSTRUCTED，1939－40．

| Number of Rooms． | Brlck Dwellings． |  |  | Wooden Dwellings． |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Number． | Value． | Average Value per Dwelling． | Number． | Value． | Average Value per Lwelling． |
|  |  | £ | £ |  | £ | £ |
| Three | 22 | 10，691 | 486 | 67 | 19，977 | 298 |
| Four | 177 | 123，088 | 695 | 275 | 133，289 | 485 |
| Five | 680 | 635，133 | 934 | 807 | 547，822 | 679 |
| Six | 414 | 481，660 | 1，164 | 168 | 130，945 | 779 |
| Seven | 70 | 120，414 | 1，720 | 30 | 34，281 | 1，143 |
| Eight ．． | 69 | 143，385 | 2，078 | 11 | 14，814 | 1，316 |
| Nine | 16 | 35，398 | 2，213 | 3 | 2，972 | 991 |
| Ten | 40 | 105，226 | 2，631 | 3 | 6，750 | 2，250 |
| Over ten | 75 | 354，857 | 4,731 | 3 | 6，754 | 2，251 |
| Total | 1，563 | 2，009，852 | 1，286 | 1，367 | 897，604 | 657 |


[^0]:    * Excluding Melbourne and Metropolitan Board of Works, Geelong Waterworks and Sewerage Trust, and the Ballarat Water Commission, particnlars of which appear in part " Local Government" of this issue.
    $\dagger$ The net loan liability of the State after deducting the amount in the National Debt Sinking Fund (£1,395,390) was £25,841,916.

[^1]:    Agricultural
    An Act for the establishment of Agricultural Colleges was passed in 1884, and 14,458 acres, comprising 5,955 acres at Dookie ; 2,386 acres at Longerenong ; 2,500 acres at Gunyah Gunyah; 2,800 acres at Olangolah, and 817 acres at Bullarto, were reserved as sites for colleges and experimental farms. The areas at Dookie and Longerenong are being used for the purpose for which they were reserved, but the other three are devoted to other uses. The fee for students in residence at the agricultural colleges is $£ 50$ per annum for maintenance. No charge is made for instruction. Accommodation is provided at Dookie for 100 and at Longerenong for 50 students.

[^2]:    * For grain.

[^3]:    * The gross value is based on the wholesale price realized in the principal markets. The places where primary products are absorbed locally or where they become raw material for a secondary industry are presumed to be the principal markets.
    † Includes amount allocated from Flour Tax $£ 194,043$.

[^4]:    * Includes amounts held on farms for seed, stock feed, \&c., as follow:-46,732 tons in 1936-37; 33,153 tons in 1937-38; 18,380 tons in 1938-39, and 21,919 tons in 1939-40.

[^5]:    * Excludes area under New Zealand Flax, the acreage of which was 81 in 1937-38 and 98 in 1938-39.

[^6]:    size of holdings and numbers of live stock.

    A table showing the sizes of holdings and the numbers of live stock thereon as at March, 1938, appears on page 472 of the 1938-39 issue of the Year-Book.

[^7]:    * Includes beet, carrots, and parsnips.

[^8]:    Rams, Ewes, sac., in
    Gounties at
    March, 1940.
    The following table sets out the numbers of rams, ewes, wethers and lambs depastured on rural holdings in each of ewes mated, classified according to whether the progeny is intended for wool or fat lamb production. The breeds of rams are also shown.

[^9]:    Priess of
    Wool. The following information as to the average prices of wool per lb . which have prevailed during the last three seasons has been obtained from Victorian wool brokers. These prices are for wool sold--not only for wool grown--in Victoria. Wool from the Riverina and the south-east of South Australia is included in Victorian sales.

[^10]:    * Average annual production. + Total production to 1916 . $\ddagger 1,392$ tons in 1924, 76,553 tons in 1925.

[^11]:    * Wholesale selling value of stone at the quarry, exclusive of delivery charges therefrom.

[^12]:    * Not available.

[^13]:    , wration Expenses of mandacturing the following costs only :-Raw materials, containers, fuel and light, tools replaced, repairs to plant and machinery, lubricating oil, and water.

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

[^14]:    * Figures not available for publication.

[^15]:    $\dagger$ Includes chilled.

[^16]:    * Women's socks and stockings only. † Includes men's socks and stockings, 1936-37, $775,4+3$ doz. pair; 1937-38, 836,222 doz. pair; 1938-39, 892,631 doz. pair; children's socks and stockings. 1936-37, 231,011 doz. pair; 1937-38, 258,530 doz. pair; 1938-39, 265,591 doz. pair. Men's, 1939-40, 1,040,199, Children's 278,238 .

[^17]:    * Includes canvas shoes.

[^18]:    * "Rated" Horse-power. See following table relating to Horse-power.

[^19]:    * This figure is based on the number of employees and the wages, de., paid to them, working proprietors being excluded.

[^20]:    * Manufacturing is included at its net or added value because the gross or wholesale selling value contains so much duplication of products, the finished article of one class of manufacture forming in numerous cases the raw material for others.

[^21]:    * Inclusive of wheat bounties.

[^22]:    * Incomplete.
    $\dagger$ Costs of production include stockfeed, seed costs and pickling, manures, spraying, sheep and cattle dips, power, fuel, water, and all other materials used in production.

