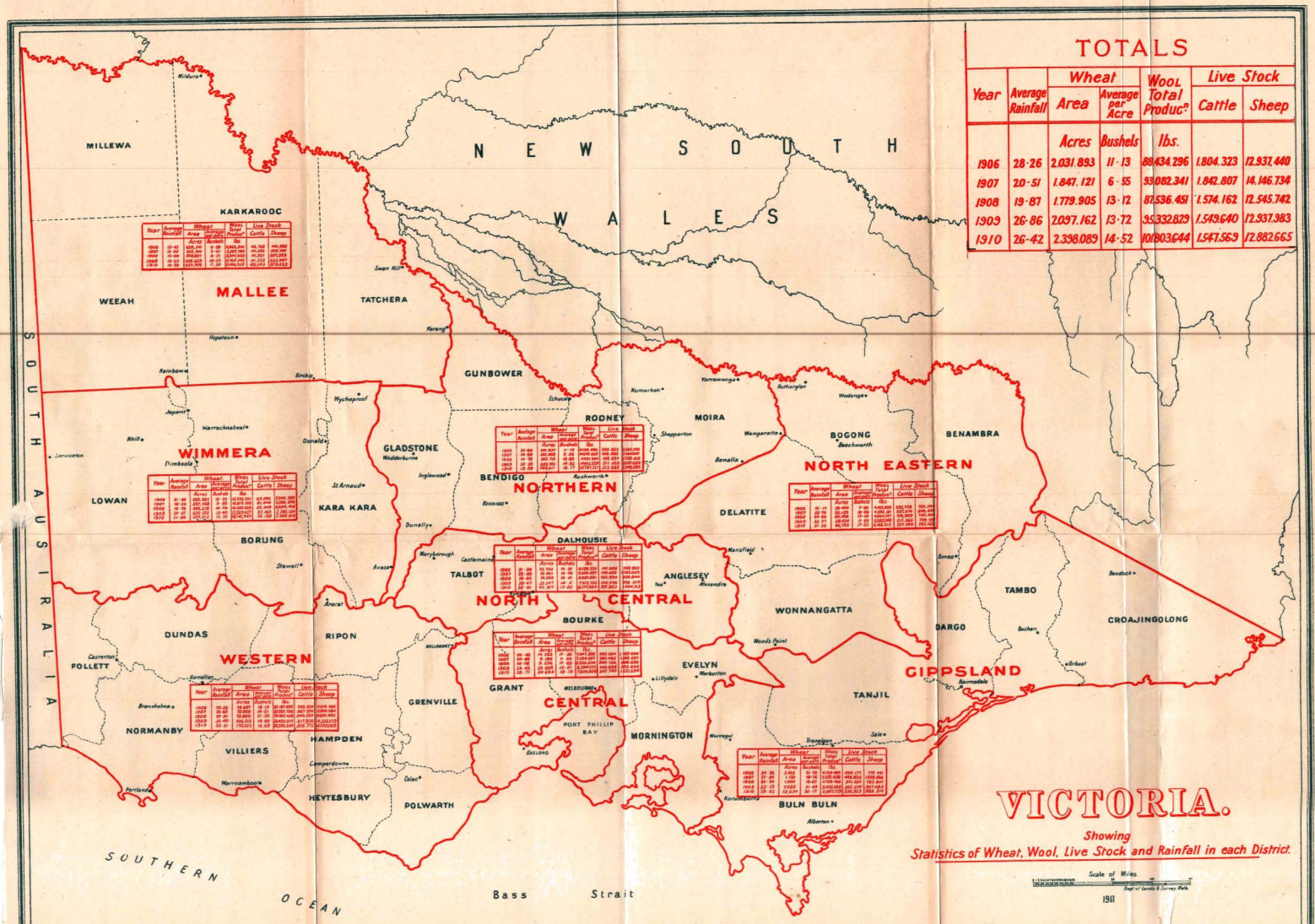
TOTALS
Year | Average Rainfall | Wheat: Area | Wheat: Average per Acre | Wool Total Product | Live Stock: Cattle | Live Stock: Sheep
Acres | Bushels | lbs.
1906 | 28·26 | 2.031.893 | 11·13 | 88.434.296 | 1.804.323 | 12.937.440
1907 | 20·51 | 1.847.121 | 6·55 | 93.082.341 | 1.842.807 | 14.146.734
1908 | 19·87 | 1.779.905 | 13·12 | 87.536.451 | 1.574.162 | 12.545.742
1909 | 26·86 | 2.097.162 | 13·72 | 95.332.829 | 1.549.640 | 12.937.983
1910 | 26·42 | 2.398.089 | 14·52 | 101.803.644 | 1.547.569 | 12.882.665
NEW SOUTH WALES
SOUTH AUSTRALIA
MILLEWA
KARKAROOC
MALLEE
WEEAH
TATCHERA
GUNBOWER
RODNEY
MOIRA
BOGONG
BENAMBRA
NORTH EASTERN
WIMMERA
LOWAN
KARA KARA
BENDIGO
NORTHERN
DELATITE
BORUNG
DALHOUSIE
TALBOT
ANGLESEY
NORTH CENTRAL
WONNANGATTA
TAMBO
CROAJINGOLONG
BOURKE
DUNDAS
RIPON
WESTERN
FOLLETT
DARGO
GIPPSLAND
EVELYN
GRANT
CENTRAL
TANJIL
GRENVILLE
NORMANBY
HAMPDEN
VILLIERS
PORT PHILLIP BAY
MORNINGTON
HEYTESBURY
POLWARTH
BULN BULN
SOUTHERN OCEAN
Bass Strait
VICTORIA.
Showing
Statistics of Wheat, Wool, Live Stock and Rainfall in each District.
Scale of Miles
1911

PRODUCTION.

LAND SETTLEMENT, ETC.

Private and Crown lands.

The total area of the State is 56,245,760 acres. On 31st December, 1910, 29,141,999 acres were held privately, of which 23,568,070 acres had been alienated in fee simple and 5,573,929 acres were in process of alienation. The total area of Crown lands is thus 27,103,761 acres, which comprise roads in connexion with lands alienated and in process of alienation, 1,692,314 acres; agricultural college and water reserves, 439,748 acres; State forests and timber reserves (under *Forests Act* 1907), 3,936,746 acres; other reserves, 693,406 acres; unsold land in cities, towns, boroughs, beds of rivers, creeks, lakes and lagoons, water frontages (including coast reserves) and various Departmental reserves, 2,192,243 acres; in occupation under grazing area leases, 3,006,988 acres; Mallee pastoral lases, 637,083 acres; all other licences and leases, 818,272 acres; and areas remaining for disposal as tabulated on page 590, 13,686,951 acres.

Alienation of land, 1900 to 1910.

During the year 1900, 494,752 acres, including land selected in previous years, were alienated in fee simple; 406,145 acres were so alienated in 1901; 523,574 acres in 1902; 510,080 acres in 1903; 584,010 acres in 1904; 907,339 acres in 1905; 344,519 acres in 1906; 181,050 acres in 1907; 137,023 acres in 1908; 150,948 acres in 1909; and 127,993 acres in 1910; the purchase money being £526,650 in 1900; £438,363 in 1901; £555,538 in 1902; £542,011 in 1903; £613,511 in 1904; £934,386 in 1905; £375,296 in 1906; £208,619 in 1907; £176,335 in 1908; £188,017 in 1909; and £171,904 in 1910. The area of Crown lands absolutely or conditionally sold during the last ten years was 232,783 acres in 1900; 523,464 in 1901; 306,806 in 1902; 347,813 in 1903; 263,180 in 1904; 226,197 in 1905; 179,755 in 1906; 197,545 in 1907; 220,435 in 1908; 264,572 in 1909; and 254,489 in 1910.

Pastoral occupation of Crown lands.

The particulars of Crown lands leased out for pastoral occupation on 31st December, 1910, are as follows:—

Number of Licences and Leases	20,405
Area (acres)	15,433,875
Annual Rental	£51,108

These licences and leases are not all on the same footing as regards the term and the privileges of tenure. For instance, grazing area leases are granted for any term of years expiring not later than 29th December, 1920, whilst grazing licences are renewable annually and are only granted for waste lands of the Crown until required under the principal sections of the Act. The lessee of a grazing area has the privilege of selecting (*i.e.*, of purchasing under the deferred payment system on certain conditions) out of his lease for agricultural or grazing purposes, an area not exceeding 200 acres

of first class, 320 acres of second class, or 640 acres of third class land, according to classification; and the lessee of a Mallee allotment has a like privilege of selecting out of his lease 640 acres of first class, 1,000 acres of second class, or 1,280 acres of third class land, according to classification.

Total amount realized by sale of Crown lands.

From the period of the first settlement of the State to the end of 1910 the amount realized by the sale of Crown lands was £32,681,610, or about £1 7s. 9d. per acre. It must, however, be remembered that payment of a considerable portion of this amount extended over a series of years without interest, upon very easy terms.

Lands remaining for disposal.

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

CROWN LANDS REMAINING FOR DISPOSAL ON 31ST DECEMBER, 1910.

Location.	Classification.						Total.
	Agricultural and Grazing.				Auriferous.	Pastoral.	
	First.	Second.	Third.	Unclassed.			
County.	acres.	acres.	acres.	acres.	acres.	acres.	acres.
Buln Buln	4,072	37,138	37,626	..	4,691	..	
Croajingolong ..	..	2,000	504,320	216,500	14,150	549,000	
Dargo	..	..	71,400	180,000	96,600	256,100	
Tambo	..	..	215,100	..	3,800	375,450	
Tanjil	..	2,600	54,080	..	69,500	360,000	
Wonnangatta ..	..	..	122,279	..	..	947,600	
Bogong	995	10,068	151,831	..	132,984	191,300	
Benambra	..	..	149,640	..	86,178	419,547	
Delatite	638	26,299	206,392	..	68,618	180,300	
Moira	..	..	7,150	..	..	..	
Anglesey	26	3,684	51,224	..	9,302	..	
Bourke	..	3,432	100	..	..	..	
Dalhousie	20	829	2,062	..	2,842	..	
Evelyn	689	25,007	..	..	7,913	..	
Mornington ..	..	21,167	33,349	..	..	..	
Bendigo	113	1,050	6,705	..	9,532	..	
Rodney	..	180	2,000	..	20	..	
Borung	..	1,525	41,795	..	12,517	2,592	
Gladstone	243	932	3,007	..	50,463	..	
Lowan	..	177	43,423	..	..	11,024	
Kara Kara	..	2,368	762	..	17,375	..	
Talbot	207	545	570	..	74,223	..	
Tatchera	..	70	..	..	..	..	
Heytesbury ..	..	860	179 430	..	..	..	
Polwarth	..	9,690	38,580	..	..	..	
Grant	..	75	27,560	..	21,550	..	
Grenville	..	..	..	..	28,540	..	
Ripon	..	..	12,409	..	7,500	..	
Normanby	..	382	77,250	..	1,195	..	
Dundas	425	40	31,201	..	..	..	
Villiers	..	..	238	..	..	..	
Follett	..	117	9,365	..	..	..	
Totals ..	7,428	150,235	2,080,848	396,500	719,493	3,292,913	6,647,417

Throughout the State	Swamp or reclaimed lands	912
,, ,, ..	Lands which may be sold by auction	16,117
The north-western portion of the State ..	Mallee lands (such as are suitable to be eventually classed 1st, 2nd, or 3rd class for selection)	7,022,505
Total area remaining for disposal		13,686,951

For the purposes of administration, the State is divided into seventeen districts, in each of which there is a land office under the management of a land officer. These offices are situated at Melbourne, Ararat, Alexandra, Bairnsdale, Ballarat, Beechworth, Benalla, Bendigo, Geelong, Hamilton, Horsham, Omeo, Sale, Seymour, St. Arnaud, Stawell and Warracknabeal, and the officers stationed at these centres are in a position to point out the exact localities of available lands to intending selectors. Pamphlets with fuller details are obtainable from the Crown Lands Enquiry Office, Melbourne.

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

Land Acts.

The present system of disposing of the Crown lands of Victoria dates from the passing of the *Land Act* 1884 and the *Mallee Pastoral Leases Act* 1883, which, with subsequent amendments, were consolidated by the *Land Act* 1890. This Act was in turn amended by the Land Acts 1891, 1898, 1900, and 1900 (No. 2); and by the *Settlement on Lands Act* 1893, and the *Mallee Lands Act* 1896. These Acts were all consolidated into the *Land Act* 1901, which has been amended by the Land Acts of 1903, 1904, 1905, and 1909. With the *Land Act* 1898 (Part III.) was introduced a system by which the Government was enabled to repurchase private lands for closer settlement. This subject is dealt with on page 596.

The *Land Act* 1901 (consolidated) embodies the provisions for the classification of Crown lands, and the various means, as set forth in the succeeding paragraphs, under which lands may be acquired.

The *Land Act* 1903 introduced important amendments in regard to the valuation of unalienated Crown lands.

The *Land Act* 1904 deals principally with procedure.

The *Land Act* 1905 deals with procedure and the conditions upon which bee range areas may be declared and bee farm site licences granted. Three bee farm licences, and an area of ten acres in the whole, constitute the limit allowed to any one person or company. All licences are issued for one year, but are renewable up to seven years.

The *Land Act* 1909 also deals with procedure, gives power to defer selectors' rents for a period up to 3 or 5 years after the first payment, and provides for revaluation of certain lands selected during the previous 6 years.

A Bill further amending and consolidating the Land Acts is receiving the consideration of Parliament.

Agriculture and grazing lands.

The Crown lands termed Agricultural and Grazing lands are arranged in three classes—first, second, and third.

The lands of the first class, comprising 7,428 acres, are situated principally in the county of Buln Buln, are heavily timbered, and consist for the most part of good chocolate soil of volcanic origin, and the grey soil of the coal-bearing country. The second-class lands, embracing 150,235 acres, are fairly distributed throughout the State, and comprise silurian and granite ranges, and lower lands of tertiary

formation. A large portion of these lands has chiefly a grazing value, though parts, comprising creek flats and gullies, are suitable for cultivation, while large areas are specially suitable for vineyards and orchards. The area of third class lands, which like the second class lands are to be found in almost every county in the State, is very extensive, amounting to 2,080,848 acres.

A grazing lease may be obtained of an area not exceeding 200, 640, or 1,280 acres of first, second, or third class lands respectively, for any term expiring not later than 29th December, 1920. Upon expiration of the lease the retiring lessee must be paid for his improvements by the incoming tenant at a valuation limited to 10s., 7s. 6d., or 5s. per acre for the three classes respectively. The annual rent of a grazing area is not less than 3d., 2d., or 1d. per acre according to the value of land. The lessee of a grazing area may select thereout an agricultural or grazing allotment.

Agricultural and grazing allotments.

A person desirous of selecting and obtaining the freehold may do so by either taking up a grazing area lease and selecting thereout, as just described, or by obtaining direct an agricultural or grazing allotment without first taking up a grazing area lease. The purchase money is fixed at not less than 20s., 15s., or 10s. per acre according to the value of the land, and is payable by even annual instalments, extending in the case of a residential selector over a period of 20 or 40 years at his option; but in the case of a non-residential selector over a period of 20 years only. The land is occupied during the first six years under *licence*, and during the remainder of the term under lease. During the period of the licence the land must be kept free from vermin and enclosed with a fence, and certain improvements must be made. After the expiration of the six years' licence, the selector, if all conditions have been complied with, can either purchase his holding by paying up the balance of the purchase money, the six years' instalments (licence-fees) already paid being credited as part payment, or obtain a lease extending over 14 or 34 years, as the case may be, at the same annual rental, which is also credited to him as part payment of the fee-simple.

Perpetual leases.

Instead of selecting by way of licence and lease under which the freehold is obtained, a person may acquire a similar area of agricultural and grazing lands under perpetual lease. The annual rental is 4 per cent. of the unimproved value of the land, which is fixed at £1, 15s., or 10s. per acre for first, second, or third class lands respectively. The rent is subject to revision every ten years, but must not exceed 4 per cent. of the unimproved value of the land. Residence on or within five miles of the land for six months during the first year, and for eight months during each of the four following years, is necessary; but if one-fourth of the allotment be cultivated during the first two years, and one-half before the end of the fourth year, the residence covenant will not be enforced.

Mallee Lands.

The "mallee country"—so named from the scrub found growing there—occupies about 11,000,000 acres in the north-west portion of the State. The soil is light chocolate and sandy loam, and in its virgin state is covered with mallee scrub, interspersed with plains lightly timbered with box, she-oak, and pines. Since the introduction of the "mallee roller" and the "stump-jump" plough, it has been possible to clear off the scrub at a moderate cost. With the extension of railway facilities and by the utilization of some of the surplus waters of the Murray for irrigation there will be great scope for successful settlement in this country. There are now 7,022,505 acres included in the general list of unalienated lands, portions of which, as opportunity offers, may become classified as first, second, or third class lands for selection. The terms of purchase by licence and lease are similar to those in respect of agricultural and grazing allotments previously described, viz., for first, second, and third class land, not less than £1, 15s., and 10s., respectively, payable during either 20 or 40 years. Larger areas may be held, however, the maximum being 640 acres, 1,000 acres, and 1,280 acres respectively. In the case of Mallee Perpetual Leases the rental must not exceed 1¼ per cent. of the unimproved value, and if one-fourth of the area be cultivated within four years and one-half by the end of the sixth year, or improvements be effected to the extent of 10s., 7s. 6d., or 5s. per acre, according to the classification, residence is unnecessary.

Auriferous lands.

The "auriferous lands" unalienated comprise 719,493 acres, and are distributed over twenty-one counties in various parts of the State. Any portions which are found to be non-auriferous, or which can be alienated without injury to mining interests, may be reclassed as Agricultural and Grazing lands for selection. These lands are for the most part suitable for fruit culture and grazing. Annual licences are issued for areas of auriferous lands not exceeding 20 acres on payment of a yearly licence-fee of 5s. for areas of 3 acres or under, of 10s. for areas of from 3 to 10 acres, and of 1s. per acre for areas of over 10 acres. The licensee has the right to use the surface of the land only; cannot assign or sublet without permission; and must either reside on the land or within four months enclose same with a fence and cultivate one-fifth of the area. He must post notices on the land, indicating that it is auriferous; and miners must be allowed free access to any part of the land not occupied by buildings. If at any time the mining objections be removed a licensee who has complied with conditions may surrender the licence—credit being given for all rent paid, occupation, and improvements effected—and obtain a selection licence which enables the freehold to be obtained. Holders of miners' rights, issued under the Mines Acts 1890 and 1897, are entitled to occupy for the purpose of residence or business a maximum area of one acre or a less area fixed by local mining by-laws. The fee is £5 per annum for a business licence, and 2s. 6d. for a miner's

right, and a habitable dwelling must be erected on the area within four months. After having been in possession for two and a half years, and having erected buildings or other improvements, the holder may apply for leave to purchase his allotment at a price to be determined by the Board of Land and Works.

Swamp or reclaimed lands.

The area of swamp or reclaimed lands unalienated amounts to 912 acres. The most important of these are situated at Koo-wee-rup, Moe, and Condah, which have been reclaimed at considerable cost to the Crown. These lands are divided into allotments not exceeding 160 acres. When the value of an allotment has been determined, it may be disposed of in one of four ways, viz., under a 21 years' lease; under perpetual lease, at a rental of 4 per cent. on the value of the land; under a conditional purchase lease, payment extending over 31½ years by 63 half-yearly instalments, including 4½ per cent. interest on the balance of the unpaid purchase money; or by public auction, on terms similar to those explained in the following paragraph.

Lands for sale by auction.

Country lands specially classed for sale by auction (not including swamp or reclaimed lands) and remaining unalienated on 31st December, 1910, comprise 16,117 acres. Any unsold land in a city, town, or borough, areas specially classed for sale, isolated pieces not exceeding 50 acres, and sites for church or charitable purposes of not more than 3 acres, may be sold by auction. The terms are cash, or a deposit of one-eighth of the purchase money and the balance in from 6 to 20 half-yearly instalments with interest at 4 per cent. per annum. There are stringent provisions prohibiting agreements which would prevent fair competition.

Pastoral lands.

The "pastoral lands" unalienated comprise 3,292,913 acres, and are situated in the counties of Wonnangatta, Croajingolong, Benambra, Tambo, Tanjil, Bogong, Delatite, Dargo, Lowan, and Borung. Generally speaking these lands are difficult of access, and large portions are in high altitudes, where cultivation is impossible and grazing impracticable except during the summer months. Areas which are found suitable may as occasion requires be reclassed Agricultural and Grazing lands for selection.

Annual grazing licences.

Annual grazing licences may be issued to enter with cattle, sheep, or other animals upon reserves, "pastoral lands," "Mallee lands," or other Crown lands, not required in the meantime for other purposes. Such licences are renewable for a period not exceeding seven years, subject to cancellation at any time during the period. Any fencing erected by a licensee may be removed by him.

Other leases purchases, &c.

Leases up to 21 years at an annual rental of not less than £5, and annual licences at various rates are issued for different purposes, such as sites for residences, gardens, inns, stores, smithies, butter factories, creameries, brickworks, &c. Licensees of sites for residences, gardens, inns, stores, smithies, butter factories, or similar buildings, who have been in possession of land for five years (if

the land is outside the boundaries of a city), may purchase at a price to be determined, in which case any rents previously paid will be credited towards purchase money.

Village settlement.

An Act (the *Settlement on Lands Act* 1893, No. 1311) was passed on 31st August, 1893, providing for the establishment of three descriptions of rural settlements, viz. :—Village Communities, Homestead Associations and Labour Colonies, and certain lands were set apart in connexion therewith.

The Homestead Associations were originally combinations of not less than six persons who desired to settle near each other. These Associations, however, proved unsuccessful, and the section of the Act relating to them was repealed in 1904.

The area originally made available for Village Communities and Homestead Associations was 156,020 acres in 85 different localities in the State. A large portion of that area was, however, found to be unsuitable for Village Settlement purposes, and has been withdrawn from the operation of the Act. The area which a settler could acquire, viz., 20 acres, was altered by the *Land Act* 1904 to an area not exceeding £200 in value as the maximum. The area now occupied is 33,036 acres, and this is divided amongst 1,530 settlers, giving an average of 22 acres each.

These figures do not apply to a considerable number of settlers who have surrendered their Village Settlement leases and have become selectors under the *Land Act* 1901.

Monetary aid to the extent of £67,379 has been afforded to settlers by way of loans, but no advances have been made since 1903. At 30th June, 1911, £37,237 of the amount advanced had been repaid by the settlers.

Transfer of Land Act.

The "Torrens System," whereby persons acquiring possession of land may receive a clear title, was introduced into Victoria in 1862. The system was originated previously in South Australia by the late Sir R. R. Torrens, and has been the means of simplifying procedure in connexion with the transferring of land. It gives a title to the transferee free of any latent defect and cheapens the cost of dealing in real estate by reason of the simplicity of the procedure. All land parted with by the Crown since 1862 is under the operation of the Transfer of Land Act, and the Crown grant issues through the Titles Office; but to bring under the Act land that was parted with prior to that year, application must be made accompanied by strict proofs of the applicant's interest in the property. During 1910 there were submitted 692 applications to have brought under the Act land amounting to 119,160 acres in extent, and to £1,775,735 in value; whilst the land actually brought under the Act during the year by application was 109,918 acres, valued at £1,247,758. Up to the end of 1910 there had been brought under the Act 2,694,232 acres valued at £53,236,491. The number of certificates of title issued in 1910 was 14,486.

Assurance fund.

When application is made to have land brought under the Transfer of Land Act, a contribution to the assurance fund of ½d. in the £1 on the value of the land is levied on the applicant, to assure and indemnify the Government in granting a clear title against all the world, as some other person may have a latent interest in the property, and it may be necessary for the Government to recompense such person out of the fund for the loss of his interest. Since 1884-5 the assurance fund has been reduced by £75,073, which amount was advanced towards the purchase of land adjoining the Titles Office, the fund receiving interest thereon at 4 per cent. per annum from the general revenue. The amount paid up to 30th June, 1910, as compensation and for judgments recovered, including costs, was £6,563, representing 33 claims.

Closer Settlement.

Closer Settlement.

The increasing demand for small farm holdings, coupled with the necessity for retaining within the State persons trained in agricultural pursuits, who might otherwise transfer their activities to adjoining States, has led to the establishment of a vigorous policy of repurchase of private lands by the Crown for the purposes of closer settlement. The operations of the State Rivers and Water Supply Commission, and the extension of channels into new districts suitable for irrigation, have given considerable impetus to irrigation farming in Victoria, and in order that the advantages of irrigation may be fully utilized, the Closer Settlement Board and the State Rivers and Water Supply Commission have joined forces in making available a large number of holdings for both irrigation and dry farming purposes.

The Honorable the Minister for Lands (Mr. H. McKenzie) and the Chairman of the Water Supply Commission (Mr. Elwood Mead) proceeded to Europe and America in 1910 for the purpose of bringing under the notice of prospective emigrants the advantages afforded to, and the opportunities for settlers in Victoria. The results of their mission have manifested themselves by the arrival in Victoria of a steady stream of immigrants of good type eager to secure irrigation farms.

To expedite settlement, and to permit the farm allotments to become producing without delay, the Lands Purchase and Management Board has either erected dwellings and outbuildings on the allotments or made advances towards the erection of houses and other improvements, and the State Rivers and Water Supply Commission has graded and seeded a portion of each allotment. The expenditure incurred is to be repaid by easy instalments. The advice of experts from the Department of Agriculture in selecting dairy herds is given when desired.

The Closer Settlement Act provides that any tenant of Crown lands may obtain an advance from the Board to the amount of 60 per cent. of the value of the permanent improvements effected by him, the limit of such advance being £500. This provision insures

that a settler who may in the early days of his occupation have to expend a large proportion of his capital in the carrying out of necessary improvements, may not be handicapped in the struggle to develop the property later on.

Authority is also given to the Closer Settlement Board to approve of a provisional agreement to purchase a property, not exceeding £2,500 in value, at the request of a suitable applicant. If the price asked by the vendor is indorsed by the Board, the cash value is paid over, and the applicant becomes a conditional purchaser subject to all the terms and conditions of the Closer Settlement Act.

Advances may also be made to Crown tenants under the Wire Netting Act, which enables settlers in rabbit-infested areas to procure netting upon easy terms.

The following *resumé* of the legislation connected with Closer Settlement reflects the progressive experience gained from time to time, so that the most recent Act bearing upon the whole subject may fairly be claimed to be based upon thoroughly sound lines, dictated and confirmed by experience.

Part III. of the Land Act of 1898 authorized the purchase of private lands suitable for closer settlement. That Part, with several subsequent amendments of minor importance, became Part IV. of the Consolidated Act of 1901, since superseded by the Closer Settlement Act of 1904. Under the Act of 1901 the Minister was empowered, after a favorable report and valuation by independent valuers had been obtained, to enter into a provisional contract for the purchase of land, copies of which contract and report were to be laid before Parliament, and if the Legislative Assembly by resolution declared it expedient to acquire such land, a Bill for the purchase thereof was introduced. The price to be paid by settlers for the land so acquired was fixed so as to cover cost of purchase, survey, and subdivision, value of land absorbed by roads and reserves, cost of constructing roads, cost of clearing, draining, fencing, and other improvements which the Board of Land and Works might effect prior to disposal in farm allotments, and any other incidental expenses. Any person aged 21 (not a holder of rural land valued at £1,250, and who would not, by reason of the grant, become a holder of land exceeding such value) could be granted one farm allotment under conditional purchase lease. The purchase money, including interest at 4½ per cent., had to be paid by 63 or a less number of half-yearly instalments, two of which were required to accompany the application. The conditional purchase lease issued was for a

term not exceeding 31½ years, and contained, so far as consistent, the usual conditions of perpetual leases, also the following:—(*a*) Improvements to be effected to the value of 10s. per acre, or, if the Board so determined, to the value of 10 per cent. of the purchase money before the end of the third year; and to the same extent, in addition, before the end of the sixth year: (*b*) Personal residence or residence by wife or child over eighteen years of age for eight months during each of the first six years: (*c*) Not to transfer, assign, mortgage, or sublet within first six years; and any other conditions prescribed by the regulations. The fee-simple could be acquired after the first six years, if the conditions were complied with, on payment of the balance of principal. Forfeiture for non-payment of an instalment could be prevented by payment thereof with a penalty of 5 per cent. within three months, or of 10 per cent. within six months. Any tenant of land acquired by the Crown from his landlord could be granted a prior right to conditional purchase of any area not exceeding £1,250 in value, or £4,000 if there were a homestead. Power was given to close unused roads, and portions of the land acquired could be used for experimental farms.

On 30th November, 1904, an Act was passed further providing for the acquisition and disposal of land for closer settlement. It provides for administration by a Board consisting of three persons appointed by the Governor in Council, and intrusted with power to acquire, either by agreement or compulsorily, blocks of private land in any part of the State for the purposes of closer settlement. Such land acquired by the Board is to be paid for in money the proceeds of the sale of debentures or stock under this Act; or at the option of the owner by means of Victorian Government Stock. The Governor in Council may for the purposes of the Act increase the amount of the Victorian Government Stock by a sum not exceeding £500,000 in any one financial year; or, instead of increasing the Victorian Government Stock, may issue debentures for the whole or any portion of such sum. The principal and interest on stock and debentures issued has been made a charge on the Closer Settlement Fund created from all moneys received by the Board, and the fund formerly known as the Farm Settlements Fund has been transferred to the Board. This Act limited the power to raise money to five years, but by the Act passed on 4th January, 1910, the time was extended to nine years from the passing of the original (1904) Act.

Acquisition and Administration.

The Minister administering the Act may authorize the inspection of private land, and the Board is to fix its value when deemed suitable. If the Minister agrees with the Board's valuation he may direct the Board to acquire the land by purchase at auction or other sale, or by exchange of land equivalent, or to make an offer to

purchase it from the owner—the purchase price or value of land equivalent not to exceed the value of the land to be purchased as fixed by the Board. Should the owner decline the Board's offer, then by resolution of both Houses of Parliament the whole or any part of the land may be acquired by the Board by compulsory process. The Governor in Council may by notification in the *Government Gazette* declare the land acquired, and thereupon it becomes Crown land. The owner may within a time specified claim exemption of land up to the value of £10,000. The amount of compensation to be paid to the owner is determined by a Judge of the Supreme Court.

The Board may dispose of acquired lands by conditional purchase lease at fixed prices as farm allotments, as allotments for workmen's homes, or as allotments for agricultural labourers. The size of farm allotments is limited to such an area of land as shall not exceed £2,500 in value (except in cases of homestead allotments when the value of land held may be increased to £4,000); workmen's homes allotments may not exceed £100 in value; and agricultural labourers' allotments are not to exceed £200 in value. No lease of an allotment shall be granted to any person who is already the holder of land to the value of £2,500 (township land excepted), or who would thereby become the holder of land exceeding the value of £2,500; and not more than one allotment is to be held by any one lessee. Conditional purchase leases are to be issued for such a term of years as may be agreed upon by the lessee and the Board, and provision is made for payment of the value of the allotment and interest at a rate of not less than 4½ per cent. per annum, by not more than 63 half-yearly instalments. The leases provide for the destruction of vermin and the eradication of noxious weeds, for fencing and its maintenance, and other improvements of a permanent character, for personal residence on the estate, also that the lessee shall not transfer, assign, mortgage, sublet, or part with possession of the whole or any part of the allotment within the first six years of the lease, save in certain circumstances. A Crown grant may be acquired at any time after twelve years on payment of the balance of the purchase money. In the case of workmen's homes allotments, the lessee must within four months be in actual residential occupation of the allotment, and within one year from the date of the lease he must fence the allotment and erect a dwelling house of the value of at least £50, and

not more than one dwelling house and one place of business shall be erected upon any one allotment. The condition regarding improvements to be made on agricultural labourers' allotments is that the lessee must within one year erect a dwelling house of a value of £30 upon the allotment, and within two years fence the allotment.

Closer Settlement Act 1906.

Under the provisions of the *Closer Settlement Act* 1906, a lessee unable to pay his instalments, may, if the Board is satisfied that he has complied with the conditions of his lease, be granted suspension of payments up to 60 per cent. of the value of his improvements, and on payment of interest thereon at 5 per cent. the arrears may be paid over a definite time, or the lease may be extended for a corresponding period.

Closer Settlement Act 1907.

A further privilege is granted, by an amending Act passed in 1907, to lessees who may have spent all their capital in improving their holdings, and have not availed themselves of the provision to suspend their payments. The Board is empowered to grant advances to such lessees up to 60 per cent. of the value of existing improvements, in order that they may carry on farming pursuits, or to enable further improvements to be effected. Such sums advanced with interest at 5 per cent. are repayable by half-yearly instalments extending over fifteen years.

Closer Settlement Act 1909.

Under the *Closer Settlement Act* 1909, Section 8 of the original Act was so amended that the power to raise money for the purposes of the Act was extended for a further period of twelve months. Provision was made governing the payment of instalments, and conditions of forfeiture were added. The latter were of such a nature that if a lessee paid the whole or any portion of any amount owing to the Board subsequent to a breach of any covenant or condition of the lease, such payment should not be deemed a waiver of such breach, also that lessees, on payment of a fine of 5 per centum, might secure, at the discretion of the Board, prevention of forfeiture.

Closer Settlement Act 1909 (No. 2).

The principal features of this Act relate to extension of the powers of the Lands Purchase and Management Board; the power conferred to acquire land in irrigation districts for future settlement on the recommendation of the State Rivers and Water Supply Commission; the acquisition of land by compulsory purchase, and the compensation payable in connexion therewith; extension of powers in regard to suspension of payment of instalments of purchase money

and interest by lessees, and in regard to advances to settlers; and the provision to borrow £500,000 a year for the purposes of closer settlement for a further term of three years.

Any person 18 years of age or over may now become a lessee under the Closer Settlement Acts.

The following is a complete statement of all estates acquired by the Closer Settlement Board for the purposes of closer settlement at 30th June, 1911, including the estates acquired under the provisions of the Small Improved Holdings Act, the administration of which has been transferred to the Board. Estates purchased.

CLOSER SETTLEMENT ESTATES AT 30TH JUNE, 1911.

Estates.	Area.*	Purchase Money.	Price Paid Per Acre.	No. of Lessees.			Area Vacant and Available.
				Farm Allotments.	Workmen's Homes Allotments.	Agricultural Labourers' Allotments.	
	acres.	£	£ s. d.				acres.
Wando Vale ..	10,446	63,985	6 2 6	66	..	..	..
Walmer ..	13,769	44,751	3 5 0	42	..	..	..
Whitfield ..	4,247	36,096	8 10 0	36	..	..	..
Brunswick ..	91	2,644	29 0 0	..	54	..	..
Eurack	5,109	53,640	10 10 0	46	..	..	..
Footscray ..	31	2,486	80 0 0	..	84	..	..
Dal Campbell ..	45	2,358	47 8 0	..	62	..	..
Springvale ..	3,396	25,895	7 12 6	21	..	..	..
Memsie	10,028	57,159	5 14 0	43	..	..	..
Richmond Vale ..	1,851	11,000	8 11 6	12	..	..	185
Overnewton ..	11,336	71,492	6 4 6	70	..	..	..
Wyuna	23,016	120,876	5 5 0	124	..	11	..
Restdown ..	17,894	60,391	3 7 6	54	..	..	..
Strathkellar ..	10,227	74,150	7 5 0	56	..	6	..
Bona Vista ..	2,060	28,832	14 0 0	32	..	4	..
Cadman's ..	18	844	50 0 0	..	42	..	..
The Willows ..	400	5,131	10 6 6	4	..	..	..
Ercildoune ..	1,200	12,199	10 2 6	11	..	..	..
Greenvale ..	304	7,298	24 0 0	6	..	..	..
Lara	8,329	45,825	5 10 0	34	..	7	..
Tandarra ..	4,558	21,083	4 12 6	18	..	..	..
Dura	337	3,200	9 13 4	8	..	..	..
Exford	8,054	64,039	8 0 0	46	..	6	..
Colbinabbin ..	19,164	110,198	5 17 6	85	..	..	..
Pirron Yaloak ..	1,058	23,796	22 7 6	12	..	..	..
Numurkah ..	2,360	18,901	8 0 0	14	..	1	..
Allambee ..	5,023	31,779	6 6 4	21	..	..	1,748
Pender's Grove ..	233	23,292	100 0 0	..	63	31	15
Phœnix ..	23	968	40 0 0	..	47	..	..
Keayang ..	1,494	14,966	10 0 0	11	..	..	..
Werneth ..	6,588	31,043	4 15 0	21	..	..	..
Staughton Vale ..	9,857	66,466	6 15 0	47	..	..	..
Glen Huntly ..	74	6,858	94 0 0	..	144	..	4
Hogan's ..	444	6,197	14 0 0	9	..	..	..
Balure	183	1,463	8 0 0	10	..	..	..
Wein Wein Gurk ..	3,021	8,684	2 17 6	13	..	..	..
Inverary ..	1,260	7,548	6 0 0	24	..	..	..
Springs	398	2,290	5 15 0	8	..	..	..
The Heart ..	3,793	56,322	14 12 2	43	..	..	..

* The area given is that to the nearest acre, and in some cases includes Crown lands transferred to the Board without purchase.

CLOSER SETTLEMENT ESTATES AT 30TH JUNE, 1911—*continued.*

Estates.	Area.*	Purchase Money.	Price Paid Per Acre.	No. of Lessees.			Area Vacant and Available.
				Farm Allotments.	Workmen's Homes Allotments.	Agricultural Labourers' Allotments.	
	acres.	£	£ s. d.				acres.
Condah ..	157	1,725	11 0 0	..	..	..	..
Mooralla ..	17,199	60,197	3 10 0	29	..	..	..
Maribyrnong ..	1,112	10,842	9 15 0	12	..	2	..
Kenilworth ..	18,440	55,321	3 0 0	26	..	16	600
Shepparton ..	3,221	49,022	15 4 10	68	..	32	10
Doogalook ..	4,640	29,002	6 5 0	16	..	..	100
Allendale ..	1,108	9,728	9 1 0	7	..	..	1
Warrnambool ..	46	1,188	25 10 8	..	25	..	..
Maddingley ..	13	1,300	100 0 0	..	8	5	..
Leongatha ..	53	1,325	25 0 0	3	..	..	..
Mortlake ..	2,350	10,945	4 13 1½	8	..	20	..
Dowling Forest ..	225	1,350	6 0 0	..	15	1	..
Geelong ..	3	300	100 0 0	..	9	..	..
Bellarine ..	204	5,457	26 15 0	8	..	..	49
Daylesford ..	70	2,958	42 5 2	16	..	..	..
Highton ..	425	11,032	26 0 0	21	..	..	98
Belmont ..	113	3,161	28 0 0	17	..	..	..
Mordialloc ..	460	7,850	17 1 6	38	..	..	..
Thomastown ..	581	11,200	19 5 6	34	..	..	..
Wangaratta ..	796	9,683	12 3 4	35	..	..	92
Warragul ..	98	2,060	21 0 0	9	..	..	..
Geelong (Newtown)	157	1,955	12 9 1	9	..	..	..
Werribee ..	23,214	301,781	13 0 0	5	..	..	6,665
Koonong Wootong†	10,181	103,330	10 3 0	64	..	7	..
Cornelia Creek ..	37,035	175,928	4 15 0	109	..	6	3,075
Bamawm ..	43,191	314,336	..	165	..	16	2,263
Meadowbank ..	313	9,086	29 0 0	4	..	..	50
Werribee Police Paddock ..	55	1,650	30 0 0	..	..	16	..
Oaklands ..	8,060	26,163	3 5 0	3	..	..	6,340
Hurstwood ..	6,493	22,828	4 15 0	4	..	..	4,874
Eumeralla ..	10,034	57,000	5 13 7	14	..	6	6,204
Morven ..	8,029	39,141	4 17 6	9	..	..	5,888
Mt. Widderin ..	8,300	47,932	5 15 6	6	..	..	6,213
Tooronga ..	101	17,500	178 4 4	..	..	..	65
Nerrin Nerrin ..	6,802	57,314	8 10 0	..	..	..	5,781
Swan Hill ..	4,450	49,944	..	45	..	..	358
Cohuna ..	11,226	109,781	..	85	..	2	3,537
Sec. 6—Purchases	13,098	57,506	..	44	..	..	..
Cremona ..	1,102	16,532	..	Survey proceeding			
Tongala ..	14,006	154,735	..	..	..	..	..
Ascot Park ..	1,484	18,545	12 10 0	..	..	..	..
Westmere ..	933	9,325	10 0 0	..	..	..	..
Glenaladale ..	2,109	28,477	13 10 0	..	..	..	..
Deepdene ..	2,985	35,820	12 0 0	..	..	..	..
Boisdale ..	784	19,600	25 0 0	..	..	..	..
Gunbower ..	1,934	6,769	3 10 0	..	..	..	..
Thornton's ..	318	3,180	10 0 0	..	..	..	..
Total ..	459,427	3,197,949	..	1,960	553	195	54,214

* The area given is that to the nearest acre, and in some cases includes Crown lands transferred to the Board without purchase.

† This estate is the only area so far acquired under the compulsory clauses of the Act.

Altogether the Board has 88 properties, with a total area of 459,427 acres, but of these 11 estates, with an area of 68,649 acres, were not available for occupation at 30th June last. The remaining

77 estates having a total area of 390,778 acres, were occupied by 2,708 conditional purchase lessees, and contained 54,214 acres, which were available for occupation.

The extent of the settlement effected by the Board at 30th June, 1908, 1909, 1910, and 1911 respectively, is summarized in the next statement. Extent of Closer Settlement.

CLOSER SETTLEMENT HOLDINGS OCCUPIED AND VACANT.

	At 30th June.			
	1908.	1909.	1910.	1911.
In occupation—				
Number of Holdings ...	1,655	1,792	1,880	2,708
Area ... acres	188,787	196,573	235,938	312,794
Resident Population ...	5,600	5,608	6,360	10,000
Vacant and available for occupation—				
Area..... acres	...	...	9,302	54,214
Allotments—				
Farm	189	42	33	...
Workmen's Homes ...		106	104	...
Agricultural Labourers ...	...	...	47	...

The sum of £606,558 had been repaid to the Closer Settlement Fund up to 30th June, 1911. Of this amount £301,307 has been transferred to revenue to meet interest due to stockholders, and £224,395 has been utilized for redemption and cancellation of stock and for capital and working expenditure, the balance to the credit of the fund on 30th June, 1911, being £80,856. The balance of unredeemed stock is now £2,869,270, on which the interest payable amounts to £101,543 per annum.

Up to the 30th June, 1911, 734 applications for advances aggregating £73,977 had been approved, and the money advanced upon the improvements actually effected by the lessees which were valued at a bedrock estimate of over £126,000.

Under the *Closer Settlement Act* 1909 (No. 2) the administration of the *Small Improved Holdings Act* 1906 was placed in the hands of the Closer Settlement Board, subject to the Minister. The particulars of estates dealt with under the latter Act are shown in the table on page 601 relating to closer settlement estates at 30th June, 1911. Small improved holdings.

Water Supply and Irrigation.

Victorian Waterworks.

Victorian Waterworks are all controlled by official bodies, either State or local, and the following table summarizes those waterworks on which the Government has expended or advanced moneys. It is practically a summary of all waterworks in the State, although there are minor works constructed by municipalities out of municipal funds.

Waterworks—Capital Expenditure and Advances by State to 30th June, 1910.

Controlling Bodies.	Purposes of Supply.	Storage Capacity of Reservoirs.	Capital Expenditure and Advances by State.
		Gallons.	£
State Rivers and Water Supply Commission—			
Coliban System	Domestic and Mining	8,825,037,000	1,200,257
Broken River Works ...	Stock and Domestic	...	14,853
		Acre feet.	
Goulburn-Waranga ...	Irrigation, &c. ...	218,090	1,242,630
North west (Kerang) Lakes	Stock and Domestic	91,830	9,587
Kow Swamp Works ...	Irrigation, &c. ...	40,860	180,400
Loddon River Works ...	" " ...	14,000	163,768
		Cubic feet.	
Lake Lonsdale Reservoir ...	Stock and Domestic	1,981,000,000	49,054
Lower Wimmera Compensation Works	" " ...	125,000,000	8,558
Long Lake Pumping Works	" " ...	160,000,000	27,346
White Cliffs and Nyah Pumping Schemes ...	Irrigation, &c. ...	...	50,151
		Acre feet	
Pyke's Creek and Werribee Scheme	" " ...	14,850	40,693
		Cubic feet	
Irrigation and Water Supply Districts (20)	" " ...	...	1,094,609
Waterworks Districts (7) ...	Stock and Domestic	171,500,000	583,868
First Mildura Irrigation and Water Supply Trust ...	Irrigation	...	67,382
		Gallons.	
Waterworks Trusts (86) ...	Stock and Domestic	922,229,500	996,518
Municipal Corporations (32)...	" " ...	1,645,591,000	686,356
Abolished Irrigation and Water Supply Trusts (8)	Irrigation	...	31,953
Miscellaneous Expenditure ...	... ...	...	232,394
Melbourne and Metropolitan Board of Works	Domestic	6,533,000,000	3,921,517
Geelong Municipal Waterworks Trust	"	1,103,327,000	484,484
Total	... ...	...	11,086,378

Of the expenditure given in the case of the Melbourne waterworks, £3,189,934 represents money borrowed by the State, £1,501,271 of which has been redeemed—£800,000 out of consolidated revenue, and £701,271 by payments from the Melbourne and Metropolitan Board of Works, to which body the waterworks were transferred in 1891. The balance, £1,688,663, represents the loan liability to

the State of the Melbourne and Metropolitan Board of Works on 30th June, 1910. Further particulars relating to this Board will be found on page 205, Part III., of this work.

The Geelong Waterworks were sold by the Government to the Geelong Municipal Waterworks Trust on 25th January, 1908, for £265,000, in addition to which amount the expenditure shown in the above table includes the outstanding State loan liability on account of the works, viz., £190,082, and the capital expenditure by the Trust since acquiring the works, viz., £29,402.

Advances and expenditure for waterworks.

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

CAPITAL EXPENDITURE AND LOANS FOR WATERWORKS.

—	Expenditure and Advances by State.	Interest Capitalized.	Free State Grants.	Capital Written Off.	Payments towards Redemption.	Amount standing at Debit, 30th June, 1910.
	£	£	£	£	£	£
State Works	2,984,499	..	2,798*	..	..	2,984,499
Irrigation and Water Supply Districts (20)	1,064,236	..	30,373	575,152	8,367	480,717
First Mildura Irrigation and Water Supply Trust ..	67,382	..	..	..	..	67,382
Waterworks Districts (7) ..	552,396	..	31,472	169,927	12,474	369,995
Waterworks Trusts (86) ..	960,304	6,871	36,214	130,989	66,744	769,442
Geelong Water Supply Works	455,082	..	..	..	265,000	190,082
Municipal Corporations (23)	676,813	43,633	..	165,870	96,595	457,981
,, ,, (9)	9,543	346	..	..	9,889	..
Melbourne and Metropolitan Waterworks System ..	3,189,934	..	..	..	1,501,271	1,688,663
Abolished Trusts (8) ..	31,710	..	243	31,680	30	..
Miscellaneous	232,394	..	..	..	..	232,394
Total	10,224,293	50,850	101,100	1,073,618	1,960,370	7,241,155

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

In addition to the capital written off, as shown above, arrears of interest amounting to £579,786 have also been written off certain liabilities to the State, viz., £342,773, from the liabilities of what were originally Irrigation and Water Supply Trusts £85,556 from the liabilities of Waterworks Trusts, and £151,457 from the liabilities of Municipal Corporations. Thus the amount actually written off the liabilities of the Trusts (Irrigation and Waterworks) and Corporations is £1,653,404. Interest outstanding at 30th June, 1910, amounted to £42,297, viz., £16,852 against the First Mildura Trust, £14,727 against Waterworks Trusts, and £10,718 against Municipal Corporations.

STATE RIVERS AND WATER SUPPLY COMMISSION.

The *Water Act* 1905.

The *Water Act* 1905, which came into operation on 1st May, 1906, consolidates and amends the laws relating to the conservation and supply of water, and declares the law relating to certain rights in natural waters, and the property in the beds and banks containing the same. This Act is administered

by the State Rivers and Water Supply Commission, consisting of three Commissioners, whose functions thereunder were principally administrative and advisory—the general construction of works on the part of the State being imposed on the Department of Water Supply. All State waterworks were vested in the Commission, and the property powers and duties vested in or imposed upon the Commissioners of Irrigation and Water Supply Trusts, with the exception of the First Mildura Irrigation and Water Supply Trust, were transferred to and vested in the Commission. The powers and duties of the Commission under this Act embrace the making and levying of rates and charges for the supply of water; the carrying out of surveys necessary to ascertain the nature and extent of the water supply and water storage resources of the State; determining the means and cost of improving such resources, and of improving and extending works for the conveyance and distribution of water throughout the State, and deciding as to the areas capable of being profitably supplied with water from such works; determining the extent, character, and quality of lagoon, swamp, and marsh lands within the State, the cost of works for their drainage and improvement, and the benefits to be derived from such improvement; preparing proposals for the construction of works of water supply or reports upon proposed works of water supply; the systematic gauging and recording of the volume and flow of rivers and streams, and of the volume of lakes and lagoons within the State, and the effect of climatic conditions thereupon; boring and other explorations for ascertaining the existence and location of subterranean waters, and the character and quality thereof; recording, publishing, and making available for general information the results of all such surveys, gaugings, borings, and other explorations; instructing the occupiers of lands in irrigation and water supply districts in the best methods of irrigated culture, and of the utilization of water as applied to agriculture, also in general rural economy; ascertaining and recording from time to time the extent of land under irrigation in the several irrigation and water supply districts, and the nature of the crops grown in and the products of such districts; and promoting the discussion of matters of general interest among the settlers in the irrigation and water supply districts by public conferences.

The *Water Act* 1909.

Comprehensive amendments were made in the *Water Act* 1905 by the passing of the *Water Act* 1909. The latter Act extends the authority of the State Rivers and Water Supply Commission by giving it the general construction of works formerly intrusted to the Department of Water Supply, so that the duties of the Commission are now constructive as well as administrative and advisory. This extension of authority has been effected by making the Department

of Water Supply a part of the Water Commission, and by imposing on the Commission all the duties formerly performed by the Water Supply Department. These include in addition to the construction of works the oversight of loans to Waterworks Trusts.

A change in the basis of the compulsory charge for water is another of the important amendments. Under the 1905 Act the charge for irrigation water was based on land values, being one-fifth of the net annual value of land commanded by irrigation works, from which one-half to three-fourths of the water allotted was supplied as a right. Under that Act the price of water varied with the quantity allotted as a right and with the price of land. Under the new Act (1909) the charge for water is based on the cost of supplying it, and includes 4 per cent. on the capital debt for interest, 2 per cent. on the original capital debt for liquidation or redemption fund, and in addition to these two the sum required to pay operation and maintenance expenses.

Water is now sold by measure, and the price of an acre foot of water is fixed, so that if all the water assigned is sold it will meet the entire running expenses of the district. From one-half to three-fourths of the water assigned is apportioned as a right, and the charge for this right is made compulsory. The remainder of the water is sold on demand or under contract.

Surplus or flood waters supplied outside of the irrigation season are sold at a less rate.

For several years the Commission has experienced great difficulty in inducing land-owners in waterworks districts to build storage tanks or dams of sufficient size to hold the year's supply, which are required in the interests of economy, and which will be still more necessary as the service from the present works is extended. The new Act provides that where land-owners neglect or refuse to build tanks of sufficient capacity the Commission may build them and collect the cost thereof from the land-owners.

Another of the amendments provides for temporary diversions of water. Under the old Act there was provision for granting licences or permits up to fifteen years, but the preliminary steps were expensive. The new Act contains a simpler procedure for yearly permits.

The various waterworks and districts vested in the Commission and their capital debit at 30th June, 1910, are set forth in the following statement :—

WATERWORKS UNDER CONTROL OF STATE RIVERS AND WATER SUPPLY COMMISSION.

(*a*) *Free Head-works.*	Capital Debit at 30th June, 1910 (exclusive of cost of Loan Flotation).
	£
Broken River Works	14,853
Goulburn River Works	728,620
Kerang North-west Lakes Works	9,587
Kow Swamp Works	180,400
Loddon River Works	163,768
Lake Lonsdale Reservoir	49,054
Lower Wimmera Compensation Works	8,558
Long Lake Pumping Works	27,346
Total—Free Head-works ..	1,182,186

(*b*) *Waterworks Districts.*	Balance at Debit, 1st July, 1908.	Capital Expenditure since 1st July, 1908.	Balance at Debit, 30th June, 1910.	Capital Debit at 30th June, 1910 (exclusive of cost of Loan Flotation).
	£	£	£	£
Birchip	5,923	50,113	110,502	
Sea Lake	45,591			
Wycheproof	8,875			
Karkarooc	..	9,077	9,077	
Western Wimmera	74,948	7,989	82,937	
Wimmera United	109,588	1,886	111,474	
Long Lake (free head-works excluded)	5,277	21,618	26,895	
Coliban System	1,171,622	28,635	1,200,257	
Miscellaneous	12,184	16,926	29,110	
Total	1,434,008	136,244	1,570,252	1,570,252

WATERWORKS UNDER CONTROL OF STATE RIVERS AND WATER SUPPLY COMMISSION—*continued.*

	Balance at Debit, 1st July, 1908.	Capital Expenditure since 1st July, 1908.	Balance at Debit, 30th June, 1910.	Capital Debit at 30th June, 1910 (exclusive of cost of Loan Flotation).
(c) *Irrigation and Water Supply Districts.*	£	£	£	£
Bacchus Marsh	5,257	5,889	11,146	
Campaspe	8,710	6,806	15,516	
Deakin	33,477	36,306	69,783	
Rodney	70,417	89,168	159,585	
Swan Hill	4,800	19,545	24,345	
Benjeroop and Murrabit ..	5,060	7,974	13,034	
Cohuna	56,733	28,771	85,504	
Dry Lake	719	..	719	
Gunbower West	5,889	191	6,080	
Kerang East	7,023	560	7,583	
Koondrook and Myall	3,316	9,079	12,395	
Macorna North	10,394	354	10,748	
Marquis Hill	5,399	124	5,523	
South Kerang	618	322	940	
Wandella	9,714	463	10,177	
East Boort	6,517	..	6,517	
Leaghur and Meering	2,422	..	2,422	
North Boort	2,058	..	2,058	
Tragowel Plains	34,870	..	34,870	
Twelve-Mile	1,772	..	1,772	
Total	275,165	205,552	480,717	480,717
Irrigation Areas.				
Nyah	..	18,149	18,149	
White Cliffs	..	32,002	32,002	50,151
(d) *New Works* (to be apportioned to Irrigation and Water Supply Districts benefited).				
Goulburn Main Channels—				
East Goulburn	...	129,748	129,748	
Waranga Reservoir to Campaspe	...	239,274	239,274	
Campaspe to Loddon	...	134,143	134,143	
Main Distributary Channels ...	...	10,845	10,845	514,010
Pyke's Creek and Werribee Scheme	...	40,693	40,693	40,693
(e) *Waterworks Trusts Districts.**				
Avoca Waterworks Trust ..	...	...	5,643	
Carrum Waterworks Trust ..	...	...	17,824	
Loddon United Waterworks Trust	...	...	18,571	
Grand Total ..	...	...	...	3,838,009

*In consequence of the undermentioned Trusts having made default in the payment of interest on loans, their districts have been temporarily placed under the Commission's control.

The receipts and disbursements of the State Rivers and Water Supply Commission during the year ended 30th June, 1910, were as follows:—

STATEMENT OF RECEIPTS AND EXPENDITURE, 1909-10.

Works.	Receipts.	Expenditure.			Excess.	
		Total from Annual Votes.	On Capital Works from Annual Votes.	Net Expenditure on Management and Maintenance.	Revenue over Net Expenditure.	Net Expenditure over Revenue.
	£	£	£	£	£	£
Coliban	39,013	14,468	2,911	11,557	27,456	..
Goulburn	75	1,313	..	1,313	..	1,238
Loddon River ..	7	302	..	302	..	295
Kow Swamp ..	162	2,647	..	2,647	..	2,485
Broken River ..	8	217	..	217	..	209
North-West Lakes ..	97	624	..	624	..	527
Lake Lonsdale ..	147	263	..	263	..	116
Lower Wimmera ..	..	166	..	166	..	166
Irrigation Districts ..	32,763	26,342	1,350	24,992	7,771	..
Waterworks Districts ..	41,654	17,562	186	17,376	24,278	..
Licences, Diversions, Pumping	1,492	517	..	517	975	..
Tatura Experimental Farm	799	1,200	348	852	..	53
Departmental—General	234	..	..	..	234	..
	116,451	65,621	4,795	60,826	55,625	..
Not Earning Revenue.						
Departmental—General	...	5,448	..	5,448	...	5,448
Ouyen-Kow Plains ...	...	1,629	1,629	...	...	...
River Gauging and Surveys	...	2,315	...	2,315	...	2,315
New Projects ...	...	1,125	...	1,125	...	1,125
Loan Works—Services on account of, defrayed from vote ...	...	2,626	...	2,626	...	2,626
Total ...	116,451	78,764	6,424	72,340	44,111	...

NOTE.—This table does not take into consideration the question of interest on capital expenditure or capital debit.

Areas irrigated.

The extent to which the different crops were watered, and the actual areas irrigated in the different districts of the State during the year 1909-10, are set forth in the next statement.

IRRIGATION—AREAS OF CROPS WATERED, 1909-10.

Districts.	Area under Irrigation (Acres).						
	Cereals.	Lucerne grown for Pasture and Hay.	Sorghum and other Annual Fodder Crops.	Pastures.	Vineyards, Orchards, and Gardens.	Fallows, &c.	Total.
Supplied from Goulburn State Works.							
Rodney	742	13,206	431	11,199	3,466	3,312	32,356
Deakin	300	2,692	192	5,116	110	942	9,352
Total	1,042	15,898	623	16,315	3,576	4,254	41,708
Supplied from Kow Swamp State Works.							
Dry Lake	..	1	..	380	3	2	386
Gunbower West	297	306	268	537	29	12	1,449
Kerang East	576	70	375	2,438	20	34	3,513
Macorna North	697	140	1,025	3,818	1	..	5,681
Marquis Hill	472	25	93	906	..	..	1,496
South Kerang	138	161	73	121	1	..	494
Wandella (portion of)	752	91	268	415	552	..	2,078
Total	2,932	794	2,102	8,615	606	48	15,097
Supplied from Loddon State Works.							
Wandella (portion of)	685	206	120	1,596	7	..	2,614
East Boort	863	..	68	254	32	..	1,222
Leaghur and Meering	465	8	17	645	3	..	1,138
North Boort	116	..	101	220	15	..	452
Tragowel Plains	4,848	214	121	2,334	88	..	7,605
Twelve-Mile	666	59	43	564	..	..	1,332
Total	7,648	487	470	5,613	145	..	14,363
Supplied from other State Works.							
Bacchus Marsh	..	25	2	..	3	1	31
Benjeroop and Murrabit ..	1,161	68	75	275	39	11	1,629
Campaspe	19	218	9	245	14	..	505
Cohuna	4,144	2,502	2,288	10,610	150	131	19,825
Koondrook and Myall	1,127	147	62	2,037	27	..	3,400
Nyah	90	10	116	13	65	275	569
Swan Hill	1,767	1,748	570	1,057	117	151	5,410
Western Wimmera	..	41	40	33	914	25	1,053
White Cliffs	..		40	..	..	162	202
Total	8,308	4,759	3,202	14,270	1,329	756	32,624
Lands supplied from Kerang North-west Lakes	1,535	131	285	2,877	..	..	4,828
Lands supplied directly from Kow Swamp State Works ..	442	1,042	484	832	..	7	2,807
First Mildura	978	715	..	..	9,609	698	12,000
Supplied from Coliban State Works	..	134	475	134	2,254	..	2,997
Private Diversions in Kerang District	830	164	453	1,885	5	10	3,347
Grand Totals, 1909-10 ..	23,715	24,124	8,094	50,541	17,524	5,773	129,771
Grand Totals, 1908-9 ..	42,418	27,254	10,174	72,120	17,653	7,254	176,873
Grand Totals, 1907-8 ..	54,930	32,185	13,896	108,871	15,694	6,436	232,012

The areas irrigated in 1909-10 amounted, in the aggregate, to 73 per cent. of those irrigated in 1908-9, and to only 56 per cent. of those so treated in 1907-8. In 1909-10, however, the usual supply from the Loddon River Works was not available on account of the breaching of the Laanecoorie Weir. An analysis of the areas

watered reveals that, during 1909-10, 39 per cent. of the total was devoted to pastures, 18 per cent. to cereals, 19 per cent. to lucerne, 13½ per cent. to vineyards, orchards, and gardens, 6 per cent. to annual fodder crops, and 4½ per cent. to fallows, &c. The extent of land under irrigated culture for all kinds of crop was 129,771 acres, in addition to which 8,000 acres were watered under yearly permits granting authority to divert water from streams throughout the State. The area of country lands within the State artificially supplied with water for domestic and ordinary use and for watering stock was 10,864,000 acres. The number of separate towns supplied, exclusive of Melbourne and suburbs, is 124, the population served being about 274,300.

Water-works Trusts.

The extent of Government assistance to the Waterworks Trusts which are not under the control of the State Rivers and Water Supply Commission, and the financial position of these Trusts are exhibited below.

WATERWORKS TRUSTS—CAPITAL INDEBTEDNESS AND INTEREST OUTSTANDING, 30TH JUNE, 1910.

Waterworks Trusts.	Cost of Works at 30th June, 1910, defrayed from—		Capital Indebtedness.				Interest Outstanding at 30th June, 1910.
			Increased by Interest Capitalized.	Reduced by—		At 30th June, 1910.	
	Free State Grant.	Loan Advances made by State.		Amounts Written Off.	Payments towards Redemption.		
	£	£	£	£	£	£	£
Alexandra	..	3,509	..	..	164	3,345	67
Avenel	..	2,284	..	..	169	2,115	79
Avoca	2,662	8,709	..	2,494	572	5,643	112
Avoca Township	..	3,926	..	..	..	3,926	33
Bairnsdale	..	43,358	..	23,439	587	19,332	383
Ballan	..	1,100	..	..	242	858	17
Benalla	..	15,579	..	..	2,907	12,672	252
Bet Bet Shire	1,384	5,694	..	..	1,168	4,526	90
Boort	28	1,150	..	150	52	948	19
Bright	..	2,990	..	..	315	2,675	53
Broadford	..	10,492	..	..	..	10,492	534
Carisbrook	..	8,400	..	2,400	318	5,682	113
Carrum	..	25,733	..	7,732	176	17,825	356
Charlton	2,840	7,877	..	887	50	6,940	138
Cobram	..	4,500	..	..	215	4,285	85
Colac	..	982	..	..	..	982	11
Dandenong	..	19,128	..	5,128	557	13,443	199
Daylesford Borough	..	24,206	2,794	3,139	1,648	22,213	441
Donald	3,058	8,166	..	1,166	343	6,657	267
Donald Shire	1,691	4,353	..	..	1,156	3,197	63
Echuca Borough	..	13,150	..	..	1,297	11,853	600
Elmore	..	4,000	..	..	379	3,621	72
Euroa	..	17,242	..	..	1,458	15,784	313
Gisborne	..	4,668	..	..	900	3,768	75
Hamilton	..	39,300	..	..	1,752	37,548	736
Healesville	..	4,661	..	..	535	4,126	..
Heathcote	..	8,480	..	..	473	8,007	158
Horsham Borough	..	17,713	..	7,712	600	9,401	186
Kara Kara Shire	1,522	9,447	..	..	411	9,036	179
Kerang	88	5,610	..	..	166	5,444	83
Kerang Shire	213	1,200	..	..	56	1,144	23
Kilmore	..	14,148	..	..	1,971	12,177	242
Koroit	..	5,502	..	2,047	395	3,060	61
Korumburra	..	11,492	..	..	1,118	10,374	207

WATERWORKS TRUSTS—CAPITAL INDEBTEDNESS AND INTEREST OUTSTANDING, 30TH JUNE, 1910—*continued.*

Waterworks Trusts.	Cost of Works at 30th June, 1910, defrayed from—		Capital Indebtedness.				Interest Outstanding at 30th June, 1910.
			Increased by Interest Capitalized.	Reduced by—		At 30th June, 1910.	
	Free State Grant.	Loan Advances made by State.		Amounts Written Off.	Payments towards Redemption.		
	£	£	£	£	£	£	£
Kowree	292	2,707	..	..	143	2,564	51
Kyabram	..	2,342	..	..	127	2,215	44
Kyneton Shire ..	..	31,345	..	..	13,230	18,115	362
Lancefield ..	..	7,082	..	..	484	6,598	131
Lawloit	1,302	12,095	..	..	641	11,454	227
Leongatha ..	..	7,823	..	..	138	7,685	152
Lilydale	..	6,384	..	..	65	6,319	126
Loddon United* ..	4,122	21,334	..	1,717	1,046	18,571	163
Longwood ..	..	2,400	..	550	98	1,752	35
Lowan Shire ..	1,258	11,680	..	..	620	11,060	220
Macedon	..	2,824	..	..	200	2,624	52
Mansfield	..	7,931	..	..	850	7,081	..
Maryborough ..	..	76,257	..	9,200	3,672	63,385	..
Mooroopna ..	..	3,054	..	1,400	100	1,554	31
Murchison	..	2,800	..	..	126	2,674	53
Murtoa	..	1,135	..	..	..	1,135	52
Nagambie ..	..	2,775	..	..	377	2,398	48
Nhill	799	10,318	..	2,482	400	7,436	148
Numurkah Shire ..	1,278	23,694	..	1,376	3,011	19,307	384
Omeo	..	3,982	..	..	383	3,599	144
Pyramid Hill ..	..	2,137	..	..	..	2,137	54
Riddell's Creek ..	..	4,050	..	497	158	3,395	68
Rochester	..	1,600	..	..	142	1,458	29
Romsey	..	4,700	..	..	906	3,794	75
Rushworth	..	4,500	..	..	144	4,356	86
Rutherglen	..	16,735	..	..	806	15,929	316
Seymour	..	27,959	..	..	1,885	26,074	520
Shepparton Urban ..	24	19,530	..	2,416	1,715	15,399	308
Shepparton Shire ..	110	17,123	..	1,376	1,279	14,468	287
St. Arnaud Borough	57	43,223	4,077	15,077	1,447	30,776	609
Stawell Shire ..	545	1,370	..	250	1,120	..	..
Sunbury	..	16,497	..	..	..	16,497	587
Swan Hill ..	231	4,383	..	..	161	4,222	84
Swan Hill Shire† ..	6,421	36,043	..	36,043	..	..	..
Tallangatta ..	..	4,297	..	..	45	4,252	84
Tatura	..	3,667	..	650	293	2,724	46
Traralgon ..	..	14,305	..	..	95	14,210	280
Tungamah Shire ..	4,130	16,424	..	..	677	15,747	300
Upper Macedon ..	..	2,290	..	..	323	1,967	..
Violet Town ..	..	5,750	..	..	213	5,537	109
Wangaratta ..	..	9,889	..	..	265	9,624	191
Warracknabeal ..	262	4,518	..	..	480	4,038	80
Warragul	..	14,678	..	..	..	14,678	423
Warrnambool ..	..	38,500	..	..	2,093	36,407	724
West Charlton ..	..	2,822	..	..	36	2,786	..
Winchelsea Shire ..	..	5,689	..	..	225	5,464	109
Wodonga	..	7,722	..	..	409	7,313	145
Woodend	..	10,163	..	..	2,175	7,988	149
Yarram	..	2,082	..	..	37	2,045	41
Yarrawonga Urban ..	1,897	8,800	..	..	1,417	7,383	146
Yatchaw	..	6,262	..	1,661	244	4,357	86
Yea	..	3,885	..	..	93	3,792	121
Total ..	36,214	960,304	6,871	130,989	66,744	769,442	14,727

* The property of this trust has been taken possession of by the State Rivers and Water Supply Commission, as provided by section 278 of the *Water Act* 1905.

† This trust was abolished under the provisions of the *Water Act* 1905.

The free State grant to Waterworks Trusts for the construction of headworks was originally £100,000, but owing to the transfer of works, portion of the grant now appears against Irrigation districts and other State works.

The following return contains full particulars of the receipts and expenditure of the Waterworks Trusts during the year ended 31st December, 1910:—

WATERWORKS TRUSTS—RECEIPTS AND EXPENDITURE, 1910.

Waterworks Trusts.	Receipts from—				Expenditure on—				
	Water Rates.	Sale of Water.	Other Sources.	Total.	Maintenance and Management.	Salaries and Wages.	Interest and Redemption.	Other Services.	Total.
	£	£	£	£	£	£	£	£	£
Alexandra	511	16	4	531	141	236	155	..	532
Avenel	230	2	2	234	20	87	148	1	256
Avoca *	..	..	..	..	..	..	..	..	..
Avoca Township † ..	..	..	..	..	..	..	..	..	..
Bairnsdale	1,431	326	11	1,768	465	356	848	56	1,725
Ballan	279	7	7	293	129	37	40	10	216
Benalla	968	506	36	1,510	361	387	874	..	1,622
Bet Bet Shire ..	302	67	1	370	12	22	208	18	260
Boort	317	5	..	322	250	32	44	..	326
Bright	187	109	1	297	153	47	123	1	324
Broadford	418	..	..	418	12	50	..	1	63
Carisbrook	381	..	5	386	26	57	361	8	452
Carrum *	..	..	..	..	..	..	..	..	..
Charlton	601	30	..	631	161	78	350	46	635
Cobram	431	1	6	438	64	133	304	10	511
Colac †	..	..	..	..	..	..	..	..	..
Dandenong ..	814	22	1	837	19	163	457	12	651
Daylesford Borough	1,240	629	281	2,150	693	155	1,021	8	1,877
Donald	513	203	22	738	382	209	157	2	750
Donald Shire ..	265	..	5	270	27	57	149	..	233
Echuca Borough ..	1,966	8	79	2,053	602	571	812	21	2,006
Elmore	283	157	2	442	122	122	249	9	502
Euroa	851	239	10	1,100	38	85	1,093	9	1,225
Geelong Municipal ‡ ..	11,713	3,853	328	15,894	2,107	1,639	11,321	192	15,259
Gisborne	310	..	2	312	69	61	173	..	303
Hamilton	2,664	462	51	3,177	761	388	1,688	91	2,928
Healesville	357	51	55	463	142	56	190	9	397
Heathcote	339	95	12	446	230	98	354	5	687
Horsham Borough ..	1,667	542	153	2,362	811	487	648	30	1,976
Kara Kara Shire ..	693	..	21	714	157	19	650	..	826
Kerang	1,105	31	101	1,237	966	312	196	53	1,527
Kerang Shire § ..	..	..	..	..	..	..	..	..	..
Kilmore	562	373	5	940	56	234	560	6	856
Koroit	509	295	..	804	341	158	385	..	884
Korumburra ..	540	342	106	988	616	234	496	52	1,398
Kowree	294	..	5	299	144	79	177	1	401
Kyabram	327	61	2	390	111	163	103	35	412
Kyneton Shire ..	1,255	944	54	2,253	72	287	1,589	18	1,966
Lancefield	307	104	4	415	36	49	303	..	388
Lawloit	1,293	..	11	1,304	368	301	528	11	1,208
Leongatha	575	58	21	654	33	67	347	17	464
Lilydale	383	50	2	435	38	130	300	3	471

(For footnotes see end of table.)

WATERWORKS TRUSTS—RECEIPTS AND EXPENDITURE, 1910—*continued.*

Waterworks Trusts.	Receipts from—				Expenditure on—				
	Water Rates.	Sale of Water.	Other Sources.	Total.	Maintenance and Management.	Salaries and Wages.	Interest and Redemption.	Other Services.	Total.
	£	£	£	£	£	£	£	£	£
Loddon United*	..	..	..	..	..	..	..	..	..
Longwood	166	..	3	169	49	33	80	2	164
Lowan Shire ..	1,336	..	9	1,345	218	303	763	28	1,312
Macedon	177	..	3	180	20	37	117	..	174
Mansfield	418	103	2	523	237	47	327	1	612
Maryborough ..	2,481	774	38	3,293	198	303	2,915	17	3,433
Mooroopna ..	390	138	3	531	171	174	107	1	453
Murchison	258	202	2	462	89	133	227	..	449
Murtoa	460	15	..	475	435	79	59	2	575
Nagambie	359	68	33	460	189	121	110	12	432
Nhill	1,037	176	8	1,221	759	56	513	5	1,333
Numurkah Shire ..	2,329	351	47	2,727	839	565	959	29	2,392
Omeo	327	12	10	349	91	34	166	2	293
Pyramid Hill ..	210	2	3	215	15	26	113	6	160
Riddell's Creek ..	210	..	2	212	18	45	156	6	225
Rochester	486	26	..	512	406	57	131	9	603
Romsey	269	..	1	270	48	43	174	..	265
Rushworth ..	609	9	9	627	232	159	200	15	606
Rutherglen ..	1,494	43	11	1,548	636	216	732	2	1,586
Seymour	676	1,104	56	1,836	532	177	1,500	15	2,224
Shepparton Urban ..	1,756	282	29	2,067	1,379	416	708	40	2,543
Shepparton Shire ..	1,219	2	2	1,223	146	260	668	14	1,088
St. Arnaud Borough ..	2,092	39	70	2,201	343	159	1,367	11	1,880
Stawell Shire §	..	..	..	..	..	..	..	..	..
Sunbury ¶	..	..	..	..	..	..	..	..	..
Swan Hill	598	21	14	633	140	265	194	15	614
Tallangatta ..	381	80	16	477	121	124	190	17	452
Tatura	383	90	13	486	207	186	163	16	572
Traralgon	795	90	..	885	19	82	955	12	1,068
Tungamah Shire ..	1,373	49	50	1,472	615	674	627	91	2,007
Upper Macedon ..	199	..	82	281	195	34	136	1	366
Violet Town ¶	..	..	..	..	..	..	..	..	..
Wangaratta	1,363	327	34	1,724	743	462	449	..	1,654
Warracknabeal ..	938	130	13	1,081	704	167	185	11	1,067
Warragul	497	20	5,572‖	6,089	4,659	432	400	26	5,517‖
Warrnambool ..	2,655	431	189	3,275	987	542	1,678	69	3,276
West Charlton ..	346	..	4	350	42	31	190	..	263
Winchelsea Shire ..	357	..	2	359	171	**	369	2	542
Wodonga	474	185	7	666	48	131	504	2	685
Woodend	230	369	22	621	30	123	484	12	649
Yarram	193	55	2	250	415	36	101	7	559
Yarrawonga Urban ..	670	196	..	866	289	277	340	7	913
Yatchaw	654	..	..	654	17	43	300	6	366
Yea	383	199	11	593	171	161	259	4	595
Total ..	68,129	15,176	7,778	91,083	27,358	14,859	47,017	1,250	90,484

* The property of this trust has been taken possession of by the State Rivers and Water Supply Commission, as provided by section 278 of the *Water Act* 1905.
† This trust had no ordinary revenue and expenditure in 1910.
‡ Year ended 30th June, 1910.
§ This trust is inoperative.
‖ Including loan money £5,443.
¶ The control and management of the works of this trust have been taken over by the State Rivers and Water Supply Commission by virtue of the provisions of section 154 of the *Water Act* 1905.
** Included under Maintenance and Management.

Municipal Waterworks.

Of the waterworks controlled by Municipalities, the most important are those at Ballarat vested in the Ballarat Water Commission, and having reservoirs with a storage capacity of nearly 842

million gallons. Other important reservoirs in this group are those supplying Beechworth, Clunes, and Talbot, the respective storage capacities being 191, 225, and 200 million gallons. The following return shows the financial position existing between the State and corporations on account of these Waterworks :—

WATERWORKS OF MUNICIPAL CORPORATIONS—CAPITAL INDEBTEDNESS AND INTEREST OUTSTANDING, 30TH JUNE, 1910.

Local Bodies.	Cost of Works to 30th June, 1910, defrayed from Loan Advances made by State.	Capital Indebtedness.				Interest outstanding at 30th June, 1910.
		Increased by Interest capitalized	Reduced by—		At 30th June, 1910.	
			Amounts written off.	Payments towards Redemption.		
	£	£	£	£	£	£
Arapiles Shire ..	3,600	..	..	1,032	2,568	51
Ararat Borough ..	49,935	..	18,266	1,738	29,931	688
Ballarat Water Commission	309,300	41,869	2,111	45,440	303,618	7,227
Beechworth Shire ..	30,426	1,256	5,958	4,215	21,509	..
Bet Bet Shire ..	1,000	..	985	15	..	..
Birchip Shire ..	2,669	..	..	308	2,361	148
Borung Shire ..	9,059	..	..	1,310	7,749	116
Castle Donnington (Swan Hill) Shire ..	4,309	..	..	626	3,683	..
Chiltern Shire ..	4,500	508	508	749	3,751	74
Clunes Borough Water Commission ..	70,195	..	62,395	412	7,388	147
Creswick Borough ..	3,500	..	..	3,500	..	..
Dimboola Shire ..	2,566	..	..	364	2,202	..
Dunolly Borough ..	2,190	..	..	821	1,369	27
Inglewood Borough ..	5,150	..	..	1,617	3,533	71
Karkarooc Shire ..	15,440	..	..	1,595	13,845	212
Korang Shire ..	2,768	..	..	278	2,490	..
Korong Shire ..	1,565	..	..	413	1,152	23
Ripon Shire ..	3,000	..	..	1,316	1,684	33
Stawell Borough ..	108,506	..	61,661	4,114	42,731	1,717
Talbot Borough ..	15,000	..	13,986	66	948	19
Tarnagulla Borough ..	800	..	..	151	649	13
Wimmera Shire ..	28,890	..	..	26,240	2,650	53
Wycheproof Shire ..	2,445	..	..	275	2,170	136
Total ..	676,813	43,633	165,870	96,595	457,981	10,755

The corporations of Echuca Borough and Ballan and Melton Shires also have waterworks, the first purchased from the State, and the other two constructed out of Shire funds.

In addition to the above, £9,889 (including £346 capitalized interest), was paid towards redemption by other municipal corporations, the balance of their liabilities to the State being transferred to Waterworks Trusts.

Abolished Trusts.

The irrigation and water supply trusts specified below were abolished, and the liabilities in respect of amounts due and owing to the Crown by such trusts on account of principal sums advanced by way of loan, and accrued unpaid interest thereon, were cancelled by provision in the *Water Act* 1905.

IRRIGATION AND WATER SUPPLY TRUSTS ABOLISHED AND LIABILITIES CANCELLED.

Name of Trust.	Cost of Works.			Written off.		
	Advances.	Grants.	Total.	Capital.	Interest.	Total.
	£	£	£	£	£	£
Dookie	630	..	630	630	171	801
Emu Valley ..	8,167	..	8,167	8,167	2,907	11,074
Harcourt	1,142	..	1,142	1,112*	335	1,447
Lerderderg ..	447	..	447	447	169	616
Millewa	973	..	973	973	582	1,555
Pine Hills	2,051	243	2,294	2,051	1,065	3,116
Torrumberry North ..	12,300	..	12,300	12,300	5,812	18,112
Werribee	6,000	..	6,000	6,000	3,752	9,752
Total ..	31,710	243	31,953	31,680	14,793	46,473

* £30 paid to Redemption Fund by Trust.

The Dookie works are now used solely for the supply of water to the Dookie Agricultural College, and the Emu Valley and Harcourt Works have been attached to the Coliban scheme.

Mildura irrigation settlement.

A full account of the history of the Mildura Irrigation Settlement from its inception will be found in the *Victorian Year-Book*, 1904. The settlement was established in 1887, and the following particulars are an indication of its prosperity:—

POPULATION OF MILDURA, 1891 TO 1911.

1891	April (Census)	... 2,321	1901	March (Census)	...	3,325
1896	September ...	... 2,000	1911	April (Census)	...	6,145

The receipts and payments of the Mildura Irrigation Trust during the year ended 30th June, 1910, were as follows:—

RECEIPTS AND PAYMENTS OF FIRST MILDURA IRRIGATION TRUST, 1909-10.

Receipts.	£	*Payments.*	£
Horticultural Rates ..	17,284	Wages, Salaries, &c. ..	3,761
Town Rates	381	Fuel	4,943
Special Waterings, &c. ..	2,104	Interest to Government ..	2,736
Miscellaneous	1,560	Miscellaneous	5,026
Total	21,329	Total	16,466

The area of land under cultivation in the settlement in April, 1910, 12,189 acres, represents an increase of 289 acres over the area for the previous year, but the record of water acres, 35,475, is lower than the record of 1909, which was 36,909 acres. In the succeeding statement, the principal kinds of fruit grown are tabulated.

ACREAGE UNDER CULTIVATION, APRIL, 1910.

Vines.				Citrus.		Other Fruit Trees.				Miscellaneous.				
Gordos.	Sultanas.	Currants.	Wine.	Oranges.	Lemons.	Apricots.	Peaches.	Figs.	Unenumerated.	Lucerne.	Crop.	House-garden.	Vacant.	Total.
2,182	3,739	1,572	52	557	292	398	165	63	319	673	981	246	920	12,189

METEOROLOGY.

Meteorological Records.

Interesting particulars in regard to climate and weather conditions have been furnished by the Commonwealth Meteorologist, and are contained in the following tables. In the first is shown the actual rainfall during the years 1908, 1909, and 1910, and the average yearly amount of rainfall deduced from all available records to

December, 1910, in each of the 26 river basins or districts constituting the State of Victoria :—

RAINFALL—YEARLY RECORDS AND AVERAGES.

Basin or District.	Rainfall.			
	Yearly Average, to Dec., 1910.	During 1908.	During 1909.	During 1910.
	Inches.	Inches.	Inches.	Inches.
Glenelg and Wannon Rivers ..	28·04	24·94	31·73	32·96
Fitzroy, Eumerella, and Merrie Rivers	30·86	29·40	33·44	34·35
Hopkins River and Mt. Emu Creek	25·77	21·56	27·52	29·31
Mt. Elephant and Lake Corangamite	25·08	20·17	28·53	26·70
Cape Otway Forest	38·14	35·76	40·50	42·46
Moorabool and Barwon Rivers ..	25·22	17·49	28·72	26·82
Werribee and Saltwater Rivers ..	24·05	15·62	24·45	23·56
Yarra River and Dandenong Creek	35·43	25·86	36·91	34·63
Koo-wee-rup Swamp	35·15	24·50	36·37	33·80
South Gippsland	39·75	28·07	42·11	34·61
Latrobe and Thomson Rivers ..	35·93	24·87	40·91	33·78
Macallister and Avon Rivers ..	23·28	14·25	26·73	23·51
Mitchell River	28·09	18·07	27·73	26·63
Tambo and Nicholson Rivers ..	25·93	19·98	26·08	24·93
Snowy River	33·27	30·23	32·52	31·74
Murray River	20·23	17·12	21·77	19·94
Mitta Mitta and Kiewa Rivers ..	35·71	29·75	38·91	34·54
Ovens River	36·42	27·75	38·00	33·71
Goulburn River	26·12	20·19	28·94	26·95
Campaspe River	24·39	17·00	27·33	27·84
Loddon River	18·96	14·65	22·35	21·65
Avon and Richardson Rivers ..	16·29	15·20	20·31	19·24
Avoca River	17·26	14·67	20·84	21·11
Eastern Wimmera	21·91	19·13	24·25	26·54
Western Wimmera	19·95	18·46	22·41	24·41
Mallee	13·84	13·95	16·67	18·47
Weighted Averages ..	24·54	19·87	26·86	26·42

The figures in the above table are the averages for each district. The next statement shows the areas of the State subject to different degrees of rainfall.

Rainfall.	Area in square miles.
Over 60 inches	1,597
From 50 to 60 inches	3,348
From 40 to 50 inches	7,055
From 30 to 40 inches	14,029
From 25 to 30 inches	15,247
From 20 to 25 inches	14,070
From 15 to 20 inches	12,626
Under 15 inches	19,912

The rainfall recorded for each quarter in 1910, and the quarterly averages up to 1910 deduced from all available records, are as follows:—

RAINFALL—QUARTERLY RECORDS AND AVERAGES.

Basin or District.	First Quarter.		Second Quarter.		Third Quarter.		Fourth Quarter.	
	Amount, 1910.	Average to 1910.	Amount, 1910.	Average to 1910.	Amount, 1910.	Average to 1910.	Amount, 1910.	Average to 1910.
	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.	Ins.
Glenelg and Wannon Rivers	6·09	3·75	7·56	8·60	11·83	9·49	7·48	6·20
Fitzroy, Eumerella, and Merrie Rivers ..	5·74	4·82	8·07	9·47	12·56	10·18	7·98	6·39
Hopkins River and Mt. Emu Creek ..	6·63	4·23	6·13	7·71	9·89	7·80	6·66	6·03
Mt. Elephant and Lake Corangamite ..	5·42	4·42	5·73	7·24	8·71	7·51	6·84	5·91
Cape Otway Forest	6·79	6·20	10·36	11·87	14·43	12·02	10·88	8·05
Moorabool and Barwon Rivers	4·78	4·41	5·71	7·16	8·87	7·37	7·46	6·28
Werribee and Saltwater Rivers	4·15	4·58	4·06	6·48	8·13	6·49	7·22	6·50
Yarra River and Dandenong Creek ..	5·66	6·72	6·64	9·87	10·50	9·57	11·83	9·27
Koo-wee-rup Swamp	5·45	6·64	6·88	9·95	10·30	9·90	11·17	8·66
South Gippsland	5·23	7·00	6·57	11·27	10·57	11·77	12·24	9·71
Latrobe and Thomson Rivers	5·11	6·75	5·51	9·43	9·75	10·40	13·41	9·35
Macallister and Avon Rivers	4·84	5·03	2·83	5·64	7·12	5·71	8·72	6·90
Mitchell River	5·37	6·72	3·38	7·22	8·24	6·84	9·64	7·31
Tambo and Nicholson Rivers	4·71	6·35	3·78	5·98	7·85	6·01	8·59	7·59
Snowy River	7·60	7·43	6·20	9·00	7·72	8·42	10·22	8·42
Murray River	3·83	3·72	4·30	6·00	7·27	5·90	4·54	4·61
Mitta Mitta and Kiewa Rivers	4·61	6·10	6·86	10·42	13·10	10·88	9·97	8·31
Ovens River	3·79	5·83	7·58	11·10	14·08	11·47	8·26	8·08
Goulburn River	4·33	4·12	6·47	7·96	10·45	8·06	5·70	5·98
Campaspe River	4·83	3·67	6·95	7·38	10·50	7·83	5·56	5·51
Loddon River	4·06	3·02	5·28	5·93	8·15	5·69	4·16	4·32
Avon and Richardson Rivers	3·97	2·41	4·78	5·34	7·67	4·99	2·82	3·55
Avoca River	5·14	2·52	4·85	5·46	7·77	5·39	3·35	3·89
Eastern Wimmera	5·61	2·98	6·52	7·01	10·07	7·17	4·34	4·75
Western Wimmera	5·53	2·39	5·56	6·57	8·61	6·76	4·71	4·23
Mallee	5·02	2·10	3·93	4·53	6·18	4·24	3·34	2·97
The whole State	5·15	4·19	5·62	7·29	9·08	7·34	6·57	5·72

RAINFALL IN REGIONS, DURING EACH QUARTER, 1908, 1909, AND 1910.

Percentage above the average, + (plus); below the average, — (minus).

Regions.	First Quarter.			Second Quarter.			Third Quarter.		
	1908.	1909.	1910.	1908.	1909.	1910.	1908.	1909.	1910.
	%	%	%	%	%	%	%	%	%
Western Districts	—17	—4	+50	—14	+28	—17	— 4	+16	+24
Cape Otway Forest	—19	—6	+10	+ 1	+27	—13	+11	+ 2	+20
Counties surrounding Port Phillip Bay	—37	—6	+10	—27	+23	—30	—17	+18	+13
South Gippsland	—37	—1	+25	—26	+21	—42	—11	+14	—10
Basins of the Latrobe, Macallister, and Mitchell Rivers	—38	+6	—17	—50	+57	—48	— 7	+36	+ 9
Basins of the Tambo and Snowy Rivers	—30	+19	—11	—40	+22	—33	+35	+ 6	+ 8
All Northern Areas between the Ranges and the Murray, East of the Campaspe River	—29	+12	— 9	— 8	+48	—25	—17	+21	+26
All Northern Areas between the Ranges and the Murray, West of the Campaspe River	—42	+17	+83	— 5	+36	—10	+ 7	+51	+45

RAINFALL IN REGIONS, DURING EACH QUARTER, 1908, 1909, AND 1910—*continued.*

Percentage above the average, + (plus); below the average, − (minus).

Regions.	Fourth Quarter.			Year.		
	1908.	1909.	1910.	1908.	1909.	1910.
	%	%	%	%	%	%
Western Districts	−17	−12	+17	−12	+12	+14
Cape Otway Forest	−27	− 7	+35	− 5	+ 7	+11
Counties surrounding Port Phillip Bay	−42	−17	+23	−31	+ 6	− 1
South Gippsland	−52	−23	+26	−30	+ 5	−13
Basins of the Latrobe, Macallister, and Mitchell Rivers	−40	−23	+35	−34	+ 9	− 4
Basins of the Tambo and Snowy Rivers	−26	−41	+17	−15	− 1	− 4
All Northern Areas between the Ranges and the Murray, East of the Campaspe River	−35	−51	+ 5	−21	+10	Normal
All Northern Areas between the Ranges and the Murray, West of the Campaspe River	−18	−43	+ 8	− 7	+20	+21

AVERAGES AND EXTREMES OF CLIMATIC ELEMENTS FOR THE SEASONS AND FOR THE METEOROLOGICAL YEAR DEDUCED FROM ALL RECORDS OBTAINED IN MELBOURNE IN PAST YEARS.

Meteorological Elements.	Spring.	Summer.	Autumn.	Winter.	Year.
Averages.					
Mean pressure of air in inches	29·972	29·924	30·081	30·079	30·014
Monthly range of pressure of air—Inches	0·895	0·800	0·807	0·984	0·871
Mean temperature of air in shade—°Fahr.	57·5	66·4	59·5	49·9	58·3
Mean daily range of temperature of air in shade—°Fahr. ..	18·8	21·5	17·7	14·1	18·0
Mean percentage of humidity. Saturation = 100	69	64	73	78	71
Mean rainfall in inches ..	7·21	5·80	6·59	5·77	25·37
Mean number of days of rain ..	37	23	30	42	132
Mean amount of spontaneous evaporation in inches ..	10·01	17·00	7·66	3·63	38·30
Mean daily amount of cloudiness—Scale 0 to 10	6·0	5·2	5·9	6·5	5·9
Percentage number of hours during which the wind blew from the various points of the compass: North ..	16·46	8·11	16·75	30·44	17·94
North-West	9·34	4·18	7·40	12·50	8 36
West ..	15·16	10·68	13·14	12·90	13 22
South-West	16·43	19·52	12·73	10·70	14·85
South ..	17·96	26·10	15·48	6·90	16 61
South-East	9·33	17·55	13·39	5·64	11 48
East ..	3·91	5·19	5·82	3·88	4·70
North-East	9·28	6·68	12·71	13·54	10 55
Calm ..	2·13	1·99	2·58	2·50	2·29
Mean number of days of fog ..	1·1	0·7	5·0	9·9	16·7

Averages and Extremes of Climatic Elements—*continued.*

Extremes.

Barometer corrected for Temperature, Sea Level, and Standard Gravity.	Inches.
Greatest monthly range ...	1·503
Smallest ,, ,, ...	0·489
Greatest yearly range ...	1·719
Smallest ,, ,, ...	1·169
Highest air pressure on record	30·762
Lowest ,, ,, ,,	28·942

Temperature of air in shade.	° Fahr.
Greatest monthly range ...	69·1
Smallest ,, ,, ...	23·4
Greatest yearly range ...	82·6
Smallest ,, ,, ...	66·0
Greatest mean daily range ...	27·8
Smallest ,, ,, ,, ...	7·7
Highest temperature on record	111·2
Lowest ,, ,,	27·0

Solar radiation—highest on record	178·5	° Fahr.
Terrestrial radiation—lowest on record ..	20·4	,,
Greatest rainfall on record	44·25	Inches.
Smallest rainfall on record	15·61	,,
Horizontal motion in miles	81·118	
Mean hourly velocity of wind	9·2	

The table below contains the values of the principal Meteorological elements for the calendar year 1910, with the corresponding averages and extremes, based on the official records for 54 years:—

Meteorology, 1857 to 1910.

Meteorological Elements.	Yearly Averages and Extremes.			
	Year 1910.	Average for 54 Years.	Extremes between which the Yearly Average Values have oscillated in 54 years.	
			Highest.	Lowest.
Mean atmospheric pressure (inches) ...	29·997	30·014	...	...
Highest ,, ,, ,, ...	30·619	30·606	30·762	30·081
Lowest ,, ,, ,, ...	29·255	29·216	29·983	28·942
Range (inches)	1·364	1·390	1·719	1·169
Mean temperature of air, in shade (°Fahr.)	59·3	58·3	59·7	57·6
Mean daily maximum ... ,,	67·9	67·3	69·0	65·8
Mean daily minimum ... ,,	50·7	49·3	51·2	47·2
Absolute maximum ... ,,	104·4	105·2	111·2	96·6
Absolute minimum ... ,,	31·8	30·7	33·9	27·0
Mean daily range ... ... ,,	17·2	18·0	20·3	14·6
Absolute annual range ... ,,	72·6	74·5	82·6	66·0
Solar Radiation (maximum)... ,,	160·2	161·2	178·5	92·7
Terrestrial Radiation (minimum) ,,	27·7	24·8	46·2	20·4
Rainfall (in inches)...	24·61	25·40	44·25	15·61
Number of wet days	167	132	171	102
Year's amount of free evaporation (in inches)	42·41	38·30	45·66	31·59
Percentage of humidity (saturation = 100)	65	71	...	...
Cloudiness (scale 10 = overcast, 0 = clear)	5·8	5·9	...	...
Number of days of fog	22	17	...	...

Department of Agriculture.

This Department is controlled by a Minister of the Crown, and has a large staff of experts, with a Director of Agriculture at the head. These are actively engaged in supervising all matters relating to the Agricultural, Pastoral, Fruit, and Dairying Industries of the State, and in giving instruction to those engaged therein. The Department publishes a monthly journal.

Agricultural Education.

Agricultural education.

An Act for the establishment of Agricultural Colleges was passed towards the close of 1884, and five areas were reserved as sites for colleges and experimental farms—at Dookie, Longerenong, Gunyah Gunyah, Olangolah, and Bullarto. The total area of these reserves is 13,664½ acres. Particulars are as follows:—

Areas of Agricultural College and Experimental Farm Lands, 1910.

Name.	Area.	How Used.
	Acres.	
Dookie and Currawa	5,161½	College and Experimental Farm
Longerenong (Jung Jung) ...	2,386	,, ,, ,,
Gunyah Gunyah and Jumbuk ...	2,500	Let for grazing and cultivation
Olangolah	2,800	Not in use
Bullarto	817	Let for grazing
Total	13,664½	

The Gunyah Gunyah, Olangolah, and Bullarto reserves have never been used for the purposes of colleges, but Gunyah Gunyah is let for grazing and agriculture, and Bullarto for grazing.

Endowment lands.

In addition to the college and farm lands, provision was made by the Act of 1884 to permanently reserve from sale an area of not more than 150,000 acres of Crown lands, and to vest it in trustees to be appointed, who should hold it in trust for the benefit of and by way of an endowment for State agricultural colleges and experimental farms. The land so reserved now amounts to 144,294 acres,

and is shown in the following table. At present the areas are let for grazing and agricultural purposes:—

ENDOWMENT AREAS.

Parish.	Acres.	Parish.	Acres.
Ararat	1,100	Leeor	125
Ardno	210	Moyston	242
Alexandra..	79	Moyston West	319
Bellellen and Illawarra ..	750	Mullroo and Yelta	28,600
Beveridge Island	2,732	Meering	690
Brankeet	387	Myrrhee	394
Berringama	199	Mooroopna	98
Bealiba	135	Milloo	120
Bumbang	10,000	Mirampiram	99
Byawatha	108	Moira	136
Buckrabanyule	220	Mologa	107
Bringalbart	79	Nurcoung	230
Bangerang	58	Pental Island	17,350
Broadwater	198	Pannoomilloo	100
Carraragarmungee	1,864	Peechember	50
Cudgewa	732	Purnim	3,678
Colac Colac	420	Quantong	495
Corack East	474	Quambatook	380
Charam	331	Turrumberry North ..	615
Carchap	99	Tullich	400
Charlton East	228	Terrick Terrick East and West	160
Dropmore and Ruffy ..	454	Terrick Terrick East ..	40
Dinyarrak..	359	Tallandoon	116
Dartagook	120	Tarwin	167
Estcourt	2,831	Turrumberry	281
French Island	340	Tallygaroopna	430
Gooram Gong	582	Tragowel	250
Granya	586	Toolongrook	160
Gowangardie and Currawa ..	272	Wychitella	1,015
Glenpatrick	100	Walwa	200
Glynwylln..	524	Windham	452
Jumbuk	2,641	Wabba	335
Kunat Kunat	700	Warrenbayne	145
Karramomus and Tamleugh..	672	Wappan	293
Kerrisdale..	148	Woorak	630
Kaarimba	429	Waratah	148
Knowsley	103	Wareek	100
Knowsley East	296	Warrenmang	120
Korrak Korrak	150	Wail	240
Kinypanial	80	Wonthaggi North	2,535
Koonik Koonik	37	Yarck	569
Konnepra	126	Yanac-a-Yanac	168
Kerang	90	Yeringa	160
Lindsay Island	42,000	Yeerung	1,400
Laen	887		
Longwood..	242	Total	144,294
Lang Lang and Yallock ..	4,780		

The total annual rental of endowment areas is £9,209.

Agricultural College, Dookie.

In order to carry out experiments, devised for the purpose of ascertaining the suitability of the Victorian climate and soil for various kinds of useful products and of obtaining data respecting the rotation of crops, but more especially for the instruction of students in agriculture, a block of 4,846 acres was reserved in 1874, at Dookie situated in the County of Moira, in the North-Eastern District of Victoria, on which to found under the direction of the Council of Agricultural Education, a State Experimental Farm. The area has been increased at different times, 272½ acres being added in 1908.

The farm has, under the provisions of the *Agricultural Colleges Act* 1884, been vested in trustees, and all moneys received from the sale of stock and produce since June, 1885, have been paid into the Agricultural College fund.

There were 107 students in attendance at the College in 1910. The charges per head per annum are:—For maintenance—first year, £30, second year, £25, third year, £20; for medical attendance and medicines, £1 5s.; for books and other school materials, £4. Conduct, deposit, and sports fees are also payable. No charge is made for instruction.

The farm is thoroughly equipped with up-to-date buildings, improvements and appliances, and by means of a line of 4-inch pipes water is pumped from the Broken River to the College reservoirs, insuring permanency of supply.

The farm has 34½ acres under vines, and 20 acres under fruit trees, and in 1910 had 850 acres under cereals, hay, and green fodder. The live stock comprised 98 horses, 54 dairy cows, 111 other cattle, 1,850 sheep, and 250 pigs. The produce of the farm supplied to the College and farm for rations, &c., for the year was valued at £2,427, and the receipts comprised £2,439 from fees, and £3,599 from sale of produce, making a total of £8,465. The expenditure for the year, including that on buildings and maintenance, amounted to £13,144.

Considerable attention is devoted to experimental work in connexion with the raising of new varieties of wheat and other cereals suitable for different parts of the country. The experimental plots numbered 5,000 last season.

Experiments with new fodder and other plants of economic importance are carried out, whilst attention is also paid to the indigenous grasses. A variety of medicinal and other plants is also grown on the farm for educational purposes. There is a 4¾ acre plantation of olives, of six varieties.

Manurial tests are carried out each year, and the results are published for the benefit of farmers.

There is a good demand for seed wheat, oats, and barley from the college farm; whilst, for the commercial training of the students, a good deal of grain is marketed.

The ploughing, harvesting, and threshing are mainly carried out by the students under competent instructors. The students ploughed 1,000 acres last season, and cropped 850 acres. About 14,000 bushels of grain were harvested, and 600 tons of hay and ensilage made.

Attention is being given to the breeding of draught horses and Indian remounts, several highly-bred Clydesdale mares and a first-class stallion being used for stud purposes. Most of the horses used on the farm have been bred on it. The cattle include Ayrshires principally, also Herefords and Shorthorns. The breeds of sheep kept are Lincolns, Merinoes, Hampshire Downs, Border Leicesters, Suffolks, and South Downs. The raising of early lambs for the market receives considerable attention. The pigs kept are pure imported Berkshires, imported large and middle white Yorkshires, and large British Blacks, for all of which there is a good demand for stud purposes. The poultry industry is fostered, and pens of the best breeds are kept, a number of the birds having been imported from England.

Longerenong Agricultural College

The Longerenong Agricultural College and Farm, under the control of the Council of Agricultural Education, is situated about 8 miles from Horsham, and 3 miles from Dooen railway station. It accommodates thirty-five resident students, and several non-resident students, the sons of neighbouring farmers, attend classes. The farm contains 2,386 acres of land, of which about 700 acres are only fit for grazing, being low-lying and subject to floods in winter: the remainder is good wheat-growing land. About 500 acres are cropped each year, the staple crop being wheat, of which the average yield per acre for the season 1910-11 was 15 bushels.

A seed farm of 50 acres for the propagation and crossing of wheat and other cereals has been established for the purpose of distributing new and improved cereals to agriculturists, and experimental work is being carried on with grasses, maizes, and other fodder plants.

The orchard, containing 28 acres—5 of which are planted with phylloxera-resistant vines—50 acres of lucerne, and about 10 acres of summer fodder-crops, are irrigated each season by water obtained from the Western Wimmera Distributary Works.

Considerable attention has been paid to tree-planting—several plantations of fair extent having been established on the estate, and the roadways having been bordered with sugar-gums, pepper-trees, and pines of different kinds. The paddocks are watered by seven tanks, varying in capacity from 1,000 to 5,000 cubic yards, which, in dry years, are filled from the irrigation channel. The college buildings have been thoroughly renovated, and are sewered on the septic-tank principle.

There are four silos on the farm, and the live stock in 1910 comprised 36 horses, 37 dairy cattle, 34 other cattle, 1,500 sheep, and 20 pigs.

Lamb raising is one of the chief industries at Longerenong, and in 1910 the lambing averaged 98 per cent.

In 1910 the receipts comprised fees £650, and sale of produce, &c., £2,228; whilst the expenditure, including that on buildings and maintenance, amounted to £4,247. Farm produce used for College consumption was valued at £660.

Government Experimental Farming.

In addition to the experimental farming carried on in connexion with the Dookie and Longerenong Agricultural Colleges, the Government has experimental farms at Wyuna, Rutherglen, and Whitfield. The Wyuna Irrigation Farm is devoted chiefly to raising, under irrigation, all kinds of fodder crops, and carrying on dairying and experimental feeding of stock. It is situated in the Shire of Deakin, nine miles north of Kyabram, and eight miles north-east of Tongala, on the Echuca-Toolamba railway line. The average annual rainfall is about 16 inches. Wyuna Irrigation Farm.

An abundant supply of water is derived from the Waranga Basin by means of the channels of the State Rivers Commission, which intersect the property. The farm comprises an area of 540 acres, 200 of which are timber, and the balance plain land. One hundred and fifty acres of timber land have been cleared, cultivated, and graded, and 100 acres are permanently laid down to lucerne and provided with a system of irrigation and drainage channels. The lucerne is now permanently established, and large crops are cut, and fed to stock, or converted into hay and sold as opportunity offers. Considerable quantities of various seed wheats have been raised, also other cereal crops for hay and grain and ensilage, while in addition to a small orchard there are irrigated crops raised chiefly for ensilage purposes, comprising maize, sorghum, amber cane, millet, kafir corn, peas, beans, rape, mangolds, &c. The live stock consists of 8 working horses, 117 dairy cows and heifer calves, 32 pigs, and 250 head of poultry. The principal new buildings are brick quarters for a limited number of students, a large wood and iron bungalow for temporary use by immigrants, a cowshed and extensive brick-paved yards, a brick dairy, a boiler house, brick and iron piggeries, and four silos (capacity 520 tons). Provision is made for short terms of instruction in the principles and practice of irrigation, and in the grading and preparing of land. From time to time lectures on subjects of interest to farmers are delivered by the Departmental staff, and these are open to the public.

The Government Tobacco Farm, of 113 acres at Whitfield, is used to demonstrate the suitability of certain varieties of tobacco to Victoria, and by means of the trials there conducted several new tobaccoes have been satisfactorily acclimatized and established. For many years it was said that cigar leaf of marketable value could not be grown; but it has been proved that this was a mistake, as leaf for Government Tobacco Experimental Farm.

cigar-making purposes has been grown, and sold at 1s. 3d. and 1s. 6d. per lb., the yield being from 700 lbs. to 1,200 lbs. of cured leaf per acre.

The varieties which have given best results are Comstock for yield, and Vuelta de Abajo for quality. Experimental work in pipe tobaccoes has led to improved qualities, and prices have reached 8d. per lb. for heavy plug leaf. The varieties proved to be most useful for this leaf are Tax and Blue Pryor, which have given yields of from 1,000 lbs. to 1,500 lbs. of cured leaf per acre. Hester, Conqueror, and Orinoco have given better quality and finer texture, but the yield per acre has only ranged from 800 to 1,000 lbs. of cured leaf. During the past three years seed has been sent from the farm to 1,000 growers, and information on systems of culture disseminated.

A stud herd of Red Polled cattle is kept, and dairying operatoins are carried on. In addition, experimental work is conducted in connexion with vines, fruits, maize, and fodder crops.

Government Viticultural Station.

The Government Viticultural Station is situated near Rutherglen, has an area of 913 acres, and is being used as a viticultural station, model orchard, and experimental farm. The expenditure in connexion with the station, including buildings and maintenance, amounted to £3,767 in 1910.

The chief work being done at the station is in connexion with the propagation and grafting of the American and Franco-American resistant vines for the reconstitution of phylloxerated vineyards.

As is well known, the ordinary European vines rapidly succumb to an attack of phylloxera—a disease which injures the vine roots and quickly destroys vineyards wherever it obtains a footing. In Victoria, phylloxera was discovered in 1877. By its inevitable spread it soon destroyed the vines in the districts into which it had been introduced, and other districts became infected. The seriousness of these attacks led to the trials of many methods to exterminate the pest, all of which have unfortunately proved futile. French investigators have discovered, however, that certain American vines are able to resist phylloxera, and these are used as stocks on which to graft the desired producing kinds.

There is a number of American vines grown, but all are not equally suitable for all soils, nor adapted as graft-bearers for all European varieties, hence the work undertaken at the viticultural station is to discover the most eligible kinds. To test their adaptability to the different soils, sub-stations have been founded in each viti-

cultural district of the State, and data carefully collected regarding the growth of each variety in the very diverse soils purposely selected for these tests.

To ascertain the grafting affinities of each kind of stock and scion, the principal wine and table varieties are grafted on each kind of resistant stock, after which they are planted out permanently and the results noted. Growers are thus enabled to see readily which stock suits a certain variety best. The grafting of those European vines of wine, table, and drying varieties that are in greatest demand, on suitable resistant stocks is carried out extensively during the season. A few rootlings are used as stocks, but the majority of the grafts are cuttings. A large number of the cuttings grown at the station are utilized in grafting chosen varieties for vignerons, who may not have the facilities or time to carry out this operation for themselves.

Large areas are devoted to the permanent growth of resistant stocks for the production of cuttings. A considerable area of more suitable land for nursery purposes has been taken up on the banks of the Murray, at Wahgunyah. Here a large irrigation plant, grafting and callusing houses, &c., have been erected. The callusing is done in a heated compartment, and the cuttings are packed in boxes with seaweed and sawdust.

To practically prove the efficacy of resistant stocks, grafted vines have been planted on the very sites of phylloxerated vines that had to be uprooted. These are growing luxuriantly, thus affording striking testimony to their resistant value.

The principal resistant stocks grown belong to the genera Riparia and Rupestris, with their hybrids. As its name indicates, the Riparia in its native habitat loves moist, fertile soils along water-courses. Its root system is spreading and horizontal. Placed in such conditions as it is naturally accustomed to, it grows luxuriantly, but from the character of the root system, it is susceptible to drought. The species of Rupestris that are cultivated are more erect in habit than the Riparias, which are trailing. They are generally deeper rooted plants, and hence are better able to thrive in districts with a less generous rainfall. The hybrids apparently inherit the good qualities of both parent plants, and have so far proved themselves most suitable for all conditions of soil and climate. They have also a wider range of affinity as graft-bearers.

In the vineyard attached to the station, interesting and useful experiments are being conducted in methods of pruning, cultivation, manuring, &c.

As a college for the sons of vine-growers the Viticultural Station did not become popular, but the buildings are now occupied by boys from the Neglected Children's Department, who are being trained in scientific and practical agriculture and viticulture, and are already supplying vignerons and farmers with skilled labour of a class now difficult to obtain. This work has been sufficiently long in operation to enable some idea to be formed of its value and possibilities, and the results obtained justify the brightest optimism. Many lads trained in the various rural pursuits have been sent out to employment in different parts of the State, and all are doing well.

Experimental work is carried on with manures, cereals, grasses, fodder, and reputedly drought-resisting plants. Plots of selected wheats have been grown for seed for distribution, and a model orchard has been planted. Experimental dairying and the cross-breeding of strains of dairy cattle are also carried on, with a view to investigating the possibilities of dairying in the drier districts of the State. Milking and feeding sheds with necessary silos have been erected, and dairying, as practised in dry climates, forms part of the regular instruction. Sheep are also kept, and the growth of suitable summer fodder crops is an important branch of the work.

School of Horticulture.

This school is situated in Richmond Park, Burnley, and is about 3 miles from Melbourne. The site covers 33 acres of ground, and was originally part of the old police paddock. In 1890, the Government decided to establish on this site an institution for the training of orchardists and small settlers, and during the past ten years much has been done to provide for the teaching of regular and casual students, and those visitors calling in search of special information.

Model orchard blocks, gardens, and a students' training ground have been prepared, an entirely new and complete orchard equipment provided, and a large variety of instructive implementa got together for use in class and field work. Domestic and farm animals of all kinds are kept, and a poultry run is provided, also such other conveniences as will insure a thoroughly practical training for students. The estate includes orchard and grazing and arable land where garden and vegetable crops are largely grown.

The school course includes regular lectures in agricultural and horticultural science, poultry breeding, and kindred subjects.

Practical work includes the propagation and management of orchard trees, citrus, table grapes, and bush fruits, the harvesting, storing, packing, marketing, and drying of fruit, vegetable culture, the clearing, grading, and trenching of land, and the management of soils, manures, and drainage. The principal and his assistant carry out this programme by giving lessons daily in class-room and field.

Prior to 1903 instruction was free, but a fee of £5 per annum is now charged. There has been a steady advance in the number of students, and there is every indication that the school is doing generally helpful work in the service of the State. The botanic gardens surrounding the principal's residence are noted for their beauty, and the instructional character of the work in progress makes the place well worth a visit at any season. The school year extends from February to December.

Agricultural High Schools.

Agricultural High Schools have been established at Warrnambool, Sale, Shepparton, Wangaratta, and Ballarat, and it is proposed to open others at Colac, Mansfield, Warragul, Mildura, and Geelong. During 1909-10 the expenditure on these schools, including buildings, amounted to £12,844. They have been established under condition that—

(*a*) At least one-half of the cost of the necessary buildings and equipment shall be contributed by local subscriptions.

(*b*) An area of land of not less than 20 acres, situated in a convenient position to the High School, shall be provided and vested in the Minister of Public Instruction.

(*c*) At least 50 students paying prescribed fees shall be guaranteed before the proposal to establish an Agricultural High School is entertained.

Pupils for these schools must be at least 14 years of age, and must have obtained the certificate of merit at the local school, or have passed the primary or some higher examination at the Melbourne University, or they must have satisfied an Inspector of Schools that they are qualified to profit by the course of study.

A local council appointed for each school exercises a general oversight of the work, particularly in regard to the farm operations, and expends the maintenance allowance allotted to the school. It also nominates for free instruction students who possess the required qualifications, subject to the provision that the number of students so nominated shall not, in any one year, exceed 10 per cent. of the total number paying full fees at the school.

Agricultural and Horticultural Societies.

Agricultural and Horticultural Societies, established on the principle of voluntary membership, and having for their object the improvement of the agricultural, pastoral, and horticultural industries, exist throughout the State. Accounts of some of the more important societies will be found in previous issues of this work. One hundred and four agricultural societies furnished returns for the year 1910, in regard to which particulars are set out below.

Agricultural Societies, 1907 to 1910.

Societies.	Area of Grounds.	Number of Members.	Government Grant.	Total Receipts (including Government Grant).	Total Expenditure.	Bank Overdraft.
	Acres.		£	£	£	£
Royal (Melbourne) ...	42	2,004	...	12,141	12,205	8,149
Ballarat	11	413	152	1,501	1,672	635
Benalla	13	279	40	937	909	..
Bendigo	10	321	125	1,812	1,733	79
Colac	13	397	57	1,476	1,678	402
Geelong	150	377	60	1,518	951	...
Hamilton	21	329	65	1,086	1,021	...
Horsham and Wimmera	28	481	49	1,109	1,197	6
North-Eastern ...	25	290	45	877	750	478
Ovens and Murray ...	39	366	83	1,287	1,538	288
Shepparton	23	470	78	2,618	2,501	696
Warracknabeal ...	16	400	32	825	867	589
Others	1,331	13,390	2,030	36,727	36,911	8,688
Total, 1910 ...	1,722	19,517	2,816	63,914	63,933	20,010
Total, 1909 ...	1,649	17,583	2,598	58,246	55,212	19,826
Total, 1908 ...	1,600	16,726	2,366	55,814	56,043	22,851
Total, 1907 ...	1,613	16,849	2,160	56,801	55,360	21,768

The loan liability of these societies in 1910 amounted to £4,085. The Horticultural Societies furnishing returns for 1910 numbered 38, their membership being 3,793, the receipts for the year £3,603, (including Government grant £213), the expenditure £3,516, the bank overdraft £95, and the loan liability £1,342.

Inspection of Orchards, Nurseries, &c.

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

Plants and cuttings coming from foreign parts are fumigated at the new fumigating building at Melbourne wharf, if a certificate that they have been treated at the port of shipment does not accompany the consignment. Even when they have been thus certified, the Chief Horticulturist has the right of examination, and, if necessary, of ordering a second fumigation.

The fear of introducing either of the fruit flies, Tephritis tryoni and Halterophora capitata, has induced the Agricultural Department to arrange for the more thorough examination of fruit from New South Wales, Queensland, and elsewhere. The fruit-fly question is a very grave one, and should either of the above-named insects obtain a footing in Victoria, a great portion of the large and important fruit industry of our State would be practically ruined.

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

General Remarks on Live Stock Diseases in Victoria.

No country in the world is so free from malignant infectious disorders in stock as Victoria. The State interferes in every direction to prevent the spread and importation of disease, and exercises a strict supervision over all animals slaughtered for food.

The inspection of meat products for export is carried out under stringent regulations, and by properly trained officers, and no meats are allowed to be canned unless they are of a perfectly wholesome character, and derived from animals free from disease. The premises where canning of meat is conducted are rigorously inspected, and cleanliness is a factor insisted upon in the packing operations.

The Commonwealth Government controls the inspection of all meats exported from Australia, and, in addition, Victorian State laws insist on a thorough inspection of meats for export, and all inspectors

associated with the work are officials of the Crown. All countries where meats of Victorian origin are consumed are officially assured that meats canned in this State are subjected to the closest scrutiny. The State jealously guards the wholesomeness of all products sent to oversea countries which are intended to be used as food for man. The whole of the milk supply is subjected to a strict inspection by the central government, and cleanliness in production and distribution is rigorously insisted on.

Horses.—Horses are particularly free from malignant infectious disorders. Glanders and farcy do not prevail anywhere in Australia. Tuberculosis does not occur in Victorian horses. Complaints caused by parasites that are common all the world over are occasionally encountered.

Cattle.—Rinderpest, eczema-epizootica (foot and mouth disease), and Texas-fever or tick fever, a disease dependent on a malarial organism, Pyrosomum Bigeminum, and introduced into the blood of cattle by the cattle tick (Ixodes Bovis), do not exist in the State. The herds of Victoria are not seriously affected with tuberculosis. In consequence of the mildness of the climate, cattle do not require to be housed at any period of the year, and the continuous life in the open is conducive to the health of the animals, and to the suppression of that disease. Tubercle does not affect more than about 5 per cent. of Victorian cattle, and as greater care is now being exercised by stock-owners in the feeding and sheltering of milch cows than formerly, it is hoped that in a few years the percentage noted will undergo a material decline. Parasitic diseases are rare in Victorian cattle, and none inimical to human health are found.

Sheep.—Tuberculosis has never been observed in Australian sheep. Scab has been completely exterminated, and as regards other parasitic diseases no country in the world can produce so clean a bill of health for its ovines as Australia.

Swine.—Trichinosis (Trichina Spiralis) and "measles" (Cysticercus Cellulosæ), the hydatid stage of the tapeworm Tænia Solium of man, do not exist in Victoria. The conditions under which pigs are reared and kept in Victoria are conducive to their well-being and general freedom from disease. Mildness of climate, moreover, is a great factor in insuring their healthfulness.

Dogs.—Rabies (Hydrophobia) does not exist in Victoria, and there are no serious diseases prevailing in canines.

Poultry.—No serious diseases prevail in Victorian birds, and inspections of the poultry of the State are regularly conducted. The industry of rearing chickens and turkeys for export is now established on a solid basis, and the wholesomeness of such products originating in Victoria cannot be questioned.

Experimental Field Work, 1909-10.

The expansion of our rural industries, and the permanent adoption of methods considered impracticable only a decade ago, suggest a review of the circumstances which have guided the Victorian farmer towards the present achievement. The Department of Agriculture has played no small part in bringing about increased production in every branch of agriculture, but its most useful teaching has perhaps been through the medium of a widely extended series of experimental plots designed upon lines which the farmer could follow with economy and profit to himself. In the wheat areas, these experimental plots preceded the grain drill and the now universal fertiliser. The demonstration of the soundness of new ideas, and the proof that wheat soils, instead of being worn out as was generally thought, were in reality unproductive only by reason of the fact that the methods in vogue were incapable of utilizing the unlimited stores of dormant plant food, came at a period when a serious exodus of experienced farmers was threatened. Following upon the success of the field experiments came the widespread demand for grain drills and fertilizers. One has only to study the figures relating to the effects of fertilization to realize that a new lease of life was given to Victorian farming through its agency. The new doctrine was determinedly preached by officers of the Department until the natural conservatism of the farmer was overcome. Since then, however, new problems have arisen, altered conditions having given rise to circumstances which previously were not conspicuous. Among these may be noted the question as to whether the continuous use of phosphatic manures alone over a long term might not react injuriously upon the soil and prejudice its returns. With the purpose of obtaining fundamental data concerning the response of the northern wheat soils under a variety of conditions, a highly interesting group of experiments has been conducted during the past six years by the Superintendent of Agriculture. Areas of 10 acres have been secured in 26 representative localities in the principal wheat districts, a portion being cropped each year. Reference has already been made in previous editions of the *Year-Book* to the progress results from these fields. Summarizing these results, they have so far confirmed the superiority of the superphosphate over other forms of phosphatic manures for wheat growing, also the inutility up to the present time of manures containing nitrogen and potash. Rotation of crops and deep cultivation are being extensively tested throughout the State, and the effects of subsoiling have served to illustrate the fact that in what are known as the "Northern Plains," a deeper system of cultivation is of advantage in increasing the yield of grain. The benefits of green manuring and rotation of crops are not likely to be manifested until the termination of the trials in 1912; but there is already accumulating evidence that these practices lead to an increased stock-carrying capacity of the land, and a considerable amelioration of the physical texture of the soil itself. Perhaps the most prominent feature in the usefulness of the experimental fields is that they have

enabled comparisons to be made between different varieties of wheat and oats grown side by side, under identical conditions of cultivation and manuring. It has taken only one season to reveal the unsuitability of some varieties. Others have required confirmatory trials, and a very limited number have been conspicuous successes from the commencement. Of the latter, the variety which has survived all tests from a grain-producing point of view, is "Federation." An instructive illustration of the superiority of "Federation" over such a widely-grown variety as "Dart's Imperial," is to be found in the table below:—

Season.	"Federation."			"Dart's Imperial."		
	Mallee.	Wimmera.	North Plains	Mallee.	Wimmera.	North Plains
	bushels.	bushels.	bushels.	bushels.	bushels.	bushels.
1905 ..	14·7	21·3	22·4	14·5	21·1	20·6
1906 ..	19·0	30·0	27·8	15·1	26·9	22·3
1907 ..	14·6	18·5	17·0	14·0	13·5	14·2
1908 ..	18·2	19·7	17·2	14·3	18·0	14·0
Average	16·6	22·3	21·1	14·4	20·3	17·7

During 1909, these wheat variety trials were continued upon a more extended scale. The average results of all the experimental wheat fields under the supervision of the Field Branch were:—Federation, 21.7 bushels per acre; Yandilla King, 20.0 bushels; Australian Talavera, 18.1 bushels; College Purple Straw, 16.5 bushels; Jumbuck, 15.4 bushels.

In addition to conducting the trials already alluded to, with the view of ascertaining the yielding properties of different wheats, the Department has in view the introduction of varieties having superior milling properties to those now generally in use. Up to the present time, the milling value of his wheat has not concerned the farmer very much; but if one studies the literature of other countries on this matter, it becomes evident that the time is arriving when the commercial value of wheat, which is the staple food-stuff of all civilized nations, must be put upon a more logical basis. Wheat is more or less valuable according as a greater or less amount of flour can be made from it, and the flour has a fluctuating value in proportion to its "strength" or water-absorbing capacity and content of gluten. In order to carry out co-related investigations upon this side of the wheat industry, the Department of Agriculture is installing a miniature flour-milling plant to test all varieties grown in the State. Work of this character, although not on such comprehensive lines, is being carried out in the other States of the Commonwealth, as well as in most European countries.

The potential value of such systematic investigations to Victoria is immense. New markets for our flour are being opened up in the East and South Africa, and, in order to permanently secure that trade, only the best quality of flour can be safely

exported. If our flour is of unknown quality we stand at the mercy of our commercial rivals, whose article may be of superior bread-making capacity. A third safeguard for the wheat-growing industry will be found in the initiation of "stud" plots for breeding new varieties of cereals at Longerenong and Dookie Agricultural Colleges. The Wheat Improvement Committee, consisting of the Director of Agriculture, the Vegetable Pathologist, and the Principal of the Dookie Agricultural College, has charge of four stations upon the Government farms at Wyuna and Rutherglen, and at the Dookie and Longerenong Agricultural Colleges, where work of this character is being actively carried on. Results are to be looked for within a year or two, and there is little doubt that the study of varieties under close scientific observation from sowing to harvesting must lead to the establishment of sound principles for the future guidance of the Victorian wheat-grower.

In Southern Victoria, the necessities of the dairyman, the breeder of lambs for export, and the potato-grower, have not been overlooked. A series of experimental plots, embracing green fodder crops of all kinds, roots, legumes and grasses, has been instituted, the plots being generally under the auspices of an Agricultural Society or other rural body. Varieties of maize, sorghum, and millet, have been given especial attention, and most useful work is being done in investigating the manure requirements of a variety of soils. The advantages of growing all fodder crops in drills, and the imperative necessity of cultivating between the rows, have been conclusively demonstrated and must do much to extend the area of these crops. The old system of broadcasting fodder crops, to languish as the summer advances, is giving way to more reasonable methods. It may also be mentioned that the maize industry is now receiving the same close attention that is being given to wheat. The establishment of "stud" plots at Orbost, Bruthen, and Colac, whereon the characteristics of a number of varieties, both for fodder and grain, are being observed, is a step in the right direction. A great number of cross fertilizations between varieties were made last season, some of which are bound to produce hybrids of superior value to the parents. Variety trials in representative potato-growing districts now offer information of value to the potato-grower as to the varieties best adapted to the local soil and rainfall.

In the experimental market-garden at Cheltenham, vegetables of every description are being grown for market, under the supervision of a practical market-gardener. Manure tests of every description are being made, and the results carefully tabulated. Vegetable diseases and insect pests injurious to crops are also being investigated. It is intended to make the experimental garden the demonstration ground for new varieties of seeds of all kinds. Carried out upon such common-sense lines, and based upon commercial success only, the results will, in a year or two, offer much useful information to the suburban vegetable-grower. The experiments in traying seed potatoes before sowing, which have been carried out

at the farm during the past three years, have proved beyond doubt the success of sprouted seed potatoes. It has been shown by the demonstration plots that sprouted seed will give greater yields per acre and value per ton than unsprouted seed, whilst in addition the land can be used for fodder crops for two months (July and August) instead of lying idle, waiting for the seed to germinate. Under the old system the seed is planted in July and dug in November, the plants being checked in their growth by the early Spring frosts, while under the new system the seed which is allowed to sprout or mature in the trays, under a shed, is not planted till September, but is ready for digging only a fortnight later than the unsprouted. Not only is a crop assured under the latter system, but the yield is from 50 to 100 per cent. larger than under the other method, and thus it will be readily seen that the market gardeners are amply repaid for the extra expense of £1 per acre incurred in planting sprouted seed. Several experiments were carried out on manured sections during the past season with unsprouted and sprouted seed potatoes, the former being planted on 7th July with a soil temperature of 51 degrees and dug on 28th November, while the latter were planted on 7th September with a soil temperature of 58 degrees and dug on 12th December. The manures used were 5 cwt. of bonedust and superphosphate and two trucks of stable manure, at a cost of £3 17s. 10½d. per acre. The results compare favorably with previous years, and, as the following table will show, are all in favour of the sprouted seed. The yields therefrom in the first four varieties mentioned, which are standard varieties in the district, varied from 2 tons 12 cwt. to 6 tons 7 cwt. in excess of those obtained from the unsprouted seed:—

Variety.	Sprouted Seed.		Unsprouted Seed.	
	tons.	cwt.	tons.	cwt.
Carmen No. 1	10	10	5	12
Green Mountain	10	2	5	17
Sutton's Abundance	9	0	6	8
Up-to-Date	12	0	5	13
White Prolific	8	2	5	10
Brownell's Beauty	6	0	5	17
Adironack	4	16	4	8

The activities of the Field Branch have also been directed towards the utilization of soils hitherto considered as being of too low a fertility for profitable working. Fringing the coast-line of Victoria there are large areas of what is called "heath land," sandy in character and clothed with low heath and ti-tree. In the Portland district, an attempt has been made to show that with drainage and suitable manuring, land of this character can be made to produce

profitable crops. Millet, rape, sugar beet, potatoes, and grasses have shown such encouraging yields that the Government has initiated a comprehensive scheme for drainage, which when completed will permit of some 20,000 acres being put under grass or crop. There is little doubt that work of this useful nature will be extended to the large areas of similar land in South Gippsland.

It will be gathered from the above brief outline that the objectives of the Departmental inquiries are all in the direction of enabling the producer to handle his soil to more advantage, and at the same time with economy. It is the true function of a Department to demonstrate sound principles in farming, and past results point to the solid advantages accruing from the advice of experienced officers. The standard of cultivation in Victoria is decidedly on the up grade, and with modern implements there is no reason why the present production in all branches should not be doubled or trebled.

Forestry.

The State has about 12,000,000 acres of woodland, and of this area over 4,600,000 acres are set aside as climatic reserves and for the production of timber. Of the State forest domain, some 3,000,000 acres are situated on the slopes of high mountain ranges, and their protection is essential for the maintenance of streams and springs; over half-a-million acres are situated in the extreme Eastern part of the State, but, owing to difficulties of transport, are not at present accessible for practical working; half-a-million acres, chiefly in the central district, which have been cut over, are closed for the protection of the young timber; while in the remaining area (over 600,000 acres) timber cutting is carried on in various parts. The bulk of the forest revenue is derived from a total area of about 200,000 acres. The trees are felled on the selection system of treatment; but for the supply of mine-props and fuel, large blocks are allotted and worked as coppice, or coppice under standards, thinnings only, light or severe as the circumstances require, being taken out in many districts. The open timber licence system has been abolished in Victoria, and strict control is enforced over the operations of timber-getters.

As is usual in newly-settled countries, little care was formerly exercised in respect to the forests, and, though Victoria is the best-wooded of the Australian States, the fact is due to the extent of its mountain territory and its ample rainfall. In many districts, particularly in the moister portions of the State, re-afforestation by natural process has been going on.

The timbers of commercial value in Victoria number twenty, all species of the eucalyptus family. Alarmist statements to the effect that there is an increasing scarcity of commercial timber here are ill-founded, as large supplies of hardwood are assured for many years to come.

A forest nursery, with provision for an annual output of from four to five million tree plants has been completed at Creswick, and the existing nursery at Macedon has been remodelled. The plantations at Creswick, Lara, and Mt. Alexander are being gradually extended, and large new plantations have been formed in the Wimmera district, in Southern Gippsland, and in coastal areas near Warrnambool and Frankston. In the past, much of this work was experimental, but the experience gained in the propagation and growing of Australian hardwoods, as well as exotic conifers, has proved of great benefit to the community. Transplants are distributed to farmers, municipalities, and State schools. Farmers particularly benefit by planting trees around their homesteads, as the home is thereby protected from wind and weather, and shelter and shade are afforded to live stock, thus insuring healthier flocks and herds and increased returns.

In addition to the two nurseries, there are thirteen plantation trial stations, having a total area of 10,000 acres. The persons employed in connexion with the State forests and nurseries comprise administrative and professional staff, 18; protective staff, 58; and nursery staff, 23. The revenue from licences and royalties in 1909-10 amounted to £40,572. The expenditure was £35,759, of which sum £17,883, or 50 per cent., was devoted to the improvement of the natural forests and the extension of plantations.

A Forests Act, conferring reasonable powers of management and control on the conservancy staff, passed by Parliament on 6th November, 1907, came into operation on 1st January, 1908. An amending Act, which was required to remedy certain defects in the principal Act, and to give the conservancy staff greater control over fire-raising and other forest offences, has recently received the approval of Parliament. Under this law, working plans regulating the general fellings and output of timber from the reserves are being put in force, thus maintaining the forests in a productive condition.

Agriculture, expenditure and revenue connected with.

The State has rendered substantial assistance to the various branches of the agricultural and pastoral industries during past years. The appended table summarizes for the last five years the items of State expenditure from consolidated revenue in this direction,

and shows the amount of revenue received by the Department of Agriculture, which consists chiefly of payments by exporters for packing produce for export:—

EXPENDITURE AND REVENUE CONNECTED WITH AGRICULTURE, ETC., 1905-6 TO 1909-10.

	1905-6.	1906-7.	1907-8.	1908-9.	1909-10.
Expenditure.	£	£	£	£	£
Department of Agriculture	10,890	11,852	12,323	13,965	12,710
Grants to Agricultural and Horticultural Societies, &c.	2,375	2,475	3,351	3,382	3,491
To promote the Agricultural, Dairying, Fruit, and Wine Industries	296	197	213	288	365
Seed Advances Act—Fees ...	23	67	57	...	...
Carriage of Agricultural Produce at reduced Rates—Allowance to Railway Department	41,787	25,000	...	...	...
Development of Export Trade	34,050	37,681	32,859	24,798	37,400
Viticultural Education and Inspection of Vineyards ...	3,021	3,757	5,196	4,666	4,691
Vegetation Diseases ...	4,257	4,297	8,600	8,880	9,043
Maffra Beet Sugar Factory ...	214	219	222	347	642
Doncaster Cool Stores ...	390	400	1,345	799	987
Doncaster Cool Stores—Additions, Plant, &c	...	...	...	...	5,819
Technical Agricultural Education, &c.	14,428	23,316	25,487	26,248	30,851
Publishing Agricultural Reports	2,250	2,293	1,886	2,182	3,645
Advances to Settlers on account of Losses by Bush Fires, &c.	3,486	1,568	11,614	359	1,217
Rabbit and Vermin Extermination	16,477	16,513	17,585	22,756	23,005
Stock and Dairy Supervision	...	5,103	8,092	16,596	18,939
Scab Prevention and Stock Diseases	7,319	6,790	6,323		
Village Settlements ...	67	97	99	98	98
Labour Colonies	493	500	450	550	550
State Forests and Nurseries	18,805	18,358	19,103	21,003	35,759
Total	160,628	160,483	154,805	146,917	189,212
Revenue.					
Department of Agriculture ...	28,115	35,310	39,473	29,594	43,131
State Forests	44,113*	46,838*	53,894*	38,802	40,572

* Including licences and leases other than Agricultural.

From the foregoing it will be seen that the State has rendered material assistance to all the producing industries connected with the land. In addition to the expenditure shown, various sums have

been advanced from loans and votes for the purpose of aiding closer settlement, for the resumption of mallee lands, and for relief to farmers on account of bush fires, flood losses, and purchase of seed wheat and fodder, which advances are gradually being repaid.

The loan expenditure in 1909-10 was £198,946 on account of closer settlement, and £10,734 on account of wire netting.

Land occupied, and cultivation and live stock thereon.

Information relating to land occupied and cultivation and live stock thereon was collected in March, 1906, and March, 1910. The land privately owned was summarized according to different sized holdings, and in the instances where Crown lands were held in conjunction therewith, these were, regardless of size, scheduled with the holdings to which they were attached. The particulars for 1910 are as follows:—

LAND OCCUPIED, AND CULTIVATION AND LIVE STOCK THEREON, MARCH, 1910.

Size of Holdings. (In acres.)	Privately-owned Land. Number of Holdings.	Privately-owned Land. Area occupied.	Crown Land held in conjunction with that privately owned.	Total Area occupied.	Area under— Cultivation.	Area under— Pasture, &c.
		Acres.	Acres.	Acres.	Acres.	Acres.
1 to 5 ..	3,469	10,334	30,668	41,002	3,636	37,366
6 „ 15 ..	4,420	44,810	13,247	58,057	16,306	41,751
16 „ 30 ..	4,854	107,998	82,358	190,356	35,178	155,178
31 „ 50 ..	3,866	159,155	67,217	226,372	44,272	182,100
51 „ 100 ..	6,696	514,529	248,923	763,452	128,835	634,617
101 „ 200 ..	9,208	1,389,057	528,348	1,917,405	310,579	1,606,826
201 „ 300 ..	5,422	1,362,833	459,424	1,822,257	301,370	1,520,887
301 „ 400 ..	5,904	1,998,644	1,111,022	3,109,666	473,986	2,635,680
401 „ 500 ..	2,863	1,298,733	241,206	1,539,939	317,174	1,222,765
501 „ 600 ..	2,212	1,221,823	459,916	1,681,739	319,610	1,362,129
601 „ 700 ..	2,568	1,656,850	1,138,163	2,795,013	453,050	2,341,963
701 „ 800 ..	1,249	944,343	325,423	1,269,766	239,259	1,030,507
801 „ 900 ..	1,014	867,671	179,064	1,046,735	197,293	849,442
901 „ 1,000 ..	1,173	1,123,644	467,703	1,591,347	272,677	1,318,670
1,001 „ 1,500 ..	2,583	3,175,340	1,601,051	4,776,391	748,061	4,028,330
1,501 „ 2,000 ..	1,062	1,849,446	395,788	2,245,234	339,811	1,905,423
2,001 „ 2,500 ..	514	1,153,958	467,296	1,621,254	166,520	1,454,734
2,501 „ 3,000 ..	270	750,766	913,910	1,664,676	94,535	1,570,141
3,001 „ 4,000 ..	329	1,145,013	313,530	1,458,543	149,281	1,309,262
4,001 „ 5,000 ..	150	675,665	121,539	797,204	54,330	742,874
5,001 „ 7,500 ..	161	969,101	187,402	1,156,503	50,139	1,106,364
7,501 „ 10,000 ..	78	682,878	1,210,582	1,893,460	35,240	1,858,220
10,001 „ 15,000 ..	79	977,245	121,909	1,099,154	20,385	1,078,769
15,001 „ 20,000 ..	52	904,037	14,649	918,686	13,167	905,519
20,001 „ 30,000 ..	22	564,259	508	564,767	2,952	561,815
30,001 „ 40,000 ..	15	510,762	7,580	518,342	8,324	510,018
40,001 „ 50,000 ..	5	225,438	400	225,838	579	225,259
50,001 and upwards	2	116,486	374	116,860	363	116,497
Total ..	60,240	26,400,818	10,709,200	37,110,018	4,796,912	32,313,106

LAND OCCUPIED, AND CULTIVATION AND LIVE STOCK THEREON, MARCH, 1910—*continued.*

Size of Holdings (In Acres.)	Live Stock on Land occupied.				
	Horses.	Cattle.		Sheep.	Pigs.
		Dairy Cows.	Other Cattle.		
1 to 5 ..	3,569	4,694	3,953	5,227	1,530
6 „ 15 ..	6,293	8,843	6,436	4,981	4,033
16 „ 30 ..	8,746	13,082	10,793	11,620	5,563
31 „ 50 ..	9,535	15,796	13,193	23,332	7,255
51 „ 100 ..	21,214	46,345	37,630	83,333	20,465
101 „ 200 ..	41,077	107,001	90,587	255,577	41,797
201 „ 300 ..	33,059	78,678	77,826	341,113	27,273
301 „ 400 ..	42,472	83,726	99,060	591,634	27,757
401 „ 500 ..	25,211	41,769	54,526	404,620	13,346
501 „ 600 ..	21,547	29,676	46,354	418,181	9,148
601 „ 700 ..	26,661	31,337	52,749	587,736	9,750
701 „ 800 ..	14,513	17,228	30,384	393,252	6,096
801 „ 900 ..	12,220	14,759	27,823	379,346	4,442
901 „ 1,000 ..	14,965	15,100	31,073	514,582	4,544
1,001 „ 1,500 ..	38,625	31,654	83,122	1,509,276	9,466
1,501 „ 2,000 ..	17,686	12,576	40,445	991,389	3,526
2,001 „ 2,500 ..	9,689	6,585	25,517	714,778	1,671
2,501 „ 3,000 ..	5,234	3,143	12,842	471,681	1,055
3,001 „ 4,000 ..	7,951	5,617	22,670	761,999	1,052
4,001 „ 5,000 ..	3,734	2,358	14,516	454,566	515
5,001 „ 7,500 ..	5,204	2,939	25,705	739,027	553
7,501 „ 10,000 ..	2,510	1,187	12,944	516,204	159
10,001 „ 15,000 ..	3,148	2,041	18,240	801,495	468
15,001 „ 20,000 ..	2,635	1,165	10,037	691,049	278
20,001 „ 30,000 ..	1,069	541	4,602	409,264	92
30,001 „ 40,000 ..	1,616	460	4,924	405,540	138
40,001 „ 50,000 ..	526	148	3,039	218,683	19
50,001 and upwards	542	62	1,216	89,219	28
Total ..	381,251	578,510	862,206	12,788,704	202,019

1440.916

The figures are exclusive of live stock travelling, and those in cities, towns, &c.; also of 1,571 holdings containing 975,556 acres of Crown lands not held in conjunction with any private land, on which there were 37,373 acres of cultivation, 4,641 horses, 24,200 cattle, 96,662 sheep, and 3,653 pigs. The position disclosed was that 54,918 persons holding up to 1,000 acres each of private land and occupying in the aggregate 12,700,424 acres of such land, also occupied 5,352,682 acres of Crown land—a total of 18,053,106 acres, and less than half of the total area in occupation. These occupiers, however, controlled 65 per cent. of the total cultivation, and possessed 74 per cent. of the horses, 88 per cent. of the dairy cows, 68 per cent. of the other cattle, 91 per cent. of the pigs, and 31 per cent. of the sheep. To illustrate the uses to which the land was applied in 1906 and 1910, various percentages relating to holdings of different sizes are given for these years in the subsequent

table, which also shows the live stock carried by the holdings, reduced to their equivalent in sheep :—

CULTIVATION AND SHEEP-CARRYING CAPACITY OF LAND IN DIFFERENT DIVISIONS, MARCH, 1906 AND 1910.

Size of Holdings of Private Land. (In Acres.)	Year.	Percentage in each Division to Total of—				Live Stock Grazed reduced to Equivalent in Sheep.	
		Area Occupied.	Area under Cultivation.	Area used for Pasture, &c.	Equivalent in Sheep Grazed.	Total.	Per Acre used for Grazing, &c.
1 to 100..	1906	3·78	4·68	3·65	6·00	1,440,822	1·33
	1910	3·45	4·76	3·25	6·28	1,586,653	1·51
101 „ 320..	1906	13·02	18·81	12·20	17·73	4,259,999	1·18
	1910	13·19	17·50	12·55	17·50	4,415,168	1·09
321 „ 640..	1906	18·07	28·54	16·58	17·21	4,137,133	·84
	1910	17·58	24·65	16·53	17·00	4,290,653	·80
641 „ 1,000..	1906	12·52	17·52	11·81	11·40	2,739,991	·78
	1910	14·42	17·99	13·90	12·18	3,075,406	·68
1,001 „ 2,500..	1906	21·66	24·04	21·32	17·20	4,135,089	·66
	1910	23·29	26·15	22·87	20·10	5,074,837	·69
2,501 „ 5,000..	1906	12·15	4·31	13·27	8·30	1,994,035	·51
	1910	10·57	6·22	11·21	8·81	2,224,312	·61
5,001 „ 10,000	1906	6·04	1·06	6·74	6·52	1,566,846	·79
	1910	8·22	1·78	9·17	6·29	1,589,021	·54
10,001 and upwards	1906	12·76	1·04	14·43	15·64	3,758,546	·88
	1910	9·28	·95	10·52	11·84	2,989,460	·88
Total ..	1906	100·00	100·00	100·00	100·00	24,032,461	·81
	1910	100·00	100·00	100·00	100·00	25,245,510	·78

Horses and cattle have been reduced to an equivalent in sheep on the assumption that one head of the former will eat as much as ten, and one of the latter as much as six sheep. In this return it may be seen that 48.64 per cent. of the land occupied was in areas not exceeding 1,000 acres, and, after supplying 65 per cent. of the cultivation, contained 53 per cent. of the grazing stock; whilst holdings of over 1,000 acres supplied 54 per cent. of the total area used for grazing, and only 47 per cent. of the stock mentioned. As many of the large areas are situated in the rich Western District, which is favoured with a good annual rainfall, it requires only the introduction of labour to utilize the capacity of these lands to carry at least as many sheep per acre as are now carried on holdings of 320 acres or under. The figures show that there is sufficient land in use in Victoria to support at least thirteen million more sheep than there were in 1910. Dairying is principally carried on in the small holdings, as much as 39 per cent. of the number of dairy cows being on holdings of from 101 to

320 acres. Naturally, pigs are most numerous where dairying prevails, the proportion found on holdings of the acreage mentioned being about 41 per cent. of the total in the State. Compared with 1906, the sheep-carrying capacity per acre of the total grazing area in 1910 shows a decline, and of the various sizes of holdings, those having an area of less than 101 acres and of from 1,001 to 5,000 acres are the only ones in which an improvement is apparent. The proportionate increase of pastoral areas in estates of from 5,001 to 10,000 acres is very prominent, especially as it is accompanied by a proportionate reduction in the number of live stock grazed.

Particulars of land occupied and cultivation thereon are in the following table compared with similar information for the year 1906 :—

LAND OCCUPIED, 1906 AND 1910.

Size of Holdings (in acres).	Year.	Privately-owned Land. Number of Holdings.	Privately-owned Land. Area Occupied.	Crown Land held in conjunction with that privately-owned.	Total Area Occupied.	Area under— Cultivation.	Area under— Pasture, &c.
			Acres.	Acres.	Acres.	Acres.	Acres.
1 to 100 ..	1906	19,173	721,669	554,759	1,276,428	196,580	1,079,848
	1910	23,305	836,826	442,413	1,279,239	228,227	1,051,012
101 ,, 320 ..	1906	16,121	3,459,291	937,727	4,397,018	789,330	3,607,688
	1910	17,583	3,686,498	1,209,660	4,896,158	839,664	4,056,494
321 ,, 640 ..	1906	9,319	4,497,331	1,604,280	6,101,611	1,197,536	4,904,075
	1910	9,676	4,623,839	1,900,058	6,523,897	1,182,254	5,341,643
641 ,, 1,000 ..	1906	3,876	3,164,404	1,063,166	4,227,570	735,263	3,492,307
	1910	4,354	3,553,261	1,800,551	5,353,812	863,080	4,490,732
1,001 ,, 2,500 ..	1906	3,466	5,112,200	2,200,867	7,313,067	1,009,034	6,304,033
	1910	4,159	6,178,744	2,464,135	8,642,879	1,254,392	7,388,487
2,501 ,, 5,000 ..	1906	617	2,106,732	1,996,797	4,103,529	180,884	3,922,645
	1910	749	2,571,444	1,348,979	3,920,423	298,146	3,622,277
5,001 ,, 10,000 ..	1906	220	1,567,251	471,271	2,038,522	44,347	1,994,175
	1910	239	1,651,979	1 397,984	3,049,963	85,379	2,964,584
10,001 and upwards	1906	195	4,134,067	176,916	4,310,983	43,521	4,267,462
	1910	175	3,298,227	145,420	3,443,647	45,770	3,397,877
Total ..	1906	52,987	24,762,945	9,005,783	33,768,728	4,196,495	29,572,233
	1910	60,240	26,400,818	10,709,200	37,110,018	4,796,912	32,313,106

The most noticeable alteration between 1906 and 1910 is in holdings of over 10,000 acres. The number of these has decreased by 10 per cent. and the area occupied by 20 per cent., yet there has been a small increase in the cultivation. In the case of all other sizes exhibited above there has been an increase in number and, with one exception, in area, and the only holdings which do not show an increase in cultivation are those of from 321 to 640 acres in extent.

The following tables show the land in occupation in March, 1911, in districts, and the uses to which the land was applied :—

LAND IN OCCUPATION IN EACH DISTRICT OF VICTORIA, MARCH, 1911.

(Areas 1 acre and upwards.)

District.	Number of Occupiers.	Acres Occupied.				
		For Agricultural Purposes.	For Pasture.		Other Purposes and Unproductive.	Total.
			Sown Grasses, Clover, or Lucerne.	Natural Grasses.		
Central ...	14,984	483,854	175,970	2,081,778	29,324	2,770,926
North-Central	5,783	203,553	28,312	1,884,154	15,349	2,131,368
Western ...	10,942	471,058	188,194	6,008,602	77,396	6,745,250
Wimmera ...	5,800	1,411,662	1,388	4,391,873	98,065	5,902,988
Mallee ...	3,630	1,031,467	954	3,583,543	1,377,643	5,993,607
Northern ...	10,303	1,456,333	20,033	3,738,804	12,202	5,227,372
North-Eastern	4,934	180,608	1,883	4,012,165	132,545	4,327,201
Gippsland ...	8,275	147,712	574,461	3,339,539	572,379	4,634,091
Total ...	64,651	5,386,247	991,195	29,040,458	2,314,903	37,732,803
		PERCENTAGE OF TOTAL OCCUPIED IN EACH DISTRICT.				
Central ...	...	17·46	6·35	75·13	1·06	100·00
North-Central	...	9·55	1·33	88·40	·72	100·00
Western ...	...	6·98	2·79	89·08	1·15	100·00
Wimmera ...	...	23·92	·02	74·40	1·66	100·00
Mallee ...	...	17·21	·02	59·79	22·98	100·00
Northern ...	...	27·86	·38	71·53	·23	100·00
North-Eastern	...	4·18	·04	92·72	3·06	100·00
Gippsland ...	...	3·19	12·40	72·06	12·35	100·00
Total ...	...	14·28	2·63	76·96	6·13	100·00
		PERCENTAGE IN EACH DISTRICT OF TOTAL IN STATE.				
Central ...	23·18	8·98	17·75	7·17	1·27	7·34
North-Central	8·95	3·78	2·85	6·49	·66	5·65
Western ...	16·92	8·75	18·99	20·69	3·34	17·89
Wimmera ...	8·97	26·21	·14	15·12	4·24	15·64
Mallee ...	5·61	19·15	·10	12·34	59·51	15·88
Northern ...	15·94	27·04	2·02	12·87	·53	13·85
North-Eastern	7·63	3·35	·19	13·82	5·72	11·47
Gippsland ...	12·80	2·74	57·96	11·50	24·73	12·28
Total ...	100·00	100·00	100·00	100·09	100·00	100·00

It will be seen from these tables that in the Northern, Wimmera, and Mallee districts, the greatest area under cultivation and the greatest proportion of cultivation to land occupied are found. About 28 per cent. of the land occupied in the Northern, and about 24 per cent. of that occupied in the Wimmera district is devoted to agriculture, and these divisions supplied 53 per cent. of the cultiva-

tion in Victoria. In the Western, North-Central, and North-Eastern districts, the land occupied is largely devoted to grazing; and in Gippsland considerable attention has been given to the cultivation of grasses, 58 per cent. of all the sown grasses in the State being found in that division.

In the next table the distribution of cattle and sheep on pastoral lands in March, 1911, is given.

AREA OCCUPIED AND STOCK, 1911.

District.	Acres Occupied for—		Number of—		Stock—Equivalent of Sheep—per 100 acres used for Pasture.*
	Agriculture.	Pasture.	Cattle.	Sheep.	
Central	483,854	2,257,748	247,740	1,052,694	112
North-Central ...	203,553	1,912,466	99,923	1,044,713	86
Western	471,058	6,196,796	316,772	4,100,068	97
Wimmera ...	1,411,662	4,393,261	56,196	2,205,610	58
Mallee	1,031,467	3,584,497	49,343	679,432	27
Northern ...	1,456,333	3,758,837	213,668	2,048,886	89
North-Eastern ...	180,608	4,014,048	207,004	783,052	50
Gippsland ...	147,712	3,914,000	356,923	968,210	79
Total ...	5,386,247	30,031,653	1,547,569	12,882,665	74

* Reckoning six sheep as the equivalent of one head of cattle.

The area occupied does not include 2,314,903 acres regarded as mostly in an unproductive state, and horses grazing have not been allowed for in the stock. There has been a small decrease in the number of sheep—there having been 12,882,665 in 1911, as compared with 12,937,983 a year earlier. The decline in numbers was confined to the Western, Wimmera, and North-Eastern districts, where there were 312,980 less than in 1910; the other five districts showed an increase of 257,662 sheep. The practice among farmers of combining sheep-farming with agriculture is growing in the State with very satisfactory results. In the Mallee, the number of sheep showed an increase of 88 per cent. between 1906 and 1910, and a further increase of 7 per cent. in the year 1910-11.

Occupations of persons settled on the land—Pastoral and dairying (Census).

The occupations of persons settled on the land are collected in the census years only in full detail.

In 1891 the number of persons engaged in pastoral and dairying pursuits was 15,296, and in 1901 it was 30,920. The full particulars for the 1901 census are as follows:—

RETURN OF PERSONS ENGAGED IN PASTORAL AND DAIRYING PURSUITS, 1901.

Persons following Pastoral and Dairying Pursuits.	Employers of Labour.		In Business on their own account, but not employing labour.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Grazier, Pastoralist, Stock Breeder, and Relative Assisting ..	2,242	177	2,422	303	—	—	1,159	1,062	—	—
Station Manager, Overseer, Clerk	—	—	—	—	593	4	1	7	39	—
Stock Rider, Drover, Shearer, Shepherd, Pastoral Labourer ..	47	—	100	—	4,540	7	5	—	248	—
Dairy Farmer, and Relative Assisting	2,205	276	3,007	756	—	—	3,263	4,456	—	—
Dairy Assistant, Milker	—	—	—	—	3,194	386	—	—	32	3
Poultry Farmer	19	8	132	79	17	3	16	41	1	—
Stock and Brands Department Officer	—	—	—	—	18	—	—	—	—	—
Others, including Pig Farmers ..	3	1	10	—	34	—	2	—	2	—
Total	4,516	462	5,671	1,138	8,396	400	4,446	5,566	322	3

Total Males	23,351
Total Females	7,569
Grand Total	30,920

Occupations of persons settled on the land—Agricultural (Census).

In 1891 the number engaged in agricultural pursuits was 82,482, and in 1901 it had increased to 95,920. The following return gives particulars of persons mainly engaged in agricultural pursuits when the census of 1901 was taken:—

RETURN OF PERSONS ENGAGED IN AGRICULTURAL PURSUITS, 1901.

Persons following Agricultural Pursuits.	Employers of Labour.		In Business on their own account, but not employing labour.		Receiving Salary or Wages.		Relatives Assisting.		Not at work for more than a week prior to Census.	
	Males	Females	Males	Females	Males	Females	Males	Females	Males	Females
Farmer and Relative Assisting ..	13,267	1,099	15,096	1,693	—	—	16,361	13,238	—	—
Farm Manager, Overseer	—	—	—	—	359	6	—	—	3	—
Farm Servant, Agricultural Labourer	—	—	—	—	20,204	599	—	—	956	5
Market Gardener	859	19	1,647	32	1,518	9	576	132	22	—
Fruit Grower, Orchardist	493	44	868	91	700	43	465	172	14	—
Hop, Cotton, Tea, Coffee Grower	10	2	7	—	48	48	9	2	—	—
Tobacco Grower	10	—	25	—	24	—	1	—	—	—
Vine Grower, Vigneron	174	18	72	8	1,131	6	86	39	6	—
Sugar Planter	1	—	—	—	—	—	—	—	—	—
Horticulturist, Gardener	237	7	571	17	2,132	7	107	39	214	—
Agricultural Department Officer..	—	—	—	—	41	—	—	—	—	—
Others, Threshing Machine Owners and Workers, &c.	20	1	26	—	72	2	4	3	103	—
Total	15,071	1,190	18,312	1,841	26,229	720	17,609	13,625	1,318	5

Total Males	78,539
Total Females	17,381
Grand Total	95,920

Information is obtained by the collectors of agricultural statistics each year as to the number of persons ordinarily employed upon the land occupied. For the last eight years the numbers were as follows:—

NUMBER OF PERSONS EMPLOYED UPON FARMING, DAIRYING, AND PASTORAL HOLDINGS, 1903 TO 1910.

Year.	Males.	Females.	Total.
1903	87,322	48,561	135,883
1904	90,396	51,933	142,329
1905	91,336	50,982	142,318
1906	92,652	51,993	144,645
1907	93,981	51,905	145,886
1908	94,990	52,410	147,400
1909	96,873	52,782	149,655
1910	99,948	54,083	154,031

The number of persons ordinarily employed on any holding includes the occupier or manager, and those members of his family who actually work on it; but persons absent from their farms for the greater portion of the year following other occupations, as well as temporary hands engaged in harvesting, &c., are not included, neither are domestic servants nor cooks. It is difficult to arrive at an estimate of the extent of the temporary labour employed upon farms and pastoral holdings. Five years ago the collectors were asked to supply some information on the subject, and from the knowledge gained in this way, and particulars available from other sources it is believed that such labour may be set down as approximately equal to about 24,000 men employed continuously throughout the year.

Wages—agricultural and pastoral.

In the following return will be found particulars of the rates of wages paid (with rations) upon farms and pastoral holdings during 1910-11. The information has been furnished by the occupiers of holdings:—

WAGES, AGRICULTURAL AND PASTORAL, 1910-11.

Occupations.	Range.	Prevailing Rate.
Ploughmen	20s. to 30s. per week ..	25s. per week
Farm labourers	20s. to 30s. „ ..	20s. „
Threshing machine hands ..	7d. to 1s. per hour ..	8d. per hour
Harvest hands	5s. to 8s. per day ..	6s. per day
Milkers	15s. to 25s. per week ..	20s. per week
Maize pickers (without rations)	4d. to 6d. per bag ..	5½d. per bag
Hop pickers „ „	3d. to 4d. per bushel ..	3½d. per bushel
Married couples	25s. to 40s. per week ..	30s. per week
Female servants	8s. to 20s. „ ..	12s. „
Men cooks	20s. to 30s. „ ..	25s. „
Stockmen	£52 to £78 per annum ..	£52 per annum
Shepherds	£39 to £68 „ ..	£45 „

WAGES, AGRICULTURAL AND PASTORAL, 1910-11—*continued.*

Occupations.	Range.	Prevailing Rate.
Hut keepers	£26 to £52 per annum ..	£40 per annum
Generally useful men ..	15s. to 30s. per week ..	20s. per week
Sheep washers	20s. to 30s. ,, ..	25s. ,,
Shearers, hand*	19s. to 25s. per 100 sheep	20s. per 100 sheep
,, machine* ..	19s. to 25s. ,,	20s. ,,
Bush carpenters	25s. to 60s. per week ..	35s. per week
Gardeners, market ..	20s. to 30s. ,, ..	22s. 6d. ,,
,, orchard ..	20s. to 30s. ,, ..	22s. 6d. ,,
Vineyard hands	15s. to 25s. ,, ..	20s. ,,

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

Area under cultivation.

In the following table figures are given showing the land under cultivation in each of the five years ended March, 1907 to 1911:—

CULTIVATION OF PRINCIPAL CROPS, 1906-7 TO 1910-11.

Crop.	Year Ended March.				
	1907.	1908.	1909.	1910.	1911.
	Acres.	Acres.	Acres.	Acres.	Acres.
Wheat	2,031,893	1,847,121	1,779,905	2,097,162	2,398,089
Other Grain Crops ...	458,451	487,721	511,698	474,164	479,227
Root Crops	62,150	60,078	55,315	70,516	71,191
Hay	621,139	682,194	956,371	864,359	832,669
Green Forage ...	36,502	59,897	63,066	56,586	71,826
Vines	25,855	26,465	24,430	22,768	23,412
Orchards	54,021	54,111	54,946	56,108	57,375
Market Gardens ...	7,906	9,022	9,279	10,214	10,778
All other Crops ...	5,669	5,914	6,751	6,658	7,503
Land in Fallow ...	990,967	894,300	1,034,422	1,175,750	1,434,177
Total Cultivation	4,294,553	4,126,823	4,496,183	4,834,285	5,386,247

The area under cultivation, exclusive of permanent and artificial grasses, increased from 50 acres sown down with wheat in 1836 to 5,386,247 acres, under crops of various kinds and in fallow in 1910-11. The first returns of oats, maize, potato, and tobacco crops were obtained in 1838, of barley and rye in 1839, of hay

in 1841, of green forage and vines in 1842, of peas and beans in 1849, of mangel-wurzel, carrots, parsnips, turnips, and onions in 1855-6, of garden and orchard produce in 1856-7, and of chicory, grass and clover seeds, and hops in 1867-8. Returns of land under artificial grass were first procured in 1855-6, and since that year steady progress has been made, though the area in the last three years shows a slight decline when compared with that for 1907-8. The area of land in fallow has been increasing since 1858-9, and in recent years the increase has been very marked, the area in March, 1911, having been in excess of that for the previous year by 258,427 acres.

For the fifteen years, 1896-7 to 1910-11, the total area under cultivation, its proportion to the area of the State—56,245,760 acres—and the yearly increases or decreases, actual and centesimal, were as follows:—

AREA UNDER CULTIVATION, 1896-7 TO 1910-11.

Year ended March.	Area under Tillage (exclusive of area under Artificial Grass).		Yearly Increase (+) or Decrease (−).	
	Total.	Percentage of Area of Victoria.	Total.	Percentage.
	Acres.		Acres.	
1897 ...	2,925,416	5·20	...	...
1898 ...	3,144,574	5·59	+219,158	+7
1899 ...	3,727,765	6·63	+583,191	+19
1900 ...	3,668,556	6·52	−59,209	−2
1901 ...	3,717,002	6·61	+48,446	+1
1902 ...	3,647,459	6·48	−69,543	−2
1903 ...	3,738,873	6·65	+91,414	+3
1904 ...	4,021,590	7·15	+282,717	+8
1905 ...	4,175,614	7·42	+154,024	+4
1906 ...	4,269,877	7·59	+94,263	+2
1907 ...	4,294,553	7·64	+24,676	+0·5
1908 ...	4,126,823	7·34	−167,730	−4
1909 ...	4,496,183	8·00	+369,360	+9
1910 ...	4,834,285	8·60	+338,102	+7·5
1911 ...	5,386,247	9·58	+551,962	+11·4

The land under cultivation, including land in fallow, but excluding that under artificial grasses, was 2,925,416 in 1896-7, and 5,386,247 acres in 1910-11, there being an increase in the fifteen

years of 2,460,831 acres, or of 84 per cent. The increase has been distributed over nearly the whole period, but there are three years in which a slight reduction appears. The area of land actually under crops of various kinds in 1910-11 was 3,952,070 acres.

Agricultural production.

The following return contains a statement of the production from cultivated lands for the past three years:—

AGRICULTURAL PRODUCTION, 1908-9 TO 1910-11.

Produce.	Year ended March.		
	1909.	1910.	1911.
Wheat ... ... bushels	23,345,649	28,780,100	34,813,019
Other Grain ... ... ,,	13,516,894	10,266,650	12,277,548
Root Crops ... ... tons	196,813	225,016	225,931
Hay ... ... ,,	1,415,746	1,186,738	1,292,410
Vines ... cwt. of grapes	561,679	548,828	592,438
Green Forage ... £	157,665	141,465	179,565
Orchards ... ... £	408,597	458,557	559,380
Market Gardens ... £	231,975	255,350	269,450
Other Agricultural Produce £	298,543	289,805	220,873

The principal crops grown in the State are wheat, oats, barley, potatoes, and hay.

Wheat was first grown in Victoria in 1836, and there was a general increase in the area under cultivation up to 1899-1900, when 2,165,693 acres were harvested. After this there was a reduction, and the area remained fairly uniform until 1909-10. In the succeeding year, 1910-11, the area was 2,398,089 acres, and the yield, 34,813,019 bushels, these figures establishing a record both in regard to cultivation and production of wheat. The average yield for last season was 14.52 bushels per acre.

An estimate of the area under wheat was made on 2nd August, 1910, and an estimate of the wheat yield was made four months later, on 29th November. The following were the forecasts:—

Estimated area under wheat for grain ...	2,345,600 acres
,, ,, ,, hay ...	225,000 ,,
Total	2,570,600 acres
Estimated produce of grain	32,161,000 bushels
Average per acre	13·71 ,,

The results showed that though the estimates were understated they were fairly accurate.

The results in detail of the wheat harvest for the last three years are shown in the accompanying table:—

WHEAT YIELDS FOR THE SEASONS ENDED MARCH, 1909, TO MARCH, 1911, IN COUNTIES.

Districts and Counties.	Year ended March.								
	Area.			Produce.			Average per Acre.		
	1909.	1910.	1911.	1909.	1910.	1911.	1909.	1910.	1911.
	Acres.	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushls.	Bushls.	Bushls.
Central—									
Bourke ..	1,794	6,832	14,543	28,632	97,994	276,483	15·96	15·35	19·01
Grant ..	7,213	18,896	38,747	130,754	244,765	695,526	18·13	12·95	17·95
Mornington ..	121	470	968	2,470	7,008	11,926	20·41	14·91	12·32
Evelyn ..	108	210	426	1,445	3,510	6,089	13·38	16·71	14·29
North-Central—									
Anglesey ..	884	2,641	4,303	16,834	47,945	83,472	19·04	18·15	19·40
Dalhousie ..	2,795	7,671	9,114	48,171	112,706	128,773	17·23	14·69	14·13
Talbot ..	10,885	23,635	29,500	211,842	318,215	471,586	19·46	13·46	15·99
Western—									
Grenville ..	7,968	18,854	41,036	167,294	279,593	774,856	21·00	14·83	18·88
Polwarth ..	7	155	885	87	2,627	15,317	12·43	16·95	17·31
Heytesbury ..	21	69	49	466	1,238	1,515	22·19	17·94	30·92
Hampden ..	2,278	6,976	18,993	47,475	84,622	322,585	20·84	12·13	16·98
Ripon ..	58,471	71,033	98,443	1,291,862	1,049,417	1,571,914	22·09	14·77	15·97
Villiers ..	1,524	2,689	3,560	21,015	25,638	61,471	13·79	9·53	17·27
Normanby ..	1,105	1,959	4,664	16,036	31,311	61,007	14·51	15·98	13·22
Dundas ..	1,183	4,350	5,296	19,784	61,743	60,624	16·72	14·19	11·45
Follett ..	303	423	403	4,568	6,914	5,060	15·08	16·15	11·17
Wimmera—									
Lowan ..	157,297	174,213	180,275	1,960,605	2,223,997	1,766,688	12·46	12·77	9·80
Borung ..	300,798	332,322	336,633	5,301,253	5,668,380	5,314,410	17·62	17·06	15·79
Kara Kara ..	104,223	113,648	127,104	1,792,609	1,659,539	1,880,603	17·20	14·60	14·80
Mallee—									
Millewa ..	..	..	..	..	..	..	..	..	..
Weeah ..	31,819	33,554	46,515	382,191	391,339	582,394	12·01	11·66	12·52
Karkarooc ..	284,057	289,095	351,599	2,587,595	2,849,633	4,011,903	9·11	10·17	11·41
Tatchera ..	242,961	245,010	261,972	1,597,398	2,532,771	3,259,777	6·57	10·34	12·44
Northern—									
Gunbower ..	23,753	30,699	40,716	249,688	395,925	656,148	10·51	12·90	16·12
Gladstone ..	98,221	113,902	124,462	1,492,342	1,626,284	1,760,662	15·19	14·28	14·15
Bendigo ..	95,267	122,016	135,897	1,509,691	2,039,407	2,571,624	15·84	16·71	18·92
Rodney ..	102,558	134,514	152,827	1,628,178	2,046,596	2,326,845	15·88	15·21	15·23
Moira ..	205,913	284,651	230,409	2,218,701	4,124,932	4,718,602	10·77	14·49	16·25
North-Eastern—									
Delatite ..	7,749	13,539	18,101	160,081	177,383	296,963	20·66	13·10	16·41
Bogong ..	26,214	43,689	46,249	423,751	482,092	826,578	16·17	11·03	17·89
Benambra ..	499	1,186	1,763	8,599	21,411	34,571	17·23	18·05	19·61
Wonnangatta ..	16	40	130	156	411	2,245	9·75	10·28	17·27
Gippsland—									
Croajingolong ..	27	31	89	318	365	1,537	11·78	11·77	17·27
Tambo ..	19	178	275	431	3,476	6,540	22·68	19·53	23·80
Dargo ..	11	225	410	147	3,780	8,476	13·36	16·80	19·26
Tanjil ..	1,749	6,416	9,641	21,957	142,953	202,372	12·55	22·28	20·99
Buln Buln ..	94	816	2,189	1,223	14,180	35,871	13·01	17·38	16·39
Total ..	1,779,905	2,097,162	2,398,089	23,345,649	28,780,100	34,813,019	13·12	13·72	14·52

It will be observed that the area harvested for wheat last season was 300,927 acres more than in the previous one, and 618,184 acres more than in 1908-9. The increase last season was contributed to by

every county with only two exceptions, the largest increase being shown by the county of Karkarooc. In 1910-11 the area and the production were the highest recorded, and the average per acre was the highest since 1875-6.

The principal districts where wheat is grown are the Wimmera, comprising the counties of Lowan, Borung, and Kara Kara; the Mallee, comprising those of Weeah, Karkarooc, and Tatchera; and the Northern, comprising Gunbower, Gladstone, Bendigo, Rodney, and Moira. Of the wheat harvested in 1910-11, that in the counties enumerated was 2,048,319 acres, or 85 per cent. of the total in the State, and the produce therefrom was 28,849,656 bushels, or 83 per cent. of the total. The other districts are, however, not to be regarded as unsuitable for wheat-growing, as though they provided only a small proportion of the area and produce in 1910-11, the average yield per acre was 21 per cent. greater than that in the counties mentioned.

The following table shows the area of each of the principal wheat-growing counties, and the cultivation for the years of first and largest record, and for last year:—

WHEAT-GROWING COUNTIES: AREA AND PRODUCTION.

District and County.	Area of County.	First Cultivation Recorded.			Largest Cultivation Recorded.			Cultivation for 1910-11.	
		Year.	Area.	Average Yield per Acre.	Year.	Area.	Average Yield per Acre.	Area.	Average Yield per Acre.
	Acres.		Acres.	Bushels		Acres.	Bushels.	Acres.	Bushels.
Western Dist.—									
Ripon ..	1,125,760	1855-6	40	35·62	1910-11	98,446	15·97	98,446	15·97
Wimmera Dist.—									
Lowan ..	3,181,440	1871-2	232	16·69	1892-3	257,685	8·58	180,275	9·80
Borung ..	2,740,480	1871-2	4,590	15·59	1903-4	424,224	13·67	336,633	15·79
Kara Kara ..	1,472,640	1871-2	7,987	14·34	1910-11	127,104	14·80	127,104	14·80
Mallee Dist.—									
Weeah ..	2,562,560	1891-2	40	21·00	1910-11	46,515	12·52	46,515	12·52
Karkarooc ..	3,797,120	1879-80	233	10·87	1902-3	371,069	·22	351,509	11·41
Tatchera ..	2,138,240	1871-2	2	12·00	1904-5	342,022	3·35	261,972	12·44
Northern Dist.—									
Gunbower ..	862,720	1871-2	181	13·36	1880-1	75,114	9·29	40,716	16·12
Gladstone ..	1,153,280	1869-70	7,988	17·46	1910-11	124,462	14·15	124,462	14·15
Bendigo ..	1,247,360	1869-70	21,038	16·26	1910-11	135,897	18·92	135,897	18·92
Rodney ..	1,087,360	1855-6	63	26·66	1910-11	152,827	15·23	152,827	15·23
Moira ..	1,986,560	1871-2	14,936	15·93	1904-5	328,811	10·87	290,409	16·25

In the next table the average yield of wheat per acre in each of these counties during the last ten years is given :—

AVERAGE YIELD OF WHEAT PER ACRE IN WHEAT-GROWING COUNTIES, 1901-2 TO 1910-11.

District and County.	Average Yield of Wheat per Acre (in Bushels) during Year ended March.									
	1902.	1903.	1904.	1905.	1906.	1907.	1908.	1909.	1910.	1911.
Western District—										
Ripon	18·13	9·60	15·32	16·57	16·59	14·96	15·05	22·09	14·77	15·97
Wimmera District—										
Lowan ..	8·53	3·21	13·47	11·32	12·43	10·72	9·99	12·46	12·77	9·80
Borung ..	7·22	·47	13·67	11·03	13·61	14·02	9·84	17·62	17·06	15·79
Kara Kara ..	10·19	1·38	15·97	12·50	14·59	14·64	10·04	17·20	14·60	14·80
Mallee District—										
Weeah ..	5·65	·46	12·39	7·24	7·54	9·21	6·23	12·01	11·66	12·52
Karkarooc ..	3·77	·22	10·76	3·30	5·77	8·15	2·51	9·11	10·17	11·41
Tatchera ..	3·22	·10	11·99	3·35	5·33	9·00	1·02	6·57	10·34	12·44
Northern District—										
Gunbower ..	3·93	·27	14·54	8·77	10·70	10·58	3·67	10·51	12·90	16·12
Gladstone ..	8·49	1·25	16·68	12·36	13·45	14·43	7·64	15·19	14·28	14·15
Bendigo ..	8·35	1·40	18·54	13·44	15·13	14·54	6·29	15·84	16·71	18·92
Rodney ..	10·82	4·37	17·40	12·40	15·37	10·38	7·32	15·88	15·21	15·23
Moira	9·27	1·15	17·18	10·87	12·71	8·99	5·61	10·77	14·49	16·25

The following table shows the area of each county, and the rise and fall in the cultivation of wheat in the Central and North-Central districts :—

WHEAT CULTIVATION IN CENTRAL AND NORTH-CENTRAL DISTRICTS.

District and County.	Area of County.	First Cultivation Recorded.		
		Year.	Area.	Average Yield per Acre.
	Acres.		Acres.	Bushels.
Central District—				
Bourke	1,101,440	1855-6	13,606	25·03
Grant	1,173,760	1855-6	12,072	25·65
Mornington	1,040,000	1855-6	943	29·57
Evelyn	750,080	1855-6	1,124	31·43
North-Central District—				
Anglesey	1,054,080	1855-6	129	28·77
Dalhousie	838,400	1855-6	3,113	26·67
Talbot	1,037,440	1855-6	445	33·68

District and County.	Largest Cultivation Recorded.			Cultivation in 1909-10.		Cultivation in 1910-11.	
	Year.	Area.	Average Yield per Acre.	Area.	Average Yield per Acre.	Area.	Average Yield per Acre.
		Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Central District—							
Bourke	1861-2	30,268	17·12	6,382	15·35	14,543	19·01
Grant	1910-11	38,747	17·95	18,896	12·95	38,747	17·95
Mornington	1860-1	3,153	14·03	470	14·91	968	12·32
Evelyn	1859-60	1,789	15·43	210	16·71	426	14·29
North-Central District—							
Anglesey	1910-11	4,303	19·40	2,641	18·15	4,303	19·40
Dalhousie	1869-70	25,124	21·47	7,671	14·69	9,114	14·13
Talbot	1871-2	76,555	13·81	23,685	13·46	29,500	15·99

In the succeeding table is shown the area under wheat, the produce, and the average yield per acre, during each of the last fifteen years :—

WHEAT RETURN, 1896-7 TO 1910-11.

Year ended March.	Area under Crop.	Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1897	1,580,613	7,091,029	4·49
1898	1,657,450	10,580,217	6·38
1899	2,154,163	19,581,304	9·09
1900	2,165,693	15,237,948	7·04
1901	2,017,321	17,847,321	8·85
1902	1,754,417	12,127,382	6·91
1903	1,994,271	2,569,364	1·29
1904	1,968,599	28,525,579	14·49
1905	2,277,537	21,092,139	9·26
1906	2,070,517	23,417,670	11·31
1907	2,031,893	22,618,043	11·13
1908	1,847,121	12,100,780	6·55
1909	1,779,905	23,345,649	13·12
1910	2,097,162	28,780,100	13·72
1911	2,398,089	34,813,019	14·52

In 1902-3 wheat was grown on about 17,100 holdings, in 1903-4 on 17,400 holdings, in 1904-5 on 18,000 holdings, in 1905-6 on 18,362 holdings, in 1906-7 on 18,077 holdings, in 1907-8 on 16,303 holdings, in 1908-9 on 16,968 holdings, in 1909-10 on 18,593 holdings, and in 1910-11 on 21,221 holdings. The decline in the yield and in the average per acre, which is observed in the two years prior to 1903-4, was due to the severity of the seasons experienced all over the wheat-growing districts of the State. The yield in 1905-6 was 23,417,670 bushels, and that in 1906-7, 22,618,043 bushels; in 1907-8, as the result of an adverse season, it again fell to the level of that in 1901-2, but in 1908-9 it reached 23,345,649 bushels, and in 1909-10, 28,780,100 bushels. This quantity was greater than that for any previous year, but it was exceeded in 1910-11, when 34,813,019 bushels were produced. In addition to 2,398,089 acres harvested for grain, there were 240,026 acres of wheat cut for hay in 1910-11, so that the total area sown with wheat in that year was 2,638,115 acres. From information received from growers, it is estimated that the corresponding area for the season 1911-12 is 2,571,000 acres, or 67,000 acres less than in 1910-11, the reduced acreage being most noticeable in the counties of Ripon, Rodney, Tatchera, and Karkarooc. The standard weight of wheat is reckoned to be 60 lbs. to the bushel; but the actual weight of a bushel of Victorian wheat, according to the standard fixed by the Chamber of Commerce, was 62½ lbs. in 1899-1900, 1900-1, and 1901-2; 61 lbs. in 1902-3; 60½ lbs. in 1903-4; 61½ lbs. in 1904-5; 63 lbs. in 1905-6; 62¾ lbs. in 1906-7; and 62½ lbs. in 1907-8, 1908-9, 1909-10, and 1910-11.

Population and breadstuffs.

The following table shows, for 1898 and each subsequent year to 1906, the mean population of Victoria; the stocks of old wheat and flour on hand at the beginning of each year; the quantity of wheat grown; the quantity (after deducting imports) of wheat, flour, and biscuit exported; and the breadstuffs left over and available for home consumption. In addition to that required for food consumption, a quantity is used for seed purposes, equal, on an average, to three-quarters of a bushel per acre. The particulars given in the table cannot be brought up to date, as information in regard to imports from and exports to other States is not now available:—

POPULATION AND WHEAT RETURNS, 1898 TO 1906.

Year.	Mean Population.	Stocks of old Wheat and Flour on hand (1st January).	Wheat Harvested for Season ended March in each Year.	Wheat, Flour, and Biscuit.	
				Exported after deducting Imports.	Available for Home Consumption.
		Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	1,172,950	330,224	10,580,217	1,855,951	9,054,490
1899 ...	1,186,265	1,282,902	19,581,304	10,662,011	10,202,195
1900 ...	1,193,338	2,121,700	15,237,948	7,011,242	10,348,406
1901 ...	1,202,960	1,872,000	17,847,321	10,248,093	9,471,228
1902 ...	1,207,110	1,525,288	12,127,382	3,899,246	9,753,424
1903 ...	1,208,880	903,616	2,569,364	−4,495,403*	7,968,383
1904 ...	1,207,537	173,708	28,525,579	18,616,831	10,082,456
1905 ...	1,212,517	2,609,878	21,092,139	15,427,229	8,274,788
1906 ...	1,227,072	549,930	23,417,670	17,053,652	6,913,948

* Net import.

Disposal of breadstuffs.

The manner in which the breadstuffs available for home consumption were disposed of in each of the eight years ended with 1905 was as follows:—

DISPOSAL OF BREADSTUFFS, 1898 TO 1905.

Year.	Wheat and Flour.				
	Quantity available for Home Consumption.	How disposed of—			
		Stocks on hand on 31st December.	Required for Seed.	Used for Food, &c.	
				Total.	Per Head.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1898 ...	9,054,490	1,282,902	1,770,941	6,000,647	5·12
1899 ...	10,202,195	2,121,700	1,772,602	6,307,893	5·32
1900 ...	10,348,406	1,872,000	1,696,000	6,780,406	5·68
1901 ...	9,471,228	1,525,288	1,529,249	6,416,691	5·33
1902 ...	9,753,424	903,616	1,616,946	7,232,862	5·99
1903 ...	7,968,383	173,708	1,626,954	6,167,721	5·10
1904 ...	10,082,456	2,609,878	1,807,351	5,665,227	4·69
1905 ...	8,274,788	549,930	1,705,182	6,019,676	4·96

With the exception of 1896 and 1903, the breadstuffs produced in the thirty-four years ended with 1911 have been more than enough to supply home consumption. Wheat has therefore been exported each year, with these two exceptions.

Stocks of wheat and flour.

No information is obtainable as to the wheat imported from or exported to other States, and this makes it difficult to account for the disposal of that harvested in 1910-11. It is estimated, however, that about 8,500,000 bushels are required locally for food and seed, which will leave over 26,000,000 bushels of Victorian wheat for export during the year. Information as to the stocks of wheat and flour on hand on 30th June, 1911, has been received from holders, and is as follows:—

WHEAT AND FLOUR ON HAND, 30TH JUNE, 1911.

Where Located.	Quantity in Bushels.		
	Wheat.	Flour (equivalent in Wheat).	Total.
Railway Stations and in transit ...	364,500	25,400	389,900
Sites leased from Railways	7,746,400	17,800	7,764,200
Mills and Stores (other than on Railways)	4,250,700	703,200	4,953,900
Farms	3,027,000	...	3,027,000
Total	15,388,600	746,400	16,135,000

Wheat production of world.

The wheat crop of the world, according to the latest statement of the United States Agricultural Department, except in the case of Australasia, is shown below for the last three years:—

WHEAT PRODUCTION OF THE WORLD, 1908 TO 1910.

Continent.	1908.	1909.	1910.
	Bushels.	Bushels.	Bushels.
Australasia	50,223,000	71,364,000	99,075,000
Europe	1,673,368,000	1,960,470,000	1,952,531,000
Asia	381,608,000	432,963,000	508,152,000
Africa	60,577,000	69,199,000	72,886,000
America, North ...	787,036,000	913,933,000	855,433,000
,, South ...	218,886,000	182,500,000	159,753,000
Total	3,171,698,000	3,630,429,000	3,647,830,000

Oats.

In 1910-11 the area harvested for oats in Victoria was 392,681 acres, from which a yield of 9,699,127 bushels, or the third highest on record, was obtained, giving an average of 24.70 bushels to the

acre. The following return shows the harvest results for this crop for the last fifteen years:—

OATS GROWN, 1896-7 TO 1910-11.

Year ended March.	Area under Crop.	Produce.	Average per Acre.
	Acres.	Bushels.	Bushels.
1897	419,460	6,816,951	16·25
1898	294,183	4,809,479	16·35
1899	266,159	5,523,419	20·75
1900	271,280	6,116,046	22·55
1901	362,689	9,582,332	26·42
1902	329,150	6,724,900	20·43
1903	433,489	4,402,982	10·16
1904	433,638	13,434,952	30·98
1905	344,019	6,203,429	18·03
1906	312,052	7,232,425	23·18
1907	380,493	8,845,654	23·25
1908	398,749	5,201,408	13·04
1909	419,869	11,124,940	26·50
1910	384,226	7,913,423	20·60
1911	392,681	9,699,127	24·70

In addition to the area shown for last season, there were 575,791 acres of oats cut for hay, so that the total area sown with oats in 1910-11 was 968,472 acres. In August, 1911, it was estimated that the area under this grain for 1911-12 was 906,700 acres, or a decrease of 61,772 acres as compared with the year 1910-11. Imports into Victoria from oversea countries during 1910 included 11,380 bushels of oats, as well as 24,472 lbs. of oatmeal, whilst in the same year there were exported from Victoria to these countries 94,050 bushels of oats and 643,990 lbs. of oatmeal.

Barley.

The area under barley in 1910-11 was 52,687 acres, of which 30,609 were under malting, and 22,078 under other barley. There is a remarkable fluctuation in the area of land sown with barley, which seems strange, seeing that the market for this product is uniformly good. The following table shows the returns for the last fifteen years. It will be noticed that the average per acre in

1905-6, though very little higher than that in 1910-11, is the best for the period covered by the table:—

CULTIVATION OF BARLEY, 1896-7 TO 1910-11.

Year ended March.	Area under Crop.		Produce.		Average per Acre.		
	Malting.	Other.	Malting.	Other.	Malting.	Other.	Total.
	Acres.	Acres.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels
1897	53,421	8,952	641,406	174,199	12·01	19·45	13 08
1898	26,118	11,087	502,411	256,043	19·24	23·09	20·39
1899	33,584	14,275	776,785	335,782	23·13	23·52	23·25
1900	65,970	13,603	1,197,948	268,140	18·16	19·71	18·42
1901	49,723	9,130	1,003,477	212,001	20·18	23·22	20·65
1902	25,480	6,943	527,564	166,287	20·71	23·95	21·40
1903	26,436	11,280	394,877	166,267	14·94	14·74	14·88
1904	33,586	14,174	878,721	339,282	26·17	23·80	25·50
1905	30,799	15,290	575,505	298,594	18·69	19·53	18·97
1906	26,279	14,659	645,456	416,683	24·56	28·43	25·95
1907	30,052	22,764	674,043	581,399	22·43	25·54	23·77
1908	41,940	21,134	747,315	311,980	17·82	14·76	16·79
1909	42,882	21,766	1,013,384	497,797	23·63	22·87	23·38
1910	38,762	19,841	658,105	365,279	16·98	18·41	17·46
1911	30,609	22,078	804,893	535,494	26·30	24·25	25·44

During 1910, 888,133 bushels of barley were used locally in the production of 860,812 bushels of malt.

Potatoes.

The greatest area of land planted with potatoes was 62,904 acres last season; the next being 62,390 acres in the previous season. The highest yield was 204,155 tons in 1890-1, the next, 200,523 tons in 1891-2. The yield in 1910-11 was 163,312 tons, or 2 tons 12 cwt. per acre. The following table shows the potato returns for the last fifteen years:—

POTATOES GROWN, 1896-7 TO 1910-11.

Year ended June.	Area under Crop.	Produce.	Average per Acre.
	Acres.	Tons.	Tons.
1897	43,532	146,555	3·37
1898	44,197	67,296	1·52
1899	41,252	161,142	3·91
1900	55,469	173,381	3·13
1901	38,477	123,126	3·20
1902	40,058	125,474	3·13
1903	49,706	168,759	3·40
1904	48,930	167,736	3·43
1905	46,912	92,872	1·98
1906	44,670	115,352	2·58
1907	55,372	166,839	3·01
1908	54,149	135,110	2·50
1909	47,903	152,840	3·19
1910	62,390	174,970	2·80
1911	62,904	163,312	2·60

Trade in potatoes is mainly confined to that with the Australian States, as in 1908, of 10,465 tons imported, all but 1 per cent. were received from Tasmania; while of 21,130 tons exported, 8,954 were sent to New South Wales, 5,009 to Queensland, 3,981 to Western Australia, and 3,010 to South Australia. In 1909, the import section of this trade was interrupted on account of the prevalence of "Irish Blight" in the potato crops of Tasmania, in consequence of which restrictions were placed upon the transfer of potatoes from affected areas. During that year the imports into Victoria amounted to only 2,557 tons, of which all but 76 tons were received from Tasmania; but the exports reached 25,642 tons, the principal consignments being 8,367 tons to South Australia, 7,157 tons to New South Wales, 5,451 tons to Western Australia, and 4,117 tons to Queensland. Later information cannot be supplied, as the practice of keeping records of trade between States has been discontinued by the Commonwealth Government.

Hay.

Statistics of the hay crop were collected as far back as 1841, when 450 acres returned 900 tons. The greatest area sown, and the maximum production since that date were in 1908, when 956,371 acres were cut for 1,415,746 tons; the next highest record in production was in 1910, when 1,292,410 tons were produced. The quantity of straw returned for the season 1910-11 was 158,834 tons. The following is a return of the hay crop for each of the last fifteen years:—

HAY RETURNS, 1896 TO 1910.

Year.	Area under Crop.	Produce.	Average per Acre.
	Acres.	Tons.	Tons.
1896	416,667	449,056	1·08
1897	580,000	659,635	1·14
1898	565,345	723,299	1·28
1899	450,189	596,193	1·32
1900	502,105	677,757	1·35
1901	659,239	884,369	1·34
1902	580,884	601,272	1·04
1903	733,353	1,233,063	1·68
1904	452,459	514,316	1·14
1905	591,771	864,177	1·46
1906	621,139	881,276	1·42
1907	682,194	682,370	1·00
1908	956,371	1,415,746	1·48
1909	864,359	1,186,738	1·37
1910	832,669	1,292,410	1·55

Hay making is largely confined to oaten crops, as of the total hay produced last season there were 929,781 tons of oaten hay, equal to 1.61 tons per acre harvested, 333,711 tons of wheaten hay, or 1.39 tons per acre, and 28,918 tons of hay made from lucerne and other crops, equal to 1.72 tons per acre. The average return per acre for all classes of hay last season has been exceeded only once since 1870.

The five principal crops.

The area under the five principal crops during each of the last eleven years, the production of these crops, and the proportion of each to the population, are exhibited in the following table. It is interesting to observe the variations per head of the population in the areas under crop, and in the yields during the period covered by the table:—

AREA, PRODUCTION, AND AVERAGES PER HEAD OF POPULATION OF FIVE PRINCIPAL CROPS, 1900-1 TO 1910-11.

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	AREA.				
	Acres.	Acres.	Acres.	Acres.	Acres.
1901 ..	2,017,321	362,689	58,853	38,477	502,105
1902 ..	1,754,417	329,150	32,423	40,058	659,239
1903 ..	1,994,271	433,489	37,716	49,706	580,884
1904 ..	1,968,599	433,638	47,760	48,930	733,353
1905 ..	2,277,537	344,019	46,089	46,912	452,459
1906 ..	2,070,517	312,052	40,938	44,670	591,771
1907 ..	2,031,893	380,493	52,816	55,372	621,135
1908 ..	1,847,121	398,749	63,074	54,149	682,194
1909 ..	1,779,905	419,869	64,648	47,903	956,371
1910 ..	2,097,162	384,226	58,603	62,390	864,359
1911 ..	2,398,089	392,681	52,687	62,904	832,669
	PRODUCTION.				
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1901 ..	17,847,321	9,582,332	1,215,478	123,126	677,757
1902 ..	12,127,382	6,724,900	693,851	125,474	884,369
1903 ..	2,569,364	4,402,982	561,144	168,759	601,272
1904 ..	28,525,579	13,434,952	1,218,003	167,736	1,233,063
1905 ..	21,092,139	6,203,429	874,099	92,872	514,316
1906 ..	23,417,670	7,232,425	1,062,139	115,352	864,177
1907 ..	22,618,043	8,845,654	1,255,442	166,839	881,276
1908 ..	12,100,780	5,201,408	1,059,295	135,110	682,370
1909 ..	23,345,649	11,124,940	1,511,181	152,840	1,415,746
1910 ..	28,780,100	7,913,423	1,023,384	174,970	1,186,738
1911 ..	34,813,019	9,699,127	1,340,387	163,312	1,292,410
	AREA PER HEAD OF POPULATION.				
	Acres.	Acres.	Acres.	Acres.	Acres.
1901 ..	1·69	·30	·05	·03	·42
1902 ..	1·45	·27	·03	·03	·54
1903 ..	1·65	·36	·03	·04	·48
1904 ..	1·62	·36	·04	·04	·61
1905 ..	1·88	·28	·04	·04	·37
1906 ..	1·70	·26	·03	·04	·49
1907 ..	1·66	·31	·04	·04	·51
1908 ..	1·47	·32	·05	·04	·54
1909 ..	1·40	·33	·05	·04	·75
1910 ..	1·63	·30	·05	·05	·67
1911 ..	1·83	·30	·04	·05	·64

AREA, PRODUCTION, AND AVERAGES PER HEAD OF POPULATION OF FIVE PRINCIPAL CROPS, 1900-1 TO 1910-11—*continued.*

Year ended March.	Wheat.	Oats.	Barley.	Potatoes.	Hay.
	PRODUCTION PER HEAD OF POPULATION.				
	Bushels.	Bushels.	Bushels.	Tons.	Tons.
1901 ..	14·91	8·00	1·02	·10	·57
1902 ..	10·01	5·56	·57	·10	·73
1903 ..	2·12	3·63	·46	·14	·50
1904 ..	23·60	11·11	1·01	·14	1·02
1905 ..	17·47	5·14	·72	·08	·42
1906 ..	19·22	5·94	·87	·10	·71
1907 ..	18·43	7·21	1·02	·14	·72
1908 ..	9·62	4·13	·84	·11	·54
1909 ..	18·33	8·74	1·19	·12	1·11
1910 ..	22·42	6·16	·80	·14	·92
1911 ..	26·63	7·42	1·03	·13	·99

The next table compares last season's yields of the principal crops with those of the three previous seasons, and the averages of the ten years ended in March, 1907.

AVERAGE YIELD PER ACRE OF PRINCIPAL CROPS, 1897-8 TO 1906-7, 1907-8, 1908-9, 1909-10, AND 1910-11.

Crop.	Yield per Acre.				
	Average of Ten Years, 1897-8 to 1906-7.	1907-8.	1908-9.	1909-10.	1910-11.
Wheat ... bushels	8·64	6·55	13·12	13·72	14·52
Oats ... ... ,,	21·26	13·04	26·50	20·60	24·70
Barley—Malting ,,	20·62	17·82	23·63	16·98	26·30
,, Other... ,,	23·16	14·76	22·87	18·41	24·25
,, Total ... ,,	21·32	16·79	23·38	17·46	25·44
Potatoes ... tons	2·93	2·50	3·19	2·80	2·60
Hay—Wheaten ,,	1·16	·82	1·32	1·33	1·39
,, Oaten, &c. ,,	1·42	1·08	1·55	1·38	1·61
,, Total ... ,,	1·33	1·00	1·48	1·37	1·55

The substantial improvement in the average yield of wheat is to a great extent due to improved methods of cultivation, whilst the reduction in that of potatoes is due to interference by blight in some districts. The average yields of other leading crops last year were not exceeded in the previous periods mentioned in the table except in the case of the oat crop for 1908-9.

The percentage of total area under the principal crops in each district during last season was as follows:—

PERCENTAGE OF AREA IN EACH DISTRICT TO TOTAL AREA UNDER EACH OF THE PRINCIPAL CROPS, 1910-11.

District.	Percentage in each District of Area under—						
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.	Fallow.
Central	2·28	15·21	49·67	39·57	24·12	34·84	3·02
North-Central	1·79	10·52	9·01	20·74	8·45	3·69	1·63
Western	7·23	11·84	16·10	22·67	13·98	7·92	6·64
Wimmera	26·86	19·83	·95	·84	16·05	2·44	38·34
Mallee	27·52	9·53	3·90	·02	7·55	6·52	17·79
Northern	31·04	21·10	10·11	·15	18·17	13·20	30·98
North-Eastern	2·76	7·37	1·58	4·14	5·22	9·10	1·34
Gippsland	·52	4·60	8·68	11·87	6·46	22·29	·26

NOTE.—For counties contained in each district, see table on page 653.

This statement shows that during last season 85 per cent. of the area under wheat was in the Wimmera, Mallee, and Northern districts; over two-fifths of that under oats was in the Wimmera and Northern districts; half of that under barley was in the Central district; and 83 per cent. of that under potatoes was in the Central, North-Central, and Western districts. Hay was more uniformly cultivated over the whole State, though the proportion was somewhat small in the North-Central, Mallee, North-Eastern, and Gippsland districts. The Central district accounted for more than one-third of the area under minor crops, principally through a much larger area being used for gardens and orchards and for peas and beans than in other portions of the State. Naturally, the fallow land is confined to the wheat-growing districts.

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

PERCENTAGE OF AREA UNDER PRINCIPAL CROPS TO TOTAL CULTIVATION IN EACH DISTRICT, 1910-11.

District.	Percentage of Total Cultivation under—						
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.	Fallow.
Central	11·30	12·34	5·41	5·15	41·50	15·34	8·96
North-Central	21·08	20·30	2·33	6·41	34·56	3·86	11·46
Western	36·80	9·87	1·80	3·03	24·71	3·58	20·21
Wimmera	45·62	5·52	·04	·04	9·46	·37	38·95
Mallee	63·98	3·63	·20	..	6·10	1·35	24·74
Northern	51·11	5·69	·37	·01	10·38	1·93	30·51
North-Eastern	36·66	16·03	·46	1·44	24·07	10·73	10·61
Gippsland	8·55	12·22	3·10	5·05	36·42	32·14	2·52
Total of Victoria ..	44·52	7·29	·98	1·17	15·46	3·95	26·63

NOTE.—For counties contained in each district, see table on page 653.

It is apparent that the area cultivated was mainly confined to wheat in the Wimmera, Mallee, and Northern districts; largely to wheat and hay in the Western and North-Eastern districts; to wheat, oats, and hay in the North-Central district; and to hay and minor crops in the Central and Gippsland districts.

In Victoria the proportion of the land under each crop to the total area under tillage during each of the last thirteen years was as stated hereunder :—

PROPORTION TO TOTAL CULTIVATION OF LAND UNDER EACH CROP, 1898-9 TO 1910-11.

Year ended March—	Proportionate Area to Total Cultivated Land of— (Exclusive of Area under Artificial Grass.)						
	Wheat.	Oats.	Barley.	Potatoes.	Hay.	Other Crops.	Fallow.
	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.	Per cent.
1899	57·78	7·14	1·28	1·11	15·17	3·64	13·88
1900	59·04	7·39	2·17	1·51	12·27	3·74	13·88
1901	54·28	9·76	1·58	1·03	13·51	3·62	16·22
1902	48·09	9·02	·89	1·10	18·08	4·13	18·69
1903	53·34	11·59	1·01	1·33	15·54	4·02	13·17
1904	48·95	10·78	1·19	1·22	18·24	3·90	15·72
1905	54·54	8·24	1·10	1·12	10·84	3·71	20·45
1906	48·49	7·30	·96	1·05	13·86	3·75	24·59
1907	47·31	8·86	1·23	1·29	14·46	3·77	23·08
1908	44·76	9·66	1·53	1·31	16·53	4·54	21·67
1909	39·59	9·34	1·44	1·06	21·27	4·29	23·01
1910	43·38	7·95	1·21	1·29	17·88	3·97	24·32
1911	44·52	7·29	·98	1·17	15·46	3·95	26·63

It is shown on page 651 that during the period covered by this table, the area under cultivation has steadily increased. By the figures in the table above it would seem that the actual area under wheat has not made anything like a corresponding increase. If, however, it be taken in conjunction with land in fallow which is mainly used for wheat cropping, it will be observed that in proportion to the total area under cultivation, that used for wheat has been fairly uniform in the last thirteen years, but that in the later years the practice to fallow preparatory to sowing has grown considerably.

Prices of agricultural produce.

The following information regarding prices in February and March, except that relating to potatoes, has been procured direct from the growers. The table gives the average price for each of the last thirteen years :—

PRICES OF PRODUCE, 1899 TO 1911.

Year.	Average Price in February and March.					
	Wheat.	Oats	Barley.		Hay.	Potatoes.
			Malting.	Other.		Early Crop.	Main Crop (after March).
	Per bushel.	Per bushel.	Per bushel.	Per bushel.	Per ton.	Per ton.	Per ton.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
1899	2 2	1 7¾	4 2½	2 2¼	34 5	73 0	36 5
1900	2 5	2 1	3 2½	2 3½	40 9	41 11	26 11
1901	2 5¾	1 6½	2 10¾	1 11¼	39 4	73 11	55 10
1902	2 10¼	2 4	3 9¼	2 9¼	55 5	77 7	84 4
1903	6 0	3 2¾	4 5¾	3 8	100 1	91 3	47 1
1904	2 8	1 1½	2 10½	1 9½	27 2	52 6	26 1
1905	2 11½	1 6	3 2½	2 1	33 6	110 0	84 0
1906	2 10½	1 10½	3 11	2 8½	38 0	115 6	101 5
1907	2 9	1 10¼	4 2	2 2¾	38 2	59 1	37 6
1908	4 0½	3 0½	4 11½	3 7	88 7	70 4	54 11
1909	3 9¼	1 9¼	3 9¾	2 5	46 0	80 0	51 0
1910	3 9¾	1 11½	3 8¼	2 4¾	41 0	78 0	57 0
1911	3 2	1 10½	4 3½	2 0½	38 0	82 0	63 0

In Melbourne the price of wheat throughout last year was fairly good, ranging from 3s. 2½d. to 4s. 3¾d. per bushel. The latter rate was quoted in the month of January; but after that month the price declined, and in June it was as low as 3s. 2½d. It improved to 4s. 1½d. in August, but again declined, and it was down to 3s. 7½d. in November and December. The highest and lowest prices in Melbourne during each month in 1910 were as follows :—

PRICES OF WHEAT IN MELBOURNE, 1910.

Month.	Price per Bushel.	
	Highest.	Lowest.
	s. d.	s. d.
January	4 3¾	4 1
February	4 2½	4 0½
March	4 1½	4 0
April	4 2½	3 11
May	3 10½	3 4½
June	3 6	3 2½
July	4 1	3 6
August	4 1½	3 10½
September	4 1	3 11
October	3 10½	3 8
November	3 9½	3 7½
December	3 9	3 7½

The following return shows the yield of the principal crops in the various Australian States and New Zealand for each of the nine years ended March, 1911 :— Yield of crops in Australasia.

YIELD OF PRINCIPAL CROPS IN AUSTRALASIA, 1902-3 TO 1910-11.

Year ended March.	Victoria.	New South Wales.	Queensland.	South Australia.	Western Australia.	Tasmania.	New Zealand.
WHEAT.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1903 ...	2,569,364	1,585,097	6,165	6,354,912	970,571	876,971	7,457,915
1904 ...	28,525,579	27,334,141	2,436,799	13,209,465	1,855,460	767,398	7,891,654
1905 ...	21,092,139	16,464,415	2,149,663	12,023,172	2,013,237	792,956	9,123,673
1906 ...	23,417,670	20,737,200	1,137,321	20,143,798	2,308,305	776,478	6,798,934
1907 ...	22,618,043	21,817,938	1,108,902	17,466,501	2,758,567	651,408	5,605,252
1908 ...	12,100,780	9,155,884	693,527	19,135,557	2,925,690	644,235	5,567,139
1909 ...	23,345,649	15,483,276	1,202,799	19,397,672	2,460,823	700,777	8,772,799
1910 ...	28,780,100	28,532,029	1,571,589	25,133,851	5,602,368	793,660	8,661,100
1911 ...	34,813,019	27,913,547	1,022,373	24,344,740	5,897,540	1,120,744	8,273,926
OATS.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1903 ...	4,402,982	351,758	520	620,823	161,714	1,752,745	21,766,708
1904 ...	13,434,952	1,252,156	70,713	902,936	255,300	1,621,950	15,107,237
1905 ...	6,203,429	652,646	15,137	555,696	226,318	1,178,819	14,553,611
1906 ...	7,232,425	883,081	5,858	869,146	283,987	1,200,024	12,707,982
1907 ...	8,845,654	1,404,574	28,884	896,166	457,155	1,979,574	11,201,789
1908 ...	5,201,408	851,776	9,900	874,388	721,753	1,526,002	15,021,861
1909 ...	11,124,940	1,119,558	38,811	1,280,235	739,303	1,946,010	18,906,788
1910 ...	7,913,423	1,966,586	50,018	1,209,131	1,248,162	2,347,548	13,804,000
1911 ...	9,699,127	1,702,706	50,469	1,136,618	776,233	2,063,303	10,093,564
BARLEY.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1903 ...	561,144	18,233	3,595	317,155	45,778	201,133	1,136,232
1904 ...	1,218,003	174,147	510,557	487,920	51,487	212,459	1,160,504
1905 ...	874,099	266,781	331,772	346,718	37,332	163,194	1,128,164
1906 ...	1,062,139	111,266	61,816	505,916	49,497	93,664	1,024,045
1907 ...	1,255,442	152,739	158,283	491,246	48,827	141,895	1,035,346
1908 ...	1,059,295	75,148	64,881	566,937	76,205	149,186	1,163,406
1909 ...	1,511,181	166,538	137,667	825,740	74,433	158,645	1,938,452
1910 ...	1,023,384	272,663	193,586	691,424	101,673	153,654	1,304,000
1911 ...	1,340,387	82,005	83,621	544,471	33,566	142,318	920,536
POTATOES.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1903 ...	168,759	30,732	3,257	28,312	6,200	163,518	193,267
1904 ...	167,736	56,743	17,649	31,415	4,315	168,419	208,787
1905 ...	92,872	48,754	19,231	19,521	5,614	110,547	134,608
1906 ...	115,352	49,889	11,308	20,328	6,297	64,606	123,402
1907 ...	166,839	114,856	15,830	22,277	5,028	182,323	169,875
1908 ...	135,110	55,882	13,177	20,263	5,671	145,483	142,999
1909 ...	152,840	71,794	11,550	21,588	6,695	121,605	195,206
1910 ...	174,970	100,143	13,544	18,569	5,948	73,862	180,500
1911 ...	163,312	121,033	15,632	23,920	5,864	70,090	138,025
HAY.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.	Tons.
1903 ...	601,272	243,289	23,181	308,825	91,593	89,210	138,684*
1904 ...	1,233,063	816,810	136,117	479,723	119,156	115,513	154,334*
1905 ...	514,316	366,293	80,662	294,252	113,794	73,457	157,632*
1906 ...	864,177	459,182	56,829	435,546	139,380	90,077	161,498*
1907 ...	881,276	621,846	94,343	398,866	158,112	104,797	140,402*
1908 ...	682,370	376,800	77,601	376,170	137,511	98,406	160,870*
1909 ...	1,415,746	730,014	92,947	591,141	170,008	137,518	173,134*
1910 ...	1,186,738	981,201	96,854	574,475	195,182	118,746	†
1911 ...	1,292,410	843,044	151,252	595,064	178,891	115,190	†

* Estimated. † No Information.

Other crops. The area under other than principal crops and the production since March, 1905, are shown in the subjoined table:—

OTHER THAN PRINCIPAL CROPS, 1905-6 TO 1910-11.

Crop.	1905–6.		1906–7.		1907–8.	
	Area.	Production.	Area.	Production.	Area.	Production.
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Maize	11,785	641,216	11,559	704,961	10,844	508,761
Rye	1,959	28,893	1,571	20,770	1,441	21,966
Peas and Beans ..	12,253	265,206	12,012	286,636	13,613	213,818
		Tons.		Tons.		Tons.
Mangel-wurzel ..	1,657	16,400	1,360	16,139	1,184	14,295
Beet, Carrots, Parsnips, and Turnips	909	6,408	713	5,644	496	3,650
Onions	4,889	25,597	4,705	28,000	4,249	22,649
Green Forage ..	34,041	..	36,502	..	59,897	..
		Bushels.		Bushels.		Bushels.
Grass and Clover Seeds ..	2,767	33,281	1,859	17,494	1,076	10,685
		Cwt.		Cwt.		Cwt.
Hops	313	1,906	323	2,787	248	1,179
Tobacco ..	169	1,405	133	603	345	2,764
Vines—Grapes ..	26,402	498,590	25,855	752,826	26,465	535,804
Flax	500	332 fibre, 2,357 seed	655	1,116 fibre, 4,853 seed	1,263	60 fibre, 2,710 seed
Gardens and Orchards ..	59,607	..	61,927	..	63,133	..
Minor Crops ..	2,763	..	2,699	..	2,982	..
Land in Fallow ..	1,049,915	..	990,967	..	894,300	..
Artificial Grasses	1,040,335	..	1,095,642	..	1,095,471	..

Crop.	1908–9.		1909–10.		1910–11.	
	Area.	Production.	Area.	Production	Area.	Production.
	Acres.	Bushels.	Acres.	Bushels.	Acres.	Bushels.
Maize	14,004	650,462	19,112	1,158,031	20,151	982,103
Rye	2,024	32,504	2,399	26,070	2,640	32,647
Peas and Beans ..	11,153	197,807	9,824	145,742	11,068	223,284
		Tons.		Tons.		Tons.
Mangel-wurzel ..	1,370	15,048	1,119	14,116	1,254	17,654
Beet, Carrots, Parsnips, and Turnips	702	4,541	573	4,215	872	7,481
Onions	5,340	24,384	6,434	31,715	6,161	37,484
Green Forage ..	63,066	..	56,586	..	71,826	..
		Bushels.		Bushels.		Bushels.
Grass and Clover Seeds	1,741	18,161	1,595	13,160	1,295	16,262
		Cwt.		Cwt.		Cwt.
Hops	189	1,094	140	882	121	937
Tobacco ..	413	2,647	321	2,740	329	†
Vines—Grapes ..	24,430	561,679	22,768	548,828	23,412	592,438
Flax	190	6 fibre, 153 seed	1,213	676 fibre, 1,515 seed	600	748 fibre, 2,457 seed
Gardens and Orchards ..	64,225	..	66,322	..	68,153	..
Minor Crops ..	4,218*	..	3,389*	..	5,158*	..
Land in Fallow ..	1,034,422	..	1,175,750	..	1,434,177	..
Artificial Grasses	1,029,711	..	988,671	..	991,195	..

* For details see page 678. † Not available.

Maize.

In the year 1901-2 there were 10,020 acres under maize, from which a return of 615,472 bushels was obtained. After that year the area of land under this crop was fairly constant until 1909-10, when it was increased to 19,112 acres, which produced 1,158,031 bushels. In 1910-11 the area was further increased to 20,151 acres, but the production was only 982,103 bushels, of which 331,383 bushels were in the county of Tanjil, 219,547 in Dargo, 174,473 in Tambo, 113,476 in Croajingolong, 50,381 in Buln Buln, 25,670 in Delatite, 21,470 in Bogong, 13,569 in Benambra, 10,725 in Mornington, and 10,220 in Grant. Maize is grown in other counties of the State, but to such a small extent that it accounted for only 1 per cent. of the total production last season.

Rye.

The area under rye in 1910-11 was 2,640 acres, from which 32,647 bushels of grain were obtained, both area and produce being the greatest since 1870. Last season rye was grown throughout the State, except in the counties of Hampden, Borung, Kara Kara, Gunbower, Tambo, Millewa, Weeah, and Karkarooc. In Delatite, the quantity yielded was 9,946 bushels, in Bogong 6,205 bushels, and in Talbot 2,453 bushels. In each of the counties, Bourke, Grant, Anglesey, Dalhousie, and Normanby the produce exceeded 1,000 bushels, but in no other county did it reach that quantity.

Peas and beans.

In the area under peas and beans there was an increase from 8,297 acres in 1901-2 to 12,253 acres in 1905-6, and to 13,613 acres in 1907-8; there was a decline in 1909-10 to 9,824 acres, and a partial recovery in 1910-11 to 11,068 acres. The production last season was, with two exceptions, the greatest during the last fifteen years, but was only about one-fifth of that in 1893-4. Peas and beans are generally grown in all the counties except Millewa, Weeah, and Gladstone. Those from which the principal crops were obtained last season were Buln Buln with 45,664 bushels, Grant with 32,986 bushels, Tanjil with 28,141 bushels, Mornington with 24,181 bushels, Bourke with 16,488 bushels, and Polwarth with 13,019 bushels, which six counties accounted for 72 per cent. of the whole crop.

Mangel-wurzel.

A considerable increase in the area under mangel-wurzel has taken place since 1900-1, there having been 865 acres in 1901-2, 1,360 acres in 1906-7, and 1,370 acres in 1908-9. There was a decline to 1,119 acres in 1909-10, but in 1910-11 the area reached 1,254 acres. The production increased from 9,679 tons in 1901-2 to 16,139 tons in 1906-7, 15,048 tons in 1908-9, and 17,654 tons in 1910-11. Mangolds are grown principally in the counties of Villiers, Grant, Heytesbury, Tanjil, Grenville, Normanby, Mornington, Buln Buln, and Bourke.

Beet, carrots, parsnips, and turnips.

The cultivation of beet, carrots, parsnips, and turnips, exclusive of those grown in market gardens, showed an increase of 50 per cent. in area and 77 per cent. in production in the last, as compared with the previous season. In 1901-2, the land sown was 561 acres; in 1908-9 it was 702 acres, and last year it was 872 acres. The produce was 4,140 tons, 4,541 tons, and 7,481 tons in the respective years named.

Onions.

Onions are grown in nearly every county south of the Dividing Range. The counties yielding the largest crops last season were—Bourke, Buln Buln, Grenville, Polwarth, and Mornington. In Bourke, the yield was 8,029 tons from 1,021 acres; in Buln Buln, 5,513 tons from 708 acres; in Grenville, 5,307 tons from 984 acres; in Polwarth, 4,582 tons from 728 acres; in Mornington, 4,376 tons from 766 acres; in Grant, 3,745 tons from 822 acres; and in Villiers, 3,058 tons from 604 acres. The total area under onions in 1910-11 was exceeded only by that of the previous year, whilst the production was the highest recorded. The following is a return for the last sixteen years:—

ONION CULTIVATION, 1895-6 TO 1910-11.

Year.	Area.	Produce.	Year.	Area.	Produce.
	Acres.	Tons.		Acres.	Tons.
1895-6 ..	3,780	10,759	1903-4 ..	4,176	25,218
1896-7 ..	3,735	11,256	1904-5 ..	2,862	12,969
1897-8 ..	3,751	11,217	1905-6 ..	4,889	25,597
1898-9 ..	4,472	17,308	1906-7 ..	4,705	28,000
1899-1900 ..	4,436	19,905	1907-8 ..	4,249	22,649
1900-1 ..	2,815	12,766	1908-9 ..	5,340	24,384
1901-2 ..	4,151	20,859	1909-10 ..	6,434	31,715
1902-3 ..	5,565	27,467	1910-11 ..	6,161	37,484

Green forage.

During the last nine seasons the area devoted to green forage was lowest in 1904-5, when it was 29,902 acres. In 1908-9 it had increased to 63,066 acres, in 1909-10 it was 56,586 acres, which was less than that in each of the two preceding years, and in 1910-11 it was 71,826 acres, which was exceeded only in 1877-8, and then only by 207 acres.

Grass and clover seed.

The area under grass and clover for seed last season showed an increase on the figures for 1907-8, but, with this exception, was the lowest during the last thirty-nine years. The product returned in 1909-10 from 1,595 acres was 13,160 bushels, and in 1910-11 from 1,295 acres it was 16,262 bushels. It is remarkable that such favorable results have not led to the reservation of a greater area for seed purposes.

The hop-growing industry attained its maximum development in 1883-4, when 1,758 acres yielded 15,717 cwt. Delatite, Bogong, and Polwarth were the chief counties in which hops were grown last season, but yields were also recorded in Tanjil and Dargo. There has been a heavy falling-off in the last twenty-seven years, and though the production of hops in 1910-11 was slightly in excess of that for the previous season, both area and produce were lower than in any other of the last thirty-six years. Last season there were only 22 growers, whose return from 121 acres was 937 cwt. Hops.

In 1895-6 there were 1,969 acres under flax or linseed ("Linum Usitatissimum"), but in 1898-9 the area had fallen to 72 acres. Since that year the area sown has increased, the returns for 1903-4 showing 19 growers of flax, who cultivated 259 acres, and produced 1,226 cwt. of seed, 61 cwt. of fibre made, and 4,769 cwt. of straw for treatment; in 1904-5 there was a considerable increase, the number of growers being 33, the area cultivated, 564 acres, and the produce 781 cwt. of seed, 320 cwt. of fibre made, and 3,060 cwt. of straw for treatment; in 1906-7 there were 72 growers, and the area increased to 655 acres, which produced 4,853 cwt. of seed and 1,116 cwt. of fibre, with 13,800 cwt. of straw awaiting treatment; in 1907-8 there were 87 growers, and the area still further increased to 1,263 acres, but the season was very unfavorable to the crop, and only 2,710 cwt. of seed, 60 cwt. of fibre, and 9,800 cwt. of straw for treatment were returned; in 1908-9 there were only 21 growers who cultivated 190 acres, and produced 153 cwt. of seed, 6 cwt. of fibre, and 861 cwt. of straw. In 1909-10, the effect of a stimulus caused by the Commonwealth Government granting a bonus of 10 per cent. on the market value of both fibre and seed was very evident, as in Victoria there were 106 growers who cultivated 1,213 acres, and produced 1,515 cwt. of seed, and 676 cwt. of fibre, as well as 836 cwt. of straw which awaited treatment. Some disappointment, however, was caused in marketing as, although there was a good demand for the prepared fibre, the flax millers were not in a position to purchase or treat the whole crop promptly. This led to a delay in the disposal of the produce, and had the effect of again reducing the cultivation, with the result that in 1910-11 there were only 33 growers, and the area under crop declined to 600 acres, which produced 748 cwt. of fibre and 2,457 cwt. of seed, as well as 235 tons of straw awaiting treatment. Flax.

In 1910, imports into Victoria from countries outside Australia included linseed to the value of £2,499, principally from India and New Zealand; linseed oil worth £56,694, of which 92 per cent. came from the United Kingdom; and fibre worth £127,480,

principally from New Zealand and the Philippine Islands. After supplying local requirements there is an extensive market, as there is scarcely any limit to the demand for linseed and fibre in other parts of the world. There is therefore great promise that in this State the flax industry will become firmly established, and be very profitable.

Tobacco.

In addition to the Government tobacco experimental station (see page 627), there are plantations in the counties of Delatite, along the banks of the King River, and in Bogong; last season there were also small areas cultivated in Anglesey, Heytesbury, Tambo, Dargo, and Buln Buln. Particulars relating to the cultivation of tobacco for the last fifteen years are as follows:—

CULTIVATION OF TOBACCO, 1896-7 TO 1910-11.

Year.	Number of Growers.	Area.	Produce.
		Acres.	Cwt. (dry.)
1896-7	233	1,264	7,890
1897-8	77	522	3,419
1898-9	31	78	190
1899-1900	28	155	1,365
1900-1	16	109	311
1901-2	17	103	345
1902-3	24	171	781
1903-4	25	129	848
1904-5	20	106	1,112
1905-6	31	169	1,405
1906-7	30	133	603
1907-8	49	345	2,764
1908-9	60	413	2,647
1909-10	50	321	2,740
1910-11	57	329	..

The maximum quantity of tobacco grown was in 1880-1, when 17,333 cwt. of dry leaf was produced, but of late years tobacco growing in Victoria has been upon a small scale.

Vines, wine, raisins, &c.

The area under vines showed a steady increase from 4,284 acres in 1879-80, to 30,307 acres in 1894-5. In 1900-1 the area was 30,634 acres, but since then there has been a falling off to 25,855 acres in 1906-7, and 23,412 acres in 1910-11. The vineyards are distributed fairly well over the State. There are, however, districts where the principal industries are connected with vine-growing; the Shire of Mildura produced last season 340,050 cwt. of grapes; Rutherglen, 82,891 cwt.; and Yackandandah, 22,565 cwt. In the Goulburn Valley wine-making is a flourishing industry. In the County of Borung, there are many vineyards, particularly in the

Stawell Shire where 10,103 cwt. of grapes was produced in 1910-11. At Mildura the crop was principally dried for raisins and currants. The results of fifteen years' operations are as follows:—

VINE PRODUCTION, 1897 TO 1911.

Year ended June.	Number of Growers.	Area.	Produce.			
			Grapes Gathered.	Wine Made.	Raisins Made.	Currants Made.
		Acres.	Cwt.	Gallons.	Cwt.	Cwt.
1897 ..	2,603	27,934	601,053	2,822,263	11,276	762
1898 ..	2,364	27,701	457,437	1,919,389	13,234	462
1899 ..	2,453	27,568	468,887	1,882,209	17,979	1,033
1900 ..	2,382	27,550	298,920	933,282	17,847	3,315
1901 ..	2,486	30,634	631,912	2,578,187	29,370	3,715
1902 ..	2,469	28,592	497,269	1,981,475	27,533	2,546
1903 ..	2,347	28,374	444,966	1,547,188	35,534	3,722
1904 ..	2,260	28,513	654,965	2,551,150	53,447	7,490
1905 ..	2,253	28,016	452,433	1,832,386	30,295	5,974
1906 ..	2,009	26,402	498,590	1,726,444	42,975	6,403
1907 ..	1,860	25,855	752,826	2,044,833	98,127	11,730
1908 ..	1,967	26,465	535,804	1,365,600	68,617	10,440
1909 ..	1,637	24,430	561,679	1,437,106	69,536	11,929
1910 ..	1,606	22,768	548,828	991,941	81,044	27,408
1911 ..	1,652	23,412	592,438	1,362,420	79,318	26,394

Of the total quantity of grapes gathered in 1910-11, 194,630 cwt. was used for making wine, 339,544 cwt. for raisins and currants, and 58,264 cwt. for table consumption and export. Of the 79,318 cwt. of raisins made, 49,440 cwt. were sultanas almost entirely from Mildura. That destructive insect affecting the vines, the phylloxera vastatrix, has not during recent years shown itself to any marked extent. Attempts are being made to completely stamp out the pest by the Department of Agriculture through the distribution of disease-resistant stocks.

Raisins are being produced in Victoria upon a scale far in excess of local requirements. It is estimated that a year's consumption of raisins is about 20,000 cwt., consequently, nearly 60,000 cwt. of the production in 1911 is available for export. With regard to currants, a year's consumption is about 30,000 cwt., and it was not until 1910 that anything approaching the required quantity was produced locally.

Orchards.

The total number of persons in the State growing fruit for sale was 5,780 in 1910-11, as against 5,647 in 1909-10, 5,241 in 1907-8, and 5,163 in 1905-6. The area under orchards in these years was 53,325, 51,578, 49,212, and 47,312 acres respectively. The orchards are fairly spread over the whole State. The counties having the largest areas last season and the acreage in each were as

follows:—Bourke, 11,582 acres; Evelyn, 11,559 acres; Mornington, 8,524 acres; Rodney, 3,493 acres; Talbot, 2,733 acres; Bendigo, 1,988 acres; Karkarooc (including Mildura), 1,851 acres; Borung, 1,619 acres; Grant, 1,564 acres; Buln Buln, 1,093 acres; and Bogong, 1,071 acres.

In the following table will be found a statement of the number of fruit trees and plants—showing trees bearing and non-bearing—producing the various kinds of fruit grown during the seasons 1907-8 and 1910-11:—

RETURN SHOWING THE NUMBER OF FRUIT TREES, PLANTS, ETC., IN ORCHARDS AND GARDENS WHERE FRUIT WAS GROWN FOR SALE, 1907-8 AND 1910-11.

Fruit.	Number of Trees, Plants, &c.					
	1907–8.			1910-11.		
	Not Bearing.	Bearing.	Total.	Not Bearing.	Bearing.	Total.
Apples	795,188	1,155,966	1,951,154	764,890	1,449,381	2,214,271
Pears	225,916	261,959	487,875	268,330	364,638	632,968
Quinces	18,505	48,309	66,814	22,820	58,116	80,936
Plums	187,353	296,915	484,268	134,129	355,332	489,461
Cherries	100,228	231,084	331,312	73,739	242,891	316,630
Peaches	109,406	295,189	404,595	179,240	292,054	471,294
Apricots	43,312	260,351	303,663	44,641	236,536	281,177
Nectarines	1,807	5,048	6,855	2,951	4,279	7,230
Oranges	27,117	34,024	61,141	45,403	40,190	85,593
Lemons	14,111	46,465	60,576	20,070	47,880	67,950
Loquats	2,170	5,248	7,418	1,621	4,926	6,547
Medlars	63	197	260	93	361	454
Figs	4,846	29,274	34,120	8,965	35,132	44,097
Passion	4,203	7,251	11,454	5,293	9,795	15,088
Guavas	352	949	1,301	323	162	485
Pomegranates	152	93	245	87	117	204
Persimmons	253	517	770	242	504	746
Total Large Fruits	1,534,982	2,678,839	4,213,821	1,572,837	3,142,294	4,715,131
Raspberries	..	1,547,847	1,547,847	..	663,315	663,315
Strawberries	..	4,157,534	4,157,534	..	4,018,944	4,018,944
Gooseberries	..	297,853	297,853	..	177,661	177,661
Mulberries	430	1,145	1,575	465	1,220	1,685
Olives	652	3,165	3,817	3,037	3,473	6,510
Currants (Red, White, and Black)	10,327	77,906	88,233	13,572	49,282	62,854
Almonds	8,605	19,772	28,377	9,690	21,053	30,743
Walnuts	4,726	3,787	8,513	4,252	4,461	8,713
Filberts	1,197	2,052	3,249	1,214	3,637	4,851
Chestnuts	410	476	886	498	533	1,031
Total Nuts	14,938	26,087	41,025	15,654	29,684	45,338

The area under orchards growing fruit for sale increased steadily from 5,800 acres in 1872-3, to 10,048 in 1882-3, 31,370 in 1892-3, 44,502 in 1902-3, 47,205 in 1904-5, 49,086 in 1906-7, 51,578 in

1909-10, and 53,325 in 1910-11, which is the largest area returned up to date. Details of the produce from orchards growing fruit for sale for the last eleven years are as follows:—

ORCHARDS GROWING FRUIT FOR SALE, 1900-1 TO 1910-11.

Year ended March.	Number of Fruit-growers.	Area under Gardens and Orchards.	LARGE FRUITS GATHERED.			
			Apples.	Pears.	Quinces.	Plums.
		Acres.	Bushels.	Bushels.	Bushels.	Bushels.
1901	5,400	44,688	893,418	251,384	71,357	172,467
1902	5,693	45,885	652,525	118,742	64,145	201,291
1903	5,301	44,502	903,853	248,030	91,665	154,112
1904	5,254	46,642	805,034	158,186	81,516	289,972
1905	5,341	47,205	1,019,816	188,849	90,735	121,725
1906	5,163	47,312	578,700	219,864	56,898	130,917
1907	5,367	49,086	1,010,381	303,647	77,277	237,468
1908	5,241	49,212	618,424	182,609	47,871	157,366
1909	5,586	50,675	1,241,826	373,145	99,608	167,012
1910	5,647	51,573	1,121,702	253,195	50,559	232,657
1911	5,780	53,325	1,667,271	640,436	86,355	325,677

LARGE FRUITS GATHERED—*continued.*

	Cherries.	Peaches.	Apricots.	Oranges.	Lemons.	Figs.	Others.
	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.	Bushels.
1901	105,032	160,968	228,686	37,184	57,866	21,846	9,901
1902	111,891	284,312	234,101	60,150	64,954	18,135	9,363
1903	102,512	173,414	168,348	23,210	48,083	19,214	8,187
1904	124,423	260,589	336,899	27,670	61,429	26,405	8,863
1905	82,504	230,130	186,360	34,088	81,716	23,500	7,335
1906	116,845	132,870	154,791	21,364	63,904	32,467	12,339
1907	120,496	276,077	258,049	23,431	37,662	29,549	16,817
1908	71,798	290,178	239,735	28,620	46,827	20,460	10,753
1909	95,012	282,040	149,262	22,363	38,548	23,687	17,462
1910	100,054	291,766	292,496	34,027	51,130	22,675	10,566
1911	121,756	317,317	160,884	59,723	71,041	31,054	21,200

	SMALL FRUITS GATHERED.					NUTS GATHERED.			
	Raspberries.	Strawberries.	Gooseberries.	Currants (Red, Black, & White).	Others.	Almonds.	Walnuts.	Filberts.	Chestnuts.
	cwt.	cwt.	cwt.	cwt.	cwt.	lbs.	lbs.	lbs.	lbs.
1901	20,396	4,246	12,431	1,794	882	66,837	25,294	6,818	6,469
1902	13,610	4,435	10,436	1,383	968	72,528	18,435	3,469	6,990
1903	20,185	3,101	11,573	1,456	1,011	41,551	19,378	3,437	8,262
1904	22,377	3,122	14,199	2,312	1,327	113,791	13,276	2,223	6,677
1905	12,480	5,456	13,558	1,805	1,320	80,758	28,306	1,756	4,396
1906	6,821	2,643	9,814	2,113	1,320	81,077	23,131	6,144	4,696
1907	13,816	5,487	12,276	2,054	3,307	69,378	15,863	5,339	3,506
1908	12,466	3,645	8,526	3,705	2,145	62,921	20,266	1,928	5,047
1909	8,640	4,874	6,950	1,278	2,747	91,230	23,100	3,323	3,355
1910	6,143	6,472	5,876	1,428	1,738	81,008	25,368	1,760	5,003
1911	9,231	7,788	6,430	1,334	2,607	126,877	24,242	3,209	8,546

The following return shows the average produce per tree for all trees, and for bearing trees only, for the years 1907-8 and 1910-11 :—

PRODUCE OF FRUIT TREES, 1907-8 AND 1910-11.

Fruit Trees.	AVERAGE PER TREE.			
	1907–8.		1910–11.	
	All Trees.	Bearing Trees.	All Trees.	Bearing Trees.
	Bushels.	Bushels.	Bushels.	Bushels.
Apples	·32	·53	·75	1·15
Pears	·37	·70	1·01	1·76
Quinces	·72	·99	1·07	1·49
Plums	·32	·53	·67	·92
Cherries	·22	·31	·38	·50
Peaches	·72	·98	·67	1·09
Apricots	·79	·92	·57	·68
Nectarines	·73	·98	·66	1·11
Oranges	·47	·84	·70	1·49
Lemons	·77	1·01	1·05	1·48
Loquats	·12	·17	·89	1·19
Medlars	·24	·32	·11	·14
Figs	·60	·70	·70	·88
Passion Fruit	·38	·60	·64	·98
Guavas	·04	·05	·05	·14
Pomegranates	·33	·88	·99	1·73
Persimmons	·38	·56	1·01	1·50
Total Large Fruits only	·41	·64	·74	1·11
	lbs.	lbs.	lbs.	lbs.
Almonds	2·22	3·18	4·13	6·03
Walnuts	2·38	5·35	2·78	5·43
Filberts	·59	·94	·66	·88
Chestnuts	5·70	10·60	3·44	6·65

This table shows a good increase in the average production of the principal large fruits between 1907-8 and 1910-11, when taking into consideration either all trees or bearing trees.

In addition, large quantities of melons, rhubarb, and tomatoes were produced in these orchards, the following being the quantities returned for 1910-11—Melons, 16,736 cwt., rhubarb, 35,980 dozen

bundles, and tomatoes, 32,550 cwt. There were also 4,050 acres laid down in private fruit gardens, the value of the produce being estimated at over £8,000.

According to prices received by growers the value of fruit which reaches market was estimated to be £341,891 in 1904-5, £345,844 in 1905-6, £451,672 in 1906-7, £386,807 in 1907-8, £373,600 in 1908-9, £423,500 in 1909-10, and £524,380 in 1910-11. This, of course, does not represent the actual value of all the fruit grown, as large quantities are privately consumed in various ways. No very reliable estimate of the value of such fruit can be prepared; but it may be set down at about £35,000.

In recent years some attention has been given to cider making, and, with the view of encouraging this industry, the Agricultural Department imported a complete cider-making plant, and had it sent to various districts, the consequence being that large quantities of cider were made by it. Local manufacturers of machinery have since made machines on the lines of the imported one, with the result that the cider industry is fairly established, and colonial cider may now be obtained in most hotels.

Market gardens.

The area under market gardens for the year 1910-11 was 10,778 acres. In view of the fact that these gardens are generally situated near large centres of population, and that the producers are consequently able to dispose of the bulk of their goods with a minimum of loss from waste, &c., an average return of £25 per acre is regarded as a fair estimate. On this basis, the total value of the produce may be stated at £269,450. This does not include crops of one acre and over of potatoes, onions, mangel-wurzel, beet, carrots, parsnips, and turnips grown in market gardens, such crops being tabulated under their respective heads in the returns relating to agriculture.

Dried fruit.

The quantity of dried fruit (weight after drying) was for the first time collected in 1895-6, when 179,460 lbs. were returned, and it increased to 636,294 lbs. in 1900-1, after which date the quantity, principally by reason of a reduction in apricots, declined to 338,173 lbs. in 1905-6. In the next three years there was a notable improvement, and in 1909-10 the quantity dried reached 811,935 lbs., which was by far the greatest for the years recorded. The figures for 1910-11 were considerably below those for 1909-10, though

much above the figures for the previous eight years. The details for the last eleven seasons are as follows:—

DRIED FRUIT, 1900-1 TO 1910-11.

Year ended June.	Apples.	Prunes.	Peaches.	Apricots.	Figs.	Pears.	Total.
	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.	lbs.
1901 ..	28,944	35,931	97,254	411,526	62,639	..	636,294
1902 ..	42,218	33,789	90,328	328,599	66,472	..	561,406
1903 ..	18,178	28,996	70,759	110,666	69,069	8,935	306,603
1904 ..	25,137	58,293	114,096	184,960	17,599	..	400,085
1905 ..	28,021	33,080	134,019	179,520	41,137	..	415,777
1906 ..	19,290	9,207	27,703	252,746	29,227	..	338,173
1907 ..	42,113	64,648	109,958	143,970	37,716	..	398,405
1908 ..	35,544	25,504	87,383	223,091	13,112	8,077	392,711
1909 ..	69,120	56,183	84,514	170,620	26,796	30,322	437,555
1910 ..	46,767	76,015	109,661	539,910	22,160	17,422	811,935
1911 ..	26,391	80,123	84,211	334,111	9,554	31,819	566,209

The bulk of the above dried fruit comes from Mildura, where in 1910-11 there were made also 8,606,080 lbs. of raisins, which quantity represented an increase of over 1,404,704 lbs. on the produce of the year 1908-9.

Minor crops.

The following is a return of the minor crops for the last two seasons. The items do not in all cases represent the whole of the respective crops grown, but only such as were taken cognisance of by the collectors:—

MINOR CROPS, 1909-10 AND 1910-11.

Crop.	1909-10.		1910-11.	
	Area.	Produce.	Area.	Produce.
	Acres.		Acres.	
Chicory	522	462 tons (dry)	467	432 tons (dry)
Cucumbers	...	...	30	120 tons
Flowers	82	...	53	...
Garlic	...	...	3	70 cwt.
Herbs	10	...	8	...
Lupins	4	4 cwt.	...	...
Millet—Broom ...	178	578 cwt. fibre 620 cwt. seed	665	3,663 cwt. fibre 3,881 cwt. seed
,, Japanese ...	26	145 cwt. seed	15	119 cwt. seed
Mustard	...	...	6	600 lbs.
Nursery	578	...	877	...
Opium poppies ...	2	26 lbs.	2	31 lbs.
Pumpkins	1,942	20,764 tons	2,477	23,851 tons
Seeds—Agricultural and garden	4	...	1	...
Sugar Beet	2	35 tons	458	5,969 tons
Sunflowers	39	1,787 bushels	96	2,945 bushels
Total... ...	3,389	...	5,158	...

Land in fallow.

The fallowing of land in Victoria commenced in 1858-9, when 6,000 acres were so treated. With annual variations in acreage, but a general increase, the area in fallow reached 853,829 acres in 1904-5, 1,049,915 acres in 1905-6, 990,967 acres in 1906-7, 894,300 acres in 1907-8, 1,034,422 acres in 1908-9, 1,175,750 acres in 1909-10, and 1,434,177 acres in 1910-11. The system of fallowing is much more extensive in the wheat-growing counties than in the other districts of the State. It is gratifying to find that the enormous advantages obtainable from this mode of treating the land are now being properly recognised. Evidence of this is supplied by returns received in March, 1908, from which it appears that on fallowed land manured there was a gain in wheat yield of over 5 bushels per acre, while on fallowed land unmanured the gain was nearly 2 bushels per acre. In order to obtain definite information regarding the relative production from fallowed and unfallowed land under wheat, particularly in a dry season like 1907-8, some of the principal growers in the wheat districts of the State were invited in the year 1908 to furnish information on the subject, and the tabulated results of their replies are set out in the table which follows :—

WHEAT GROWING ON FALLOWED AND UNFALLOWED LAND, 1907-8.

District.	MANURED LAND.			
	Fallowed.		Unfallowed.	
	Area.	Yield per acre.	Area.	Yield per acre.
	Acres.	Bushels.	Acres.	Bushels.
Wimmera—				
Counties of Lowan, Borung, and Kara Kara	69,834	11·82	27,520	5·75
Mallee—				
Counties of Weeah, Karkarooc, and Tatchera	31,963	5·75	20,908	2·62
Northern—				
Counties of Gunbower, Gladstone, Bendigo, Rodney, and Moira	41,110	9·50	28,946	4·06
Western—				
County of Ripon	4,821	17·93	5,993	13·47
Total	147,728	10·07	83,367	4·93

Taking the districts as a whole, it will be seen that the yield per acre from the fallowed was more than twice as great as that from the unfallowed land; and taking the districts separately, this proportion is maintained in each of the three principal ones. In the Western District the difference is not marked in the same degree, due probably to the fact that wheat-growing except on a very small scale was commenced in that portion of the State only in recent years.

Some information was also obtained in regard to wheat-growing on unmanured land, particulars of which, in the case of the counties of Karkarooc and Tatchera in the Mallee District (the driest in the State in 1907-8) are set out below :—

District and County.	Wheat Grown on Unmanured Land.			
	Fallowed.		Unfallowed.	
	Area.	Yield per acre.	Area.	Yield per acre.
Mallee—	Acres.	Bushels.	Acres.	Bushels.
Karkarooc	3,067	2·21	17,448	·95
Tatchera	2,453	3·06	17,323	·24
Total	5,520	2·59	34,771	·60

A striking difference is shown here between the yields from the fallowed and the unfallowed land, the latter being simply a failure.

Manure used.

In those counties which are included in the first, but not in the second table, the areas returned as unmanured were small, indicating that wheat growing on unmanured land is in them carried on to only a limited extent. This conclusion is confirmed by the increase in the number of farmers using manure, and in the quantity of manure used in Victoria, as exhibited in the following table :—

Manure used for Fertilization, 1898 to 1910.

Year.	Farmers using.	Area used on.	Manure used—	
			Natural.	Artificial.
		Acres.	Tons.	Tons.
1898	7,318	225,830	143,586	16,052
1901	11,439	556,777	153,611	23,535
1902	18,537	1,099,686	206,676	36,630
1903	19,921	1,205,443	207,817	41,639
1904	20,167	1,521,946	190,903	45,940
1905	21,586	1,791,537	210,507	54,674
1906	23,072	1,985,148	205,906	60,871
1907	23,733	2,018,079	232,394	62,337
1908	24,437	2,053,987	235,492	64,715
1909	26 690	2,407,331	197,446	77,579
1910	27,845	2,714 854	203,884	86,316

The area on which manure was used represented only 7 per cent. of that cultivated in 1898, but since then the proportion manured has rapidly increased. In 1901, it was 19 per cent.; in 1903, 36 per cent.; in 1904, 46 per cent.; in 1905, 56 per cent.; in 1909, 66 per cent.; and in 1910, 69 per cent., which was much higher than in any previous year. During 1910 the quantity of manure imported into Victoria from oversea countries was 88,633 tons, and its value £230,289. Eighty-eight per cent. of the quantity, representing 86 per cent. of the value, consisted of guano and rock phosphates imported from Ocean Island.

So widespread is the range of application of artificial manures and so general has their use become in Victoria, that it would appear difficult to add anything of interest to the purchaser of these modern aids to agriculture; but if there is one point more than another, with which the purchaser of manures is not entirely conversant, it is probably a knowledge of the safeguards afforded him by the Artificial Manures Act. Use of artificial manures.

After divesting of their legal phraseology the clauses showing the intentions of the framers of this Act, it will be found that every importer or manufacturer of artificial manures (over the amount of one half hundredweight) within the State is required each year to register the brand of each fertilizer at the office of the Secretary for Agriculture, and under a statutory declaration to state, amongst other things, his full name and address, the material from which the manure is manufactured, the chemical analysis of the manure, and the retail price per ton. From these particulars the unit value of 1 per cent. of each class of plant food (Nitrogen, Phosphoric Acid, and Potash) in a ton of manure is computed. The unit values so established operate for twelve months only, and what is called the "commercial value" of all manures sold during that period is calculated from them. A list showing the "commercial value" and selling price of all manures will be found in the *Agricultural Journal*. The Act further requires that each bag of manure shall have a label attached showing the net weight and an analysis of the contents. It may not be generally known that each purchaser of manures is required under the Act to produce, when required by the Chemist for Agriculture, the invoice certificate which should be issued by the vendor at the time of sale. Purchasers of manures, therefore, may with advantage to themselves observe the precaution of keeping the labels.

In order to check the quality of manures despatched to the country, inspectors are empowered to take samples at certain places during transit. The compliance of the vendors with the guarantee given by them is best described in the words of the Agricultural Chemist:—"It is quite noteworthy that almost without exception the whole of the samples were well up to the guarantee, and in many cases were in excess of the percentages of fertilizing constituents guaranteed." So far, the Victorian farmer can have no fault to find with the quality of superphosphate sold in the State. Owing, however, to the great demand for bonedust, a mixed fertilizer is now being placed on the market under the name of bone fetilizer, the manurial effect of which is unsatisfactory compared with ordinary bonedust.

As regards the price per ton, it is gratifying to find that farmers are able to purchase manures of equal quality at a cheaper rate per ton than that which rules in adjoining States.

Selling prices in several of the American States are higher than those prevailing in Victoria. The Victorian purchaser of artificial manures may thus congratulate himself on being able to purchase high-grade manures at reasonable prices. It is, moreover, a

matter of further congratulation that complete harmony exists between the Department of Agriculture as the administrator of the Act and the merchants whose business is amenable to its operation.

It has come to be recognised by progressive farmers that, valuable as are the effects of manures rationally used, their usefulness is controlled by the cultivation given to the land. In other words, it is unreasonable to expect the maximum benefit from manures on imperfectly tilled land, the moisture content of which is below what it should be. Cultivation always has been, and always will be, the most important of all operations on the farm, and it is the recognition of this fact that leads to some persons securing better results than their neighbours.

The three watchwords in agricultural practice may be described as Cultivation, Rotation, and Fertilization, the proper observance of which leads to that higher standard of production towards which the demands of civilization are forcing the agriculturists of all nations to aspire.

Characteristics of Victorian soils.

The soils of Victoria vary widely in their physical and chemical conditions. Colour alone is not always an index to productivity, yet to the average mind a darkish colour in soils is generally accepted as indicating a higher potential fertility than exists in lighter coloured soils. There is some logic in this reasoning on account of darkish coloured soils containing generally more organic matter, and, other things being equal, having thus a better absorptive and retentive power for moisture. Fertility, however, is the harmonious operation of a number of factors, some of which are difficult to control. The absorption, retention, and movement of the soil moisture are entirely dependent on the composition, size, and nature of the soil particles, and in this particular, many farmers do not sufficiently appreciate the far-reaching effects of cultivation as the most economical manner in which the latent wealth of the soil may be made available to the needs of crops. Porosity, or natural drainage, controls the temperature of the soil, especially during the period when growth is most abundant, viz., the Spring, hence it is that many soils whose drainage is imperfect, remain cold at that season and the crops grown upon them are restricted in yield. Capillarity, or the power of the soil to transfer moisture from the subsoil to the upper cultivated portion, wherein the roots of crops develop, is exemplified in the case of the two extreme types of sand and clay. In the former case, the surface dries rapidly during summer, although there may be an abundant supply of moisture a few feet down; in the latter case, owing to the facility with which moisture rises from the subsoil to the surface and is lost by evaporation, the soil becomes hard and dry. It is usually regarded that the true measure of fertility is the amount of the mineral elements of plant food present in the soil; but although without food no plant can thrive, yet without an adequate supply of

moisture no seed can even germinate, much less produce a mature plant. Hence it is that the chemical condition of a soil is subordinate in importance to its physical composition.

During the past eighteen years some thousands of chemical analyses of Victorian soils have been made by the Chemical Branch of the Department of Agriculture, and the tabulation of the figures has given a general knowledge of the characteristics of soils in every district in the State.

To divide the State into three broad divisions of coastal plain, northern plain, and hill country, is sufficient classification for the general statement that the soils of each locality are somewhat below the standard for phosphoric acid, hence the universal suitability of manures containing that ingredient. In the extensive areas stretching from the coast to the hills throughout Gippsland and the Western District, field experiments have indicated the necessity for a supplementary application of manures containing nitrogen. The greater rainfall of these southern districts permits a more luxuriant growth of vegetation, and as the function of nitrogen is to build up the framework of the plant, it is logical enough that the soils should require feeding in that direction. As regards potash, there is evidence that the majority of Victorian soils, particularly those of the clay type, are well furnished, and at all events for some time, except it may be for special crops, there would appear to be little necessity for manures supplying this element. It must not be forgotten, however, that plant foods produce their best results when in correct proportions to one another, and on sandy soils, when root crops and legumes are grown, potash fertilization may be found necessary.

The percentage of lime present forms a distinct feature in soils of the northern plain, but in the south with the exception of certain places where the geological formation is of limestone, this most essential element is lacking. It is not too much to say that many thousands of acres in Southern Victoria stand in more need of drainage and liming than of manures. As a corrector of soil acidity, and as the formation of a base, wherewith other plant foods may combine and be held in such a manner as to become gradually available for the needs of plants, lime will be found of great service. For the breaking down of adhesive clay soils, so as to render the passage of implements easier, lime well repays the application of from 5 to 10 cwt. per acre—once every two or three years.

Useful as the work of soil analysis has been, its value will be made more manifest when the agriculturist has standards of fertility with which to meet the requirements of different soil types under varying climatic conditions.

A better appreciation on the part of the farmer of the powerful influence that soil treatment exerts on the production of crops, and a clearer conception of the rational principles of fertilization will gradually lead to a higher standard of farming, and an all round increase in the average yields of all crops grown within the State.

Farm implements.

In recent years the number of engines, horse-works, machines, and other implements on agricultural, dairying, and pastoral holdings has been ascertained at the time of the collectors' visits. The particulars for the last two years are as follows:—

MACHINERY AND IMPLEMENTS ON FARMS AND PASTORAL HOLDINGS IN EACH DISTRICT, 1910 AND 1911.

Districts.	Number of –													
	Engines.		Horse-works.	Harvesters.	Threshing Machines.	Winnowing Machines.	Reapers and Binders.	Strippers.	Ploughs.	Harrows.	Cultivators.	Grain Drills.	Chaff-cutters.	Cream Separators.
	Steam.	Oil.												
1910.														
Central ..	509	353	1,826	116	87	297	3,560	17	16,163	11,674	5,356	2,312	5,494	4,903
North-Central	303	106	1,064	162	31	336	2,053	43	5,737	3,895	1,355	1,218	2,149	2,502
Western ..	264	525	1,725	711	70	261	2,837	81	9,599	6,566	1,883	1,963	3,122	2,630
Wimmera ..	119	556	2,865	2,475	56	2,023	3,276	3,318	8,613	5,847	3,749	3,880	3,642	2,288
Mallee ..	132	98	988	805	24	1,415	1,034	2,657	3,668	1,921	2,080	1,558	1,108	1,065
Northern .	624	189	1,830	4,176	109	2,692	5,243	2,630	12 832	8,392	5,170	4,656	2,686	4,731
North-Eastern	306	86	816	228	33	319	1,495	298	5,041	3,171	1,066	786	1,450	1,768
Gippsland ..	380	144	608	28	68	124	1,000	13	7,731	5,633	2,226	738	2,020	4,471
Total ..	2,637	2057	11,722	8,701	478	7,467	20,498	9,057	69,384	47,094	22,885	17,111	21,671	24,358
1911.														
Central ..	489	501	1,828	283	86	252	3,856	46	16,895	11,823	5,964	2,553	5,620	5,325
North-Central	306	124	1,025	212	34	299	2,086	48	5,850	3,984	1,377	1,245	2,069	2,849
Western ..	279	685	1,702	1,057	63	233	3,070	129	10,109	7,001	1,991	2,226	3,328	3,257
Wimmera ..	105	778	2,697	2.883	58	1,789	3,308	3,043	8,572	5,804	3,784	3,926	3.798	2,660
Mallee ..	149	216	1,017	1,031	38	1,483	1.389	3,032	4,058	2,508	2,302	1,379	1,298	1,189
Northern ..	691	274	1,818	4,841	74	2,622	5,340	2,392	13,490	8,633	5,874	4,990	2,837	5,163
North-Eastern	317	104	839	331	30	356	1,576	282	5,224	3,404	1,140	871	1,514	2,049
Gippsland ..	365	236	630	89	65	148	1,114	16	8,198	5,885	2,405	878	2,057	4,815
Total ..	2,701	2918	11,556	10,727	453	7,182	21,739	8,988	72,396	49,092	24,837	18,563	22,521	27,307

NOTE.—The returns collected in March, 1911, showed that there were also in use 538 milking machine plants, 3,183 shearing machines, 3,573 wool presses, and 1,540 grain graders.

Compared with 1910, the decrease shown by the figures for 1911 in the number of threshing machines, winnowers, and strippers, is the result of an increased use of harvesters, which have grown in numbers in each district. The only other decrease is in the number of horse-works. The Central, Western, Mallee, and Northern districts are mainly responsible for a marked increase in reapers and binders, grain drills, cultivators, ploughs, harrows, and chaffcutters; and each district has contributed towards a substantial increase in the number of oil-engines, harvesters, and cream separators.

The following are particulars respecting dairy cows in Victoria for each of the last eight years:— Dairying.

DAIRYING, 1903 TO 1910.

Year.	Number of Cow-keepers.	Number of Dairy Cows at end of Year.	Butter Made.	Cheese Made.	Number of Cream Separators in use.
			lbs.	lbs.	
1903 ..	41,824	515,179	46,685,727	5,681,515	8,986
1904 ..	42,931	632,493	61,002,841	4,747,851	13,408
1905 ..	46,757	649,100	57,606,821	4,297,350	15,710
1906 ..	47,741	701,309	68,088,168	4,877,593	19,446
1907 ..	49,406	709,279	63,746,354	4,397,909	20,599
1908 ..	49,158	609,166	48,461,398	4,328,644	22,395
1909 ..	50,870	625,063	55,166,555	5,025,834	24,358
1910 ..	52,610	668,777	70,603,787	4,530,893	27,307

In 1908 the autumn was exceptionally dry, and as a result of this the number of cow-keepers and of dairy cows and the quantity of butter and cheese made showed a decrease in that year as compared with the year 1907. The production was somewhat increased in 1909, though the number of cows and the quantity of butter made were still less than in any of the years 1904 to 1907 inclusive, and in 1910 there was a further increase, the quantity of butter produced being higher than in any previous year, though the number of cows was lower than in 1906 or 1907. It is generally regarded that the milk required to make 1 lb. of butter will make about 2 lbs. of cheese, and on this basis the figures in the table show that, after deducting supplies required for milk and cream consumed in their natural state and for milk concentrated, condensed, or

preserved, the average production from each dairy cow was equal to 109 lbs. of butter in 1910, as against an average of 92 lbs. in 1909, 83 lbs. in 1908, 93 lbs. in 1907, 100 lbs. in 1906 and 1904, 92 lbs. in 1905, and 97 lbs. in 1903.

Live stock.

The numbers of horses, cattle, sheep, and pigs, in each of the last six census years, together with the numbers per head of the population at each period, are shown in the following table. The progress of the industries dependent on the breeding of stock is thus indicated:—

LIVE STOCK PER HEAD OF POPULATION: RETURN FOR SIX CENSUS YEARS.

Stock.	1861. Population, 540,322.		1871. Population, 731,528.		1881. Population, 862,346	
	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.
Horses (including foals) ..	76,536	·14	209,025	·29	275,516	·32
Cattle—						
Milch Cows	197,332	·37	212,193	·29	329,198	·38
Other	525,000	·97	564,534	·77	957,069	1·11
Sheep	5,780,896	10·70	10,477,976	14·32	10,360,285	12·01
Pigs	61,259	·11	180,109	·25	241,936	·28

Stock.	1891. Population, 1,140,405.		1901. Population, 1,201,341.		1911. Population. 1,315,551	
	Number.	Per Head of Population.	Number.	Per Head of Population.	Number.	Per Head of Population.
Horses (including foals) ..	436,469	·38	392,237	·33	472,080	·36
Cattle—						
Milch Cows	395,192	·35	521,612	·43	668,777	·51
Other	1,387,689	1·22	1,080,772	·90	878,792	·67
Sheep	12,692,843	11·13	10,841,790	9·03	12,832,665	9·79
Pigs	282,457	·25	350,370	·29	333,281	·25

The animals are here compared with the number of inhabitants of Victoria. In the next table they are apportioned to the number of square miles in the State.

LIVE STOCK PER SQUARE MILE: RETURN FOR SIX CENSUS YEARS.

Year.	Average per Square Mile (Area of Victoria, 87,884 Square Miles).				
	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
1861	·87	2·25	5·97	65·78	·70
1871	2·38	2·41	6·42	119·22	2·05
1881	3·14	3·75	10·89	117·88	2·75
1891	4·97	4·50	15·79	144·43	3·21
1901	4·46	5·94	12·30	123·36	4·00
1911	5·37	7·61	10·00	146·59	3·79

The increase in each class was constant up to 1891, except for a slight fall in the number of sheep between 1871 and 1881. Between the censuses of 1891 and 1901, however, there was a reduction in the numbers of horses, cattle generally, and sheep; and between 1901 and 1911 there was a decrease in the number of cattle other than dairy cows, as well as in the number of pigs. The number of milch cows increased considerably in the decade, indicating the growth of the dairying industry, and explaining in part the largely augmented output of butter.

The following return shows the live stock in Victoria in each of the last four years. Tables showing the stock, classified in conjunction with holdings, in March, 1910, will be found on page 642; and the sheep, further classified in different sized flocks, in March, 1910, are enumerated on page 694:—

LIVE STOCK IN VICTORIA, 1908 TO 1911.

Live Stock.	1908.	1909.	1910.	1911.
Horses (including foals)...	424,648	424,903	442,829	472,080
Cattle—				
Dairy Cows	709,279	609,166	625,063	668,777
Other (including calves)	1,133,528	964,996	924,577	878,792
Sheep	14,146,734	12,545,742	12,937,983	12,882,665
Pigs	211,002	179,358	217,921	333,281

It will be seen that the figures for 1911 relating to all classes of stock, except cattle other than dairy cows and sheep, are above those for the previous year. Horses, which include 53,905 foals reared, show an increase of 29,251.

Prices of stock.

In the following table will be found a statement of the average and the range of prices ruling in Melbourne during the years 1909 and 1910 for live stock. The information has been extracted from the Melbourne *Stock and Station Journal*:—

PRICES IN MELBOURNE OF LIVE STOCK, 1909 AND 1910.

Stock.	Prices in 1909.									Prices in 1910.								
	Average.			Range.						Average.			Range.					
	£	s.	d.	£	s.	d.		£	s.	d.	£	s.	d.		£	s.	d.	
Horses.																		
Extra heavy draught	49	10	0	46	0	0	to	52	0	0	51	10	0	48	0	0	to	54	0	0
Medium draught ..	37	10	0	34	0	0	to	40	10	0	40	5	0	38	10	0	to	43	0	0
Delivery Cart ..	29	7	6	26	0	0	to	33	0	0	30	2	6	27	10	0	to	33	0	0
Order Cart	19	5	0	17	10	0	to	22	0	0	19	10	0	18	10	0	to	22	10	0
Indian Remounts ..	23	5	0	22	0	0	to	30	0	0	23	2	6	22	10	0	to	25	0	0
Saddle and Harness	12	2	6	11	0	0	to	13	0	0	12	7	6	11	10	0	to	14	0	0
Ponies	21	15	0	21	0	0	to	24	0	0	23	12	6	22	0	0	to	24	0	0
Fat Cattle.																		
Bullocks—																		
Extra Prime ..	13	9	0	10	19	0	to	15	10	0	12	2	0	10	11	0	to	14	2	0
Prime	11	12	0	10	0	0	to	13	5	0	10	9	0	9	7	0	to	12	8	0
Good	9	13	0	8	7	0	to	11	2	0	8	17	0	7	17	0	to	10	15	0
Good Light and Handy Weights ..	8	0	0	6	10	0	to	9	5	0	7	11	0	6	5	0	to	9	10	0
Second	6	13	0	5	10	0	to	7	15	0	6	10	0	5	12	0	to	8	0	0
Cows—																		
Best	8	3	0	6	19	0	to	9	5	0	7	9	0	6	7	0	to	8	15	0
Others	5	15	0	4	15	0	to	7	0	0	5	14	0	4	10	0	to	7	7	0
Young Cattle.																		
Prime Steers and Heifers	4	17	0	4	5	0	to	5	9	0	4	10	0	3	10	0	to	5	7	0
Calves, prime ..	2	14	0	2	2	0	to	3	0	0	2	11	0	1	15	0	to	3	0	0
,, good ..	1	18	0	1	9	0	to	2	5	0	1	15	0	1	2	0	to	2	2	0
Dairy Cattle.																		
Best Milkers ..	9	14	0	8	10	0	to	11	9	0	9	8	0	7	12	0	to	11	1	0
Good	7	2	0	5	10	0	to	8	15	0	6	19	0	4	10	0	to	9	10	0
Inferior	3	14	0	2	15	0	to	4	10	0	4	3	0	3	0	0	to	5	15	0
Springers, best ..	7	4	0	6	10	0	to	8	5	0	7	9	0	5	12	0	to	8	18	0
Heifers, best Springers	5	8	0	4	5	0	to	6	15	0	5	16	0	4	5	0	to	7	5	0
Dry Cows	3	9	0	2	12	0	to	4	0	0	3	9	0	2	7	0	to	4	0	0
Stores	2	14	0	2	5	0	to	3	0	0	2	14	0	2	5	0	to	3	2	0
Fat Sheep.																		
Wethers (cross)—																		
Extra Prime ..	0	17	7	0	12	2	to	1	3	3	0	19	4	0	12	3	to	1	5	6
Prime	0	15	8	0	11	0	to	1	1	0	0	17	1	0	11	4	to	1	2	6
Good	0	13	7	0	9	4	to	0	17	7	0	14	10	0	10	0	to	0	19	9
Ewes (cross)—																		
Extra Prime ..	0	14	9	0	9	11	to	1	0	3	0	16	6	0	11	3	to	1	2	9
Prime	0	12	11	0	8	6	to	0	17	0	0	14	2	0	9	3	to	0	19	6
Good	0	11	1	0	7	4	to	0	14	3	0	11	11	0	7	7	to	0	16	4

PRICES IN MELBOURNE OF LIVE STOCK, 1909 AND 1910—*continued.*

Stock.	Prices in 1909.			Prices in 1910.		
	Average.	Range.		Average.	Range.	
Fat Sheep—continued.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Wethers (merino)—						
Prime	0 13 9	0 9 6 to	0 18 1	0 15 5	0 9 9 to	1 0 9
Good	0 11 9	0 8 0 to	0 15 7	0 13 2	0 8 9 to	0 18 9
Ewes (merino) ..	0 10 0	0 6 7 to	0 14 5	0 10 8	0 6 3 to	0 16 9
Fat Lambs.						
Extra Prime ..	0 13 9	0 8 9 to	0 19 1	0 14 6	0 9 7 to	0 17 10
Prime	0 11 9	0 8 0 to	0 15 6	0 12 5	0 8 4 to	0 15 10
Good	0 9 11	0 7 2 to	0 12 10	0 10 5	0 6 10 to	0 13 9
Second	0 8 0	0 6 2 to	0 10 9	0 8 5	0 6 0 to	0 11 0
Pigs.						
Bacon Fatters—						
Extra Heavy Prime ..	5 5 0	2 15 0 to	6 12 0	4 4 0	2 15 0 to	5 12 0
Extra Prime and Weighty ..	3 13 0	2 10 0 to	5 2 0	2 17 0	1 18 0 to	3 10 0
Baconers—						
Extra Prime ..	3 2 0	2 7 0 to	3 10 0	2 13 0	2 2 0 to	3 4 0
Prime	2 16 0	2 5 0 to	3 3 0	2 9 0	1 17 0 to	2 19 0
Porkers	1 19 0	1 13 0 to	2 4 0	1 13 0	1 7 0 to	2 0 0
Stores	1 6 0	1 1 0 to	1 12 0	1 3 0	0 19 0 to	1 7 0
Slips and Suckers ..	0 14 0	0 8 0 to	0 19 0	0 11 0	0 8 0 to	0 15 0

Compared with 1909, the average prices of horses and sheep in 1910 point to improved values; but those of horned cattle, and pigs generally, show a reduction. The range of prices indicates fluctuations in value during each year as well as unevenness in the quality of all classes of stock.

Stock slaughtered.

The return of stock slaughtered in the last eight years was partly furnished by the municipal authorities, and partly collected by the police. The number includes those slaughtered on farms and stations, as well as in municipal abattoirs. Previous to 1903, the returns were furnished solely by the municipal authorities, an estimate being made of the stock slaughtered privately. The following is a statement of the stock slaughtered during each of the last eleven years:—

STOCK SLAUGHTERED: 1900 TO 1910.

Year.	Number Slaughtered.		
	Sheep and Lambs.	Cattle.	Pigs.
1900	2,371,415	248,797	231,752
1901	2,469,797	251,477	261,479
1902	2,827,938	233,206	224,431
1903	2,652,569	235,284	164,745
1904	2,305,729	243,937	191,311
1905	2,576,316	249,454	248,568
1906	2,826,144	261,034	274,391
1907	3,226,141	289,709	257,695
1908	3,309,865	279,710	225,162
1909	3,708,512	287,548	210,613
1910	4,245,881	319,665	257,287

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

PURPOSES FOR WHICH STOCK WERE SLAUGHTERED: 1900 TO 1910.

Year.	For Butcher and Private Use.			For Freezing.			For Preserving and Salting.			For Boiling Down.		
	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.	Sheep.	Cattle.	Pigs.
1900	1,921,284	244,571	119,137	437,332	3,808	..	9,181	115	112,604	3,618	303	11
1901	2,016,863	249,079	134,276	431,740	980	..	10,087	937	127,145	11,107	481	58
1902	2,337,262	229,728	106,390	378,029	2,293	..	13,211	485	117,984	99,436	700	57
1903	2,337,958	231,682	52,681	294,906	1,630	4,200	11,400	1,473	107,754	8,305	499	110
1904	1,843,896	242,276	67,302	459,963	720	3,200	1,095	699	120,758	775	242	51
1905	1,922,402	231,519	92,347	649,107	16,663	1,959	3,229	981	154,190	1,578	291	72
1906	2,170,581	251,004	96,618	651,914	8,009	2,580	2,522	1,476	175,120	1,127	545	73
1907	2,255,308	282,403	81,116	866,498	2,805	1,585	11,760	3,141	174,970	92,575	1,360	24
1908	2,480,072	260,529	71,309	773,396	15,789	2,296	10,775	2,015	151,478	45,622	1,377	79
1909	2,718,344	276,759	67,117	941,309	7,399	2,256	10,962	2,235	143,206	37,897	1,155	65
1910	2,592,514	302,282	91,850	1,573,516	13,009	1,557	41,420	3,624	163,844	38,431	750	36

The most noticeable figures in these tables are those relating to the sheep—a large proportion of which were lambs—slaughtered for freezing. The number in 1910 was considerably greater than in any previous year, which is an indication of the growth of the frozen meat trade in Victoria. In that year the oversea exports included 35,119,134 lbs. of lamb and 22,219,793 lbs. of mutton, valued at £501,533 and £259,042 respectively, all of which, excepting about ½ per cent., was sent to the United Kingdom.

Gain or loss in live stock.

The following is a return of the imports and exports of animals under principal heads during 1909. The export of horses was largely to New South Wales and India, and the other trade in live stock was principally with Australian States:—

LIVE STOCK IMPORTED AND EXPORTED, 1909.

	Number of—			
	Horses.	Cattle.	Sheep.	Pigs.
Imported	6,696	90,539	1,650,381	1,860
Exported	7,432	81,935	842,922	95
Net Imports ...	...	8,604	807,459	1,765
Net Exports ...	736	...	...	...

The information in this table, combined with that relating to stock held at the end of 1909 and stock slaughtered during that year, shows that there were no very serious losses by death of live stock during the year. By adding the increase in the number on hand, the stock slaughtered, and the stock exported (net) during 1909, it will be seen that after replacing losses by mortality, those reared give a net production for the year of about 18,600 horses, 254,400 cattle, 3,293,300 sheep, and 247,400 pigs. In consequence of the abolition of records of Inter-State imports and exports reliable estimates of the production during 1910 cannot be given.

In the last six years the wool production of the State has been arrived at by a method which gives a much more accurate estimate of the season's production than formerly. The information relating to the clip has been obtained direct from the growers, and an allowance has been made for the wool on Victorian skins, both stripped and exported. Previously, the wool production was estimated from the Customs returns for the calendar year, but it is considered that under the present method the production of each particular season can be better distinguished. Wool production.

VICTORIAN WOOL CLIP AND ESTIMATED TOTAL PRODUCTION, SEASON 1910-11.

Districts.	Wool Clip, 1910–11.		
	Sheep.	Lambs.	Total.
	lbs	lbs.	lbs.
Central	5,060,953	452,652	5,513,605
North-Central	5,879,238	550,845	6,430,083
Western	26,386,292	2,164,397	28,550,689
Wimmera	13,400,573	869,087	14,269,660
Mallee	3,951,065	301,796	4,252,861
Northern	11,400,629	993,308	12,393,937
North-Eastern	3,760,028	303,802	4,063,830
Gippsland	4,120,448	479,157	4,599,605
Total Clip* 1910–11	73,959,226	6,115,044	80,074,270
1909–10	71,006,003	5,673 606	76,679,609
1908–9	65,289,108	3,641,093	68,930,201
1907–8	72,542,779	6,577,194	79,119,973
1906–7	67,943,784	6,739,416	74,683,200
1905–6	58,919,314	5,258,557	64,177,871

—	1909-10.	1910-11.
	lbs.	lbs.
Wool clip	76,679,609	80,074,270
Estimated quantity of wool stripped from Victorian skins	6,551,844	7,450,158
Estimated quantity of wool on Victorian skins exported	12,101,376	14,279,216
Total production	95,332,829	101,803,644
Total value	£4,044,735	£4,318,100

* The average weight of the fleece in 1910-11 was—sheep, 6·99 lbs.; lambs, 2·50 lbs. ; sheep and lambs combined, 6·15 lbs.

The quantity of wool produced last season, as the result of a better average clip and an increased number of sheep, was 7 per cent. in excess of that for 1909-10. Its value—£4,318,100—was also 7 per cent. greater than in the previous season.

The following table shows the wool imported, exported, and used in the factories of the State, and the value of same. With an allowance for weight lost in washing and scouring and for the wool Wool imported, exported, and used locally.

on skins exported, the figures will give approximately the quantity of wool produced in each of the eleven calendar years, ending 1909:—

QUANTITY AND VALUE OF WOOL IMPORTED, EXPORTED, AND USED LOCALLY—1899 TO 1909.

Year	Wool Imported.		Wool Exported.		Wool Used in Manufactures in the State.				Wool Production—Greasy and Scoured (Approximately).	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Rate per lb.		Value.	Quantity.	Value.
	lbs.	£	lbs.	£	lbs.	s.	d.	£	lbs.	£
1899	63,067,135	2,351,059	121,877,604	5,701,410	2,867,884	1	0	143,394	81,678,353	3,493,745
1900	62,527,987	1,927,677	102,205,965	4,217,018	3,045,292	0	6	76,132	42,723,270	2,365,473
1901	61,796,450	1,840,066	131,623,062	4,350,285	3,408,526	0	6	85,213	73,235,138	2,595,482
1902	38,008,765	1,141,715	100,516,094	3,473,372	3,473,835	0	8	115,794	65,981,164	2,447,451
1903	36,726,396	1,381,647	84,560,603	3,186,054	3,772,390	0	9	141,464	51,606,597	1,945,871
1904	51,449,037	2,076,958	123,208,133	5,452,973	4,027,080	0	10	167,795	75,786,176	3,543,810
1905	67,935,833	2,911,556	125,181,191	5,420,259	4,493,041	0	10½	196,570	61,738,399	2,705,273
1906	82,989,583	3,578,056	141,696,567	6,154,382	4,765,687	0	10½	208,498	63,472,671	2,784,824
1907	70,940,674	3,111,249	167,506,728	7,372,148	5,600,873	0	9	210,033	102,166,927	4,470,982
1908	65,458,440	2,836,606	136,897,537	6,059,914	5,470,740	0	9	205,153	76,909,837	3,428,461
1909	77,341,336	3,405,759	164,255,173	7,062,370	5,239,806	0	9½	212,867	92,153,643	3,869,478

Complete information in regard to the trade between States during 1910 is not available, but it is known that during that year there were exported to oversea countries 164,213,073 lbs. of wool, valued at £7,190,789, of which 76,068,574 lbs., worth £3,460,658, had been imported from other States. The quantity of wool used locally in manufactures in the same year was 5,309,730 lbs., and its value, £210,177.

Wool production—Australasia.

The quantity and value of wool produced in 1909 in the various Australian States and New Zealand, estimated on the import and export returns, were:—

	Quantity. (Greasy, Washed, and Scoured.) lbs.	Value. £
Victoria	92,153,643	3,869,478
New South Wales	333,614,714	13,858,154
Queensland	99,674,283	4,773,347
South Australia	47,168,099	1,841,419
Western Australia	27,144,579	1,013,180
Tasmania	10,960,561	439,564
New Zealand	194,742,148	6,510,346

Prices of Wool.

The following information as to the average prices of wool per lb. prevailing during the past three seasons has been extracted from Messrs. Goldsborough, Mort, and Co.'s annual review:—

PRICES OF WOOL, 1908-9 TO 1910-11.

Class of Wool.	Average Value per lb. in—		
	1908-9.	1909-10.	1910-11.
GREASY MERINO.			
Extra Super (Western District)	17½d. to 19d.	18d. to 21d.	15d. to 18¼d.
Super	16d. to 17d.	16d. to 17½d.	13½d. to 14½d.
Good	13½d. to 14½d.	13d to 14½d.	11½d. to 12½d.
Average	12d. to 13d.	12d. to 13d.	11d. to 12d.
Wasty and Inferior	7½d. to 8½d.	7½d. to 9½d.	6½d. to 8d.

PRICES OF WOOL, 1908-9 TO 1910-11—*continued.*

Class of Wool.	Average Value per lb. in—		
	1908-9.	1909-10.	1910-11.
GREASY MERINO—*continued.*			
Extra Super Lambs	up to 21½d.	21d. to 23½d.	24d. to 27d.
Super Lambs	14d. to 16d.	15d. to 18d.	16d. to 19d.
Good Lambs	11d. to 12d.	11½d. to 13½d.	11d. to 12d.
Average Lambs	8d. to 8½d.	9d. to 10d.	8d. to 9d.
Inferior Lambs	5d. to 6d.	5d. to 6½d.	4d. to 5d.
GREASY CROSSBRED.			
Extra Super Comebacks ...	15d. to 16d.	17d. to 18¾d.	14d. to 15½d.
Super Comebacks	13½d. to 14½d.	15d. to 16½d.	13½d. to 14½d.
Fine Crossbred	11d. to 12d.	13d. to 14½d.	11½d. to 12½d.
Medium Crossbred	6½d. to 7½d.	10d. to 11d.	8d. to 9d.
Coarse Crossbred and Lincoln ...	5½d. to 6d.	8½d. to 9½d.	6¾d. to 7¾d.
Super Fine Crossbred Lambs ...	11½d. to 12d.	13d. to 16d.	12½d. to 14½d.
Good Crossbred Lambs ...	9½d. to 10½d.	11d. to 12d.	10d. to 11½d.
Coarse and Lincoln Lambs ...	7½d. to 8½d.	8d. to 9½d.	7½d. to 8½d.
SCOURED.			
Extra Super Fleece	21½d. to 23d.	24d. to 25½d.	22d. to 23½d.
Super Fleece	20d. to 21½d.	22d. to 23d.	20d. to 21d.
Good Fleece	18d. to 19½d.	20d. to 22d.	19d. to 20d.
Average Fleece	16½d. to 17½d.	19d. to 20d.	17½d. to 18½d.
RECORD PRICES FOR THE SEASON.			
Greasy Merino Fleece ..	19d.	21d.	18¼d.
" Comeback Fleece ...	16d.	18¾d.	15½d.
" Merino Lambs ...	21½d.	25½d.	27d.
" Comeback Lambs ..	12d.	16d.	14½d.
Scoured Fleece	23d.	25¼d.	23¼d.

Returns which were collected in March, 1910, gave full information in regard to the flocks of sheep in Victoria. The numbers of flocks and of sheep at that time in the different districts were as follows:— Flocks of sheep.

NUMBER OF FLOCKS AND OF SHEEP IN DISTRICTS, 1910.

District.	Number of—		Average Number of Sheep in a Flock.	Percentage of—	
	Flocks.	Sheep.		Flocks.	Sheep.
Central ..	2,592	982,754	379	10·69	7·63
North-Central ..	2,043	972,439	476	8·43	7·55
Western ..	5,445	4,327,632	795	22·45	33·58
Wimmera ..	4,038	2,250,811	557	16·65	17·47
Mallee ..	1,118	631,337	565	4·61	4·90
Northern ..	4,659	2,020,911	434	19·21	15·68
North-Eastern ..	1,985	797,999	402	8·19	6·19
Gippsland ..	2,368	901,483	381	9·77	7·00
Total ..	24,248	12,885,366	531	100·00	100·00

The figures do not include 52,617 sheep which were travelling on roads, or were located in cities and towns. The average number of sheep to a flock in Victoria was 531, and this average was exceeded in three of its divisions—the Western, Wimmera, and Mallee Districts. There were some very large-sized flocks in the Western District, and, as a consequence, it contained 33½ per cent. of the total sheep in the State, though it possessed only 22½ per cent. of the total flocks. In the Central, North-Eastern, and Gippsland districts, which contained 28½ per cent. of the flocks, but only 21 per cent. of the sheep, there was a much better distribution, and also the evidence that the raising of lambs and the production of wool were combined more with cultivation than in other districts of the State. From 1906 to 1910 there had been an increase of 8,181 flocks, and of 1,545,244 sheep, each district having contributed to the increase of flocks and, with the exception of the Central and Western Districts, to the increase of sheep. The average number of sheep in a flock had decreased in each district, that of the State as a whole having been reduced during the period from 706 to 531. The decrease in the average size of flocks, combined with the increase in the number of sheep, is evidence of the growing popularity of sheep-farming. Excluding sheep travelling and in cities and towns, the following table contains a classification for the whole State of sheep according to sizes of flocks:—

SHEEP ACCORDING TO SIZES OF FLOCKS, 1910.

Size of Flocks.	Number of—		Percentage of—	
	Flocks.	Sheep.	Flocks.	Sheep.
Under 500	18,589	2,614,051	76·66	20·29
500 to 1,000 ..	3,205	2,267,722	13·22	17·60
1,001 „ 2,000 ..	1,477	2,100,701	6·09	16·30
2,001 „ 3,000 ..	378	923,881	1·56	7·17
3,001 „ 5,000 ..	258	994,634	1·07	7·72
5,001 „ 7,000 ..	107	629,821	·44	4·89
7,001 „ 10,000 ..	93	797,754	·38	6·19
10,001 „ 15,000 ..	69	850,294	·29	6·60
15,001 „ 20,000 ..	35	624,688	·14	4·85
Over 20,000 ..	37	1,081,820	·15	8·39
Total	24,248	12,885,366	100·00	100.00

Flocks of over 15,000, though not very numerous, being only about one in every 337, accounted for over 13 per cent. of all sheep, whilst those in the most general size—under 500 sheep—comprised 77 per cent. of the total flocks, and only 20 per cent. of the sheep. Of the largest flocks, 25 containing 712,609 sheep belonged to the Western District counties, and 4, containing 128,775, to the Central District counties. Flocks of from 15,001 to 20,000 were also chiefly confined to the Western District, where 28 of them, representing

491,367 sheep were found—so that as regards this size the district possessed four-fifths of the flocks and sheep in the State. The Western District had, altogether, over 33½ per cent. of the total sheep in Victoria, but only 18 per cent. of the number in this district was in flocks up to 1,000. In every other district the keeping of sheep was combined with agriculture to a much greater extent, as of the total in each district the proportion per cent. in flocks up to 1,000 was, in the Northern, 53; Mallee, 50; Wimmera, 48; North-Eastern, 47; Gippsland, 44; North-Central, 44; and in the Central, 43. Between 1906 and 1910, the flocks up to 1,000 increased by 7,740, or 55 per cent., and the sheep in them by 1,501,078, or 44 per cent.; while in the same period the flocks over 1,000 increased by 441, or 22 per cent., and the sheep in them by only 44,166, or less than 1 per cent.

Breed of sheep.

An estimate of the numbers of sheep of different breeds in Victoria at March, 1910, was as follows:—

SHEEP ACCORDING TO BREED, MARCH, 1910.

Breed of Sheep.	Number.
Merino	4,657,500
Comeback	2,976,000
Crossbred, coarse	1,682,000
,, Shropshire and Southdown	1,552,500
Lincoln	905,500
Shropshire	517,500
Other	646,983
Total	12,937,983

Lamb Raising.

The export trade in frozen lamb began in 1892, and in the years that have since elapsed, it has so enormously developed that it is now recognised as one of the principal industries of the State. In 1892, 11,794 centals of beef and mutton, and in 1894, 111,715 centals of mutton, or some 250,000 carcases, were exported. In two years from its inception the trade had increased tenfold, and this prosperous beginning was the index of its future expansion. For three or four years after the inception of the trade mutton was the chief export, but in 1896 the export of lambs commenced to be seriously viewed by graziers. The trade in lambs has since grown to such an extent that even the most sanguine prophecies concerning it seem likely to fall short of realization. In 1909, 941,309 carcases —760,308 of lamb, and 181,001 of mutton—and in 1910, 1,573,516 carcases—1,087,179 of lamb, and 486,337 of mutton—were exported.

The soil and climate of Victoria are well suited to the economical production of both lamb and mutton, and properly selected breeds of sheep are profitable, not only as meat but as wool producers. The

climate permits of flocks being kept on open pasture all the year round, and there are certain districts where, in consequence of exceptionally mild conditions prevailing, the industry can be carried on with absolute success.

The growing of wheat and the raising of lambs are two industries which are mutually dependent; farmers should, therefore, more actively combine these pursuits, as in so doing they will effect subtle transmutations in farming operations. Sheep, moreover, keep fields free from weeds, in addition to causing an enrichment of the ground.

In Victoria the legislative trend is towards the breaking up of large estates, and many small holdings have been established. With the extension of the intense culture methods that are being impressed on farmers, lamb-raising is becoming an extensive industry. Oversea markets for mutton and lamb are continually being opened up, so that there is no risk of the trade being overdone.

The demand for lamb in Britain alone steadily increases, and supply and means of transport are factors that demand considerable attention. In the season for 1910, freight was freely offering, and carcases were therefore rapidly shipped to oversea markets. The general meat supplies for the increasing populations of Europe fall far short of requirements, and it is expected that the markets of Germany and Austria, now closed to Australian meats, will soon be thrown open, and will furnish a further impetus to our trade.

The demand in Europe and America for mutton and wool is persistently increasing, while the supplies of these commodities are relatively decreasing in consequence of the continuous growth and spread of population, and the increasing inability of stock owners in old countries to augment their flocks, because of the proportionate contraction of their grazing lands. Old lands whose territories are limited, and whose populations are vast and increasing, cannot find room to depasture the great flocks and herds necessary to meet their requirements, and so must look for supplies of meat and wool to newer lands, where sheep will flourish and where extensive grazing areas are available. The possibilities, then, for settlers in Victoria who may embark in the industry of raising lambs for export oversea are unbounded; the hours of toil are neither long nor exacting, and the industry is now one of the most profitable and popular of farming occupations. With the continuous breaking up of large estates and the settlement of increasing numbers of small sheep-farmers on the land, mutton will become the primary and wool the incidental consideration, instead of the present reverse condition existing.

If special fodder crops were generally grown and methods of husbandry practised on the same lines as in New Zealand, it should be quite possible for Victoria to soon possess 25,000,000 sheep, whereas at present the number is only 12,882,665. The carrying capacity of a farm is increased by growing special fodder crops, but at the present time, although unlimited markets exist abroad, graziers do not make

sufficient special provision for feeding their stock. They, for the most part, rely entirely on the natural pastures. If systematic efforts were made to extensively grow fodder crops, graziers would not only materially augment their own incomes, but would also increase the resources and prosperity of the State.

Where rainfall is certain and irrigation possible lucerne as a mainstay fodder should be grown, for the cultivation of this crop vastly increases the carrying capacity of the farm. When the irrigation schemes of the Northern areas are completed an enormous impetus will be given to lamb production. Lucerne, rape, kale and turnips, which are the best fattening fodders for sheep, will then, no doubt, be grown in great luxuriance.

There is no limit to the demand for meat in Europe, and the only real rival we have in oversea markets is the Argentine Republic, for there the seasons correspond with our own. Victoria is a State peculiarly free from diseases that decimate flocks, and in this respect is in a much more fortunate position than the Argentine, where State assistance towards promoting prosperity and checking ravages of disease is not rendered to the same extent as in Victoria.

The possibilities, then, for farmers engaging in the trade of raising lambs in this State for export are very great, and no apprehension need be felt that the outlet for lambs is likely to become contracted. The significant feature to be kept in mind is that the number of sheep all the world over is not keeping pace with the increase in population. Europe is now finding that it must largely depend on oversea countries for its meat supplies.

Raising lambs, although not an arduous vocation, is a calling in which one must possess some knowledge of farm practice and of the management of flocks, in addition to having an acquaintance with diseases incidental to sheep, before one can hope to meet with success. Settlers who take up this work will, however, experience but little difficulty in gaining knowledge, inasmuch as the State officers are always prepared to proffer advice on any difficulties that may crop up.

Pork.

The breeding of pigs for export, either in the form of pork or bacon, if conducted on systematic lines, should prove a remunerative business. As an adjunct to dairying and general farm operations pig-breeding should be considered an indissoluble factor. Pigs are the best agents to profitably use up the waste products of a farm, and separated milk and damaged grain can profitably be converted into pork. Notwithstanding the incessant demand for pig products, farmers regard with some indifference this important branch of agriculture. There are only 333,281 pigs in the State at the present time, and this number could be enormously and advantageously increased, for there is a continuous demand in the old world for products of swine origin. It is estimated that in the principal countries of the world there exist 137,448,000 pigs. During 1910 only 1,557 carcases of pork were exported from Victoria.

Beef and Veal.

The raising of beeves for export is not as yet a great undertaking in the State, although the industry is capable of being established in districts where water is plentiful and where special fodder crops can be advantageously grown. The rearing of milk herds is an important business in Victoria, for the production of milk is one of the staple industries of the State. The number of cattle being raised in the world is not keeping pace with the increase of population, and therefore short supplies of beef in thickly populated countries must inevitably occur. It is estimated that there are about 448,460,000 cattle in the civilized countries of the world.

It is possible for Victoria to raise extensive herds, not only of dairy cattle, but also of beeves to furnish meat supplies for oversea markets. During 1910, there were exported 5,832 carcases of beef, and 3,893 carcases of veal.

Live stock in Australia and New Zealand.

In the subsequent statement are given the total number and the number per square mile of horses, cattle, sheep, and pigs in the various Australian States, according to the returns for the end of 1910, and in New Zealand as at the end of 1908:—

LIVE STOCK IN AUSTRALASIA, 1910.

State.	Horses.	Cattle.		Sheep.	Pigs.
		Milch Cows.	Other.		
	Total Number.				
Victoria	472,080	668,777	878,792	12,882,665	333,281
New South Wales	650,594	865,639	2,266,589	45,825,308	321,544
Queensland ..	593,813	365,444	4,766,255	20,331,838	152,212
South Australia* ..	249,326	119,628	265,234	6,267,477	96,386
Western Australia..	134,114	30,785	794,255	5,158,516	57,628
Tasmania ..	41,388	52,966	148,888	1,788,310	63,715
New Zealand (1908)	363,259	536,629	1,236,697	23,480,707	245,092
	Number per Square Mile.				
Victoria	5·37	7·61	10·00	146·59	3·79
New South Wales	2·10	2·79	7·30	147 65	1 04
Queensland ..	·89	·55	7·11	30·32	·23
South Australia ..	·66	·31	·70	16·49	·25
Western Australia..	·14	·03	·81	5·29	·06
Tasmania ..	1·58	2·02	5·68	68·22	2·43
New Zealand (1908)	3·47	5·12	11·80	224·16	2·33

* Exclusive of Northern Territory, the return for which shows that in 1910 there were 24,509 horses, 513,383 cattle, 57,240 sheep and 996 pigs.

When a comparison is made between the above figures and those for previous years relating to the different States of Australia, the most striking feature presented is the all-round increase in the number of pigs in each of the last two years. This is specially noticeable on account of the successive decreases which occurred in the three years preceding 1909. The reduction between 1905 and the end of

1908 was as much as 37 per cent. in Western Australia, 34 per cent. in Victoria and Tasmania, 33 per cent. in South Australia, 30 per cent. in New South Wales, and 24 per cent. in Queensland. There was no apparent reason for these reductions, as the rearing of pigs has always been a most profitable adjunct to farming or dairying, and it is satisfactory to note that in 1910 there were increases over 1908 of 86 per cent. in Victoria, 49 per cent. in New South Wales, 33 per cent. in Tasmania, 23 per cent. in South Australia and Western Australia, and 22 per cent. in Queensland. The number of horses showed an increase last year in each Australian State, that of cattle in each State except Victoria, and that of sheep in each State except Victoria, New South Wales and South Australia. The stock, in proportion to area, are evidently most numerous in New Zealand, which possesses horses, cattle, and sheep equal to about 360 sheep to the square mile; Victoria comes next with 306; then follow New South Wales with 229; Tasmania with 130; Queensland with 85; South Australia with 29; and Western Australia, with the lowest average, it having stock equivalent to 12 sheep to the square mile.

World's supply of sheep.

The following is a statement of the number of sheep in the world at the latest dates for which information is available, according to the *Year-Book*, United States Department of Agriculture:—

NUMBER OF SHEEP IN THE WORLD, 1910.

	No. of Sheep.
United Kingdom	31,167,000
Other European countries	152,104,000
Total Europe	183,271,000
Australia and New Zealand	115,735,000
Asia	92,849,000
Africa	50,293,000
North America...	63,887,000
South America...	99,593,000
Total	605,628,000

Ensilage.

Judging by the slow progress being made in the preservation of forage in a green state, it is still necessary that the attention of the public should be drawn to its importance. Not only will stock eat anything of a vegetable nature that will make useful ensilage, but ensilage-fed animals at all times present an appearance of health and vigour. It cannot be affirmed that the uncertainty of the result of the system need militate against the trial. The silo is no longer in an experimental stage. Ancient nations are known to have practised the preservation of forage and fruits in a green state in large subterranean vaults; and for upwards of twenty years experiments on a large scale have been carried on, particularly in America, where the almost universal testimony of farmers is to the resulting economy in the feeding of cattle, and the consequent increased stock-carrying capacity of the land. As a result of these experiments, many farmers have introduced silos upon their holdings,

but it is a matter of surprise that so little has been done in Australia. Professor Cherry, in a paper on "The Modern Silo," points out particularly that "animals which chew the cud differ from all other classes in requiring their food comparatively juicy and bulky. Their digestive apparatus is formed to suit this kind of food. Hence the cow or bullock cannot thrive on exclusively dry food so well as a horse." In Victoria, where every season the rapid drying up of the grass under the excessive heat of the summer sun causes large areas of pasture land to be parched and grassless, and where green food usually disappears from December till Autumn, an artificial method of preserving fodder should be of the utmost possible benefit, as the advantage of the luxuriance of trefoil, grasses, and self-sown crops in the spring would not then be lost. The juicy state in which the silo preserves ensilage fulfils another of the requirements of ruminant animals, viz.:—that their food should be presented in a succulent condition. Even in districts where fresh green fodder is available throughout the greater part of the year, the advantage of being able to secure the crop when it is in its best condition seems so evident, that the silo should soon become an indispensable adjunct on every farm.

The returns for Victoria relating to the years 1901 to 1911 show that in the season 1909-10 there was a substantial increase in the number of farmers who made ensilage, and in the material used, as compared with the previous seasons, but that in 1910-11 there was a decline in both items. The following figures show how much has been done in the direction of making ensilage since 1900:—

ENSILAGE RETURNS, 1900-1 TO 1910-11.

Year Ended March.	Number of Farms on which made.	Number of Silos (Pits and Stacks).	Weight of Materials Used.
			Tons.
1901	131	..	5,834
1902	125	..	5,065
1903	111	..	4,703
1904	290	..	10,931
1905	300	..	12,779
1906	160	218	7,240
1907	210	278	10,581
1908	203	260	11,031
1909	392	494	18,205
1910	518	656	27,280
1911	460	555	25,969

Bee-keeping.

The returns for 1909-10 show that there were in that year 3,976 bee-keepers who owned 29,761 frame and 12,871 box hives, producing 1,438,121 lbs. and 173,163 lbs. of honey respectively, and 22,369 lbs. of beeswax. In 1910-11 there were 4,043 bee-keepers who owned 36,651 frame and 16,111 box hives, producing 2,168,107 lbs. and 140,298 lbs. of honey respectively, and 34,695 lbs. of beeswax.

The number of bee hives increased from 21,412 in 1900-1 to 49,120 in 1904-5, after which it declined to 40,595 in 1908-9, but it again increased to 52,762 in 1910-11. In 1891-2, the quantity of honey returned was 1,128,283 lbs.; after a decline in the next two years, the quantity gathered in 1894-5 was 1,323,982 lbs.; a falling off was recorded from that year to 1897-8, when the return was 195,163 lbs. A recovery has since been made, and the returns for the last seven years indicate that the industry is making good progress. The production of honey in 1910-11, though slightly less than in 1908-9, was over 43 per cent. greater than in 1909-10. The increase last year occurred in the Western, Wimmera, Mallee, and Gippsland districts, where the quantity of honey produced was in excess of that for the previous year by 1,006,592 lbs., the counties showing the greatest increases being Borung, Lowan, and Dundas. In the Central, North-Central, Northern, and North-Eastern districts, the production was less than in 1909-10 by 309,471 lbs.

BEE-KEEPING, 1900-1 TO 1910-11.

Season ended May.	Number of Bee-keepers.	Bee Hives.	Honey.	Beeswax.
			lbs.	lbs.
1901	2,293	21,412	957,020	15,269
1902	3,776	22,083	572,477	13,530
1903	4,402	32,126	1,199,331	23,061
1904	5,609	40,759	833,968	18,979
1905	6,494	49,120	1,906,188	28,653
1906	5,300	41,780	1,209,144	21,844
1907	4,974	48,005	2,965,299	46,780
1908	4,745	43,212	1,138,992	24,521
1909	4,303	40,595	2,373,628	38,674
1910	3,976	42,632	1,611,284	22,369
1911	4,043	52,762	2,308,405	34,695

Poultry.

The numbers of the various kinds of poultry in the State, in March, 1911, were as follows:—

Fowls	...	...	3,855,538
Ducks	...	...	288,413
Geese	...	...	59,851
Turkeys	...	...	190,077

Taking the above figures as a basis, it is estimated that the gross value of poultry and egg production for the year 1910 was £1,592,000.

The following table shows the number of poultry and poultry-owners as ascertained in each of the last four census years :—

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

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

It thus appears that there was an increase in the number of poultry-owners between 1901 and 1911, and although geese and turkeys showed a slight decrease, there was an increase in fowls and ducks. The United Kingdom in the five years ended December, 1910, imported annually £7,189,368 worth of eggs, of which 38 per cent. was from Russia, 24 per cent. from Denmark, 10 per cent. from Austria-Hungary, 7½ per cent. from Italy, 6 per cent. from France, 5 per cent. from Germany, 9 per cent. from other foreign countries, and only ½ per cent. from British countries. It also imported in these years an annual average of £889,900 worth of poultry, 99 per cent. of which was from foreign countries.

State expenditure on rabbit destruction.

Active operations for the destruction of rabbits, &c., on Crown lands were first undertaken by the Government in 1880, and from that date to 30th June, 1910, sums amounting to £544,656 had been expended in connexion therewith, including subsidies to Shire Councils for the destruction of wild animals. The following are the amounts spent since 1879 :—

EXPENDITURE ON DESTRUCTION OF RABBITS, ETC.

	£		£
1879-80 to 1888-9 ...	142,963	1904-5	16,603
1889-90 to 1898-9 ...	208,638	1905-6	16,477
1899-1900	14,801	1906-7	16,513
1900-1... ...	15,817	1907-8	17,585
1901-2... ...	17,250	1908-9	22,756
1902-3... ...	16,489	1909-10 ...	23,005
1903-4... ...	15,759		

In addition to the expenditure of £544,656 referred to above, a loan of £150,000 for the purchase of wire-netting to be advanced to land-holders was allocated to shires in 1890, and one of £50,000 in 1896, both of which have been repaid. Further sums amounting

to £45,850 in 1908-9, and £10,734 in 1909-10 were advanced from loans for the purchase of wire-netting for supply to municipalities and land-owners. A complete system, administered by an officer called the Chief Inspector under the Vermin Destruction Act, exists for effectually keeping the rabbits under control.

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

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

RABBITS, HARES, AND WILD-FOWL SOLD AT THE MELBOURNE FISH MARKET, 1902 TO 1910.

Year.	Rabbits.	Hares.	Wild Fowl.
	pairs.	brace.	brace.
1902 ...	471,964	2,401	32,756
1903 ...	316 462	1,024	13,130
1904 ...	402,944	1,466	49,556
1905 ...	364,066	903	47,348
1906 ...	275,166	535	28,610
1907 ...	298,024	260	58,210
1908 ...	231,216	148	20,634
1909 ...	235 548	163	42,240
1910 ...	245,208	130½	34,180

Frozen rabbits, &c., exported.

Large quantities of frozen rabbits and hares have been exported to the United Kingdom and other oversea countries during recent years, the numbers and values for the last nine years being as follows:—

FROZEN RABBITS AND HARES EXPORTED OVERSEA: 1902 TO 1910.

Year.	Quantity.	Value.
	pairs	£
1902	3,213,376	158,043
1903	3,447,077	165,580
1904	4,045,036	125,038
1905	5,093,952	219,665
1906	4,622,307	221 064
1907	3,251,231	154,789
1908	1,743,466	84,835
1909	1,675,578	82,182
1910 ...	1,372,087	68.469

In 1910 the exports oversea from Victoria also included 3,395,383 lbs. of rabbit and hare skins, valued at £199,562, and sent principally to the United Kingdom and the United States of America.

Fishing industry.

The following tables give information regarding the fishing industry. The first shows the various fishing stations round the coast and on the Murray and Goulburn Rivers, the number of men and boats engaged, and the value of the general fishing plant in use. The second shows the approximate quantity and value of Victorian and other fish sold in the Metropolitan market during the years 1909 and 1910; and the third shows the quantity and value

of Victorian fish sold in the Melbourne, Ballarat, and other markets during 1910:—

FISHING INDUSTRY—MEN AND BOATS EMPLOYED, 1910.

Fishing Stations.	Number of Men.	Boats.		Value of Nets and other Plant.
		Number.	Value.	
			£	£
Anderson's Inlet	10	7	98	150
Barwon Heads and Ocean Grove ..	9	6	525	200
Brighton	8	5	125	86
Corner Inlet, Welshpool, and Toora ..	50	49	3,042	534
Dromana	20	14	641	243
Echuca	8	11	360	268
Frankston	10	10	153	148
Geelong	53	20	953	719
Gippsland Lakes	358	243	6,028	3,731
Kerang	4	4	23	92
Lorne	6	3	29	60
Mallacoota	12	6	85	465
Mentone	9	9	90	85
Mordialloc	9	7	296	158
Mornington	19	16	698	338
Nathalia	25	15	38	20
Portarlington and St. Leonards ..	59	40	1,006	601
Portland	40	24	1,600	671
Port Albert	44	40	1,469	651
Port Fairy	31	19	795	265
Port Melbourne	60	37	1,197	595
Queenscliff	92	51	5,275	452
Sandringham	18	16	629	54
Sorrento, Portsea, and Rye	23	23	1,485	358
St. Kilda	6	3	43	100
Swan Hill	4	4	173	104
Warrnambool	3	4	95	70
Western Port (Cowes, Hastings, Flinders, San Remo, and Tooradin) ..	78	45	1,257	778
Williamstown	20	11	406	117
Total	1,088	742	28,614	12,143

The quantities and values of Victorian and other fish sold in the Melbourne Fish Market during the last two years were as shown hereunder:—

FISH SOLD IN THE MELBOURNE FISH MARKET, 1909 AND 1910.

—	1909.		1910.	
	Quantity.	Value.	Quantity.	Value.
		£		£
Fresh Fish (Victorian) lbs.	10,141,550	63,384	9,612,598	60,080
Crayfish (Victorian) .. doz.	26,112	6,528	28,793	7,198
Imported Fish (fresh or frozen) lbs.	2,405,960	32,580	2,166,040	33,844
Oysters .. .. cwt.	20,797	10,418	21,929	18,796
Total	..	112,910	..	119,918

In addition to the above, 1,427 cwt. of smoked fish, and 261 baskets of prawns were sold in this market in 1910.

The quantity and value of fish caught in Victorian waters, and sold in the Melbourne and Ballarat markets and elsewhere in 1910 were as follows:—

VICTORIAN FISH SOLD IN 1910.

Markets.	Quantity.		Value.	
	Fish.	Crayfish.	Fish.	Crayfish.
	lbs.	doz.	£	£
Melbourne	9,612,598	28,793	60 080	7,198
Ballarat	672,000	2,051	3,636	379
Other	158,625	1,215	990	304
Total	10,443,223	32,059	64,706	7,881

In connexion with this subject, the quantities and values of the different classes of fish imported are of interest. The figures for the last two years are as follows:— Fish imported.

FISH IMPORTED, 1909 AND 1910.

—	1909.—Interstate.		1909.—Oversea.		1910.—Oversea.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
Fish—		£		£		£
Fresh or Preserved by cold process lbs.	1,772,999	22,720	758,545	11,076	717,500	12,226
Smoked .. „	127.016	662	99,793	3,322	32,951	1,729
Fresh Oysters cwt.	16,941	8,529	7,935	4.145	8,185	4,321
Potted, &c. ..	..	41	..	4,559	..	4,929
Preserved in tins, &c. .. lbs.	117,177	3,266	4,823,366	116,931	5,195,150	138,045
N.E.I. .. cwt.	214	356	5,815	9,434	4,840	7,289
Total ..	..	35,574	..	149,467	..	168,539

The most important item in this table is fish preserved in tins and other air-tight vessels, of which 4,628,564 lbs., or 89 per cent. of the imports from oversea countries, came from the United Kingdom, the United States, and Canada in 1910.

In Victoria the natural conditions are eminently suitable for agricultural and pastoral pursuits, and there is room for considerable expansion in these avenues of production. There is little need to fear over-production, as the United Kingdom offers an almost unlimited Imports by United Kingdom of articles that may be further developed in Victoria

market for the consumption of many articles which could be supplied from this State and would give very profitable employment. The magnitude of the importations by the United Kingdom of certain articles that can be profitably produced here is revealed by the particulars given in the table which follows. The figures, which are taken from the United Kingdom Board of Trade returns, represent the average annual imports for the five years 1906 to 1910 :—

AVERAGE ANNUAL IMPORTS INTO THE UNITED KINGDOM, 1906 TO 1910.

Articles.	Annual Value of Imports into United Kingdom from—			
	Australia.	Other British Possessions.	Foreign Countries.	All Countries.
	£	£	£	£
Butter	2,779,196	1 912,699	18,683 594	23.375,489
Cheese	5,098	5.626,316	1.336.004	6,967,418
Eggs		37 930	7.151,438	7,189.368
Meats	2,982,108	6,574 256	32,515 000	42.071.424
Poultry and Game ..	12,776	12,031	988,388	1,013,195
Fruit —Fresh, Dried, and Preserved	311.916	1,396.408	12.527,891	14.236,215
Sugar	1,847	1,181,535	19,352,463	20,535,845
Flax and Hemp	..	9 5 221	6,356,926	7,262,147
Maize	..	606.039	11,270.443	11.876.482
Wheat	3.777,875	11 645,281	24,127.059	39,550.215
Wheatmeal and Flour ..	197.610	1,00 .686	5.291,286	6,493.582
Wine	122,889	22.964	3,798.790	3,944.643
Leather	421,784	2,901.304	6,084,557	9.407,545
Skins, Furs, and Hides ..	1,699,674	3.6 7.378	6,612,842	11,969.894
Tallow and Stearine ..	1,171,045	687,434	1,534,893	3,393,372
Wool—Sheep's or Lambs' ..	13.518.208	12,063,718	5,124,951	30,706,877

As regards the sixteen articles specified, the requirements of the United Kingdom are to the extent of 68 per cent. met by foreign countries. Only 11 per cent. is supplied by Australia, where bountiful soils and a salubrious climate, especially in Victoria, give an opportunity of doing much more than at present in the supply of butter, meats, fruit, breadstuffs, &c. That it requires only increased population to enormously swell the output of primary products is apparent if a comparison be made with Great Britain, which is of equal size and less favoured generally by climate. The figures for 1910 relating to agriculture and live stock in Victoria and Great

Britain are for comparative purposes placed side by side in the table which follows :—

AGRICULTURE AND LIVE STOCK IN VICTORIA AND GREAT BRITAIN, 1910.

—		Victoria.	Great Britain.
Area	acres	56,245,760	56,214,153
Wheat produced	bushels	34,813,019	54,877,248
Oats produced	,,	9,699,127	121,829,000
Barley produced	,,	1,340,387	56,472,104
Peas and Beans produced	,,	223,284	12,674,944
Potatoes produced	tons	163,312	3,477,139
Turnips and swedes produced ..	,,	7,481*	25,695,018
Mangolds produced	,,	17,654	9,352,995
Hay produced	,,	1,292,410	9,516,630
Horses	No.	472,080	1,545,376
Cattle	,,	1,547,569	7,037,327
Sheep	,,	12,882,665	27,102,945
Pigs	,,	333,281	2,349,946

* Includes beet, carrots, and parsnips.

It should be possible in Victoria to have as great a production from agriculture and to maintain as many live stock as in Great Britain.

MINING.

The mining industry has received considerable assistance from the State Treasury, details of which are given in the following statements :— State expenditure in aid of Mining Industry.

EXPENDITURE ON MINING : 1905-6 TO 1909-10.

—	1905-6.	1906-7.	1907-8.	1908-9.	1909-10.
	Expenditure from Consolidated Revenue.				
	£	£	£	£	£
Mining Department	25,431	26,200	26,531	24,910	25,795
State Coal Mine	...	...	...	...	46,695
Acquisition and Resumption of Land, Wonthaggi	...	...	...	...	6,332
Victorian coal—Allowance to Railway Department on carriage of	10,807	11,302	7,541	7,419	11,093
Diamond drills for prospecting ...	11,231	13,124	13,150	11,805	15,978
Testing plants	2,463	2,548	2,093	2,203	3,846
Geological and underground surveys of mines	5,469	5,631	5,701	5,628	6,014
Mining Development—					
Advances to companies. &c., boring for gold, coal, &c. ...	...	...	...	19,465	24,767
Miscellaneous	777	916	2,274	8,094	9,887
	56,178	59,721	57,290	79,524	150,407

EXPENDITURE ON MINING: 1905-6 TO 1909-10—*continued.*

—	1905-6.	1906-7.	1907-8.	1908-9.	1909-10.
	Expenditure from Surplus Revenue.				
Mining Development— Advances to companies, &c., boring for gold, coal, &c. ...	£ 13,787	£ 13,677	£ 21,757	£ 19,357	£ 5,001
	Expenditure from Loan Moneys.				
Mining Development— Advances to companies, &c., boring for gold, coal, &c. ...	83	...	...	...	...
State Coal Mine	...	...	...	...	35,906
Total	70,048	73,398	79,047	98,881	191,314

Yearly grants are also made to Schools of Mines, particulars of which will be found on page 280 of this work. Since 1st July, 1896, £306,928 has been apportioned from loan receipts and expended on mining development, particulars of which expenditure are shown in the following statement:—

LOAN MONEY EXPENDED ON MINING DEVELOPMENT.

	£
Advances to companies—Development of mining ...	62,740
,, ,, Boring for gold and coal, &c....	62,532
Construction of roads and tracks for mining	57,579
Plant for testing metalliferous material	12,357
Construction of races and dams	8,260
Advances to miners for prospecting	27,839
Purchase of cyanide process patent rights	20,000
Equipping Schools of Mines with mining appliances ...	9,975
State Coal Mine	35,906
Miscellaneous	9,740
Total	306,928

The advances from loan moneys and revenue to mining companies to 30th June, 1910, for the development of mining totalled £134,366, of which sum £17,534 had up to that date been repaid, £12,593 realized, and £11,709 written off, leaving £92,530 outstanding. Interest paid during 1909-10 amounted to £1,119, and interest outstanding on 30th June, 1910, to £3,973.

The following statement shows the manner of occupation of all persons connected with mining industries throughout the State according to the Census returns of 1901 :— Persons engaged mining, 1901.

RETURN OF PERSONS ENGAGED IN MINING PURSUITS, 1901.

Persons following Mining Pursuits.	Employers of Labour.		In business on their own Account, but not employing Labour.		Receiving Salary or Wages.		Relatives assisting.		Not at work for more than a week prior to Census.	
	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.	Male.	Female.
Mines Department officer (not Geologist)	..	..	..	..	76	3	..	1	..	..
Mining engineer, inspector, surveyor, (not Government) ..	15	..	32	..	90	..	..	..	11	..
Mine, gold (quartz), proprietor, manager, worker ..	216	2	1,567	..	7,747	..	65	..	925	..
„ gold (alluvial), proprietor, manager, worker ..	87	..	4,141	..	4,285	..	107	..	448	..
„ gold (undefined), proprietor, manager, worker ..	35	1	682	..	1,142	..	20	..	213	..
„ (undefined), proprietor, manager, worker ..	79	1	1,165	..	4,264	..	30	..	624	..
„ tin (lode), worker ..	..	..	1	..	..	..	..	..	1	..
„ tin (alluvial), proprietor, manager, worker ..	..	..	9	..	9	..	..	..	1	..
„ silver, proprietor, manager, worker	..	..	..	..	2	..	..	..	3	..
„ coal, proprietor, manager, worker	10	..	8	..	844	..	..	..	32	..
„ copper, manager, worker	..	..	1	..	9	..	..	..	2	..
„ precious stones, manager, worker	1	..	3	..	..	..	..	..	1	..
„ expert, amalgamator, diamond drill worker ..	5	..	12	..	56	..	..	..	3	..
„ director, agent, legal manager, clerk, secretary ..	65	..	97	1	334	8	1	1	17	..
Quartz crusher	17	..	14	..	573	..	1	..	30	..
Pyrites worker, ore roaster ..	2	..	2	..	61	..	..	..	2	..
Cyanide worker, &c.	32	..	7	..	170	..	..	..	1	..
Smelter, gold	..	..	1	..	3	..	..	..	..	..
„ other	..	..	..	..	17	..	..	..	4	..
Quarry proprietor, manager, clerk	41	1	51	..	1	..	7	..	..	..
„ man, worker	..	..	..	..	734	..	..	..	62	..
Others	..	..	1	..	..	..	..	..	1	..
Total	605	5	7,794	1	20,417	11	231	2	2,381	..

Total Males	31,428
Total Females	19
GRAND TOTAL	31,447

Gold miners.

The average number of men employed in mining is estimated annually by the Mines Department, and the figures for the ten years ended with 1910 are subjoined:—

NUMBER OF MEN EMPLOYED IN GOLD MINING, 1901 TO 1910.

Year.	Alluvial Miners.	Quartz Miners.	Total.
1901	12,886	14,891	27,777
1902	11,963	14,140	26,103
1903	11,058	14,150	25,208
1904	10,405	13,926	24,331
1905	11,403	13,966	25,369
1906	10,951	14,353	25,304
1907	10,390	12,901	23,291
1908	8,673	12,180	20,853
1909	7,925	10,746	18,671
1910	6,638	9,915	16,553

The number of men employed in each mining district in 1910 was as follows:—Ararat and Stawell, 813; Ballarat, 3,009; Bendigo, 3,988; Beechworth, 3,619; Castlemaine, 2,041; Gippsland, 1,017; and Maryborough, 2,066.

Mineral produce

The following table shows the quantity and value of the metals and minerals produced in Victoria up to the end of 1910:—

TOTAL MINERAL PRODUCTION TO 31ST DECEMBER, 1910.

Metals and Minerals.	Recorded prior to 1910.		Recorded during 1910.		Total Recorded to end of 1910.	
	Quantity.	Value.	Quantity.	Value.	Quantity.	Value.
	Fine. ozs.	£	Fine. ozs.	£	Fine. ozs.	£
Gold	67,118.354	285,100,389	570,383	2,422.745	67,688.737	287,523,134
Silver ..	29.405	7,751	..	..	29,405	7,751
	1,305.534* tons.	199,999	18,800 tons.	2,090	1,324.334 tons.	202,089
Coal, black ..	3,054,986	1,689,756	369,059	188,977	3,424,045	1,878.733
„ brown ..	49,466	19,832	650	277	50,116	20,109
Lignite	12,923	3,086	..	..	12,923	3,086
Ore—copper ..	18,508	213,223	150	450	18,658	213,673
„ tin ..	15,593	769,824	41	3,706	15,634	773,530
„ antimony ..	33,106	209,529	1,262	6,255	34,368	215,784
„ silverlead ..	793	5,760	..	..	793	5,760
„ iron ..	5,434	12,540	..	..	5,434	12,540
„ manganese ..	..	..	23	142	23	142
Wolfram	17	1,684	20	2,092	37	3,776
Diamonds ..	..	108	..	..	..	108
Sapphires, &c. ..	..	630	..	..	..	630
Gypsum ..	17,283	9,951	1,246	715	18,529	10,666
Magnesite ..	6	12	..	..	6	12
Kaolin	4,588	10,382	288	202	4,876	10,584
Diatomaceous earth	2,993	12,352	500	2,000	3,493	14,352
Pigment clays ..	2	24	50	50	52	74
Bluestone, Freestone, Granite, &c.† .. Limestone, &c.‡ ..	..	3,723,255	..	121,455	..	3,844,710
Total ..	..	291,990,087	..	2,751,156	..	294,741,243

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

The total quantity of gold raised from its first discovery in 1851 to the end of 1910 was 71,989,887 ounces gross, or, as shown above, 67,688,737 ounces fine, the estimated value being £287,523,134. This sum is based on the average value of the gold received at the Melbourne Mint, which in 1910 was £3 19s. 2½d. per ounce. The yield of gold for 1910—609,998 ounces gross, or 570,383 ounces fine—was 92,223 ounces gross or 83,839 ounces fine, less than the yield of the previous year. This decrease is almost wholly accounted for by the diminished returns from the lode mines at Bendigo, Ballarat, Maldon, and Berringa, and from the deep alluvial mines at Rutherglen, Creswick, and Clunes.

Mining district gold yields.

In the following return will be found the yield of gold from alluvial workings and from quartz reefs during 1909 and 1910 in each mining district of the State, according to the calculations of the mining registrars:—

DISTRICT YIELDS OF GOLD, ALLUVIAL AND QUARTZ, 1909 AND 1910.

Mining District.	1909.			1910.		
	Alluvial.	Quartz.	Total.	Alluvial.	Quartz.	Total.
	ozs.	ozs.	ozs.	ozs.	ozs.	ozs.
Ararat and Stawell ...	11,186	7,458	18,644	15,003	4,728	19,731
Ballarat	40,054	95,270	135,324	27,688	74,437	102,125
Beechworth	98,783	22,092	120,875	88,661	17,178	105,839
Bendigo	2,926	216,716	219,642	1,993	177,157	179,150
Castlemaine	22,539	53,650	76,189	19,534	54,889	74,423
Gippsland	6,985	42,872	49,857	7,597	31,625	39,222
Maryborough ...	50,137	30,747	80,884	43,222	30,265	73,487
Total	232,610	468,805	701,415	203,698	390,279	593,977

According to these calculations, the totals of which fall short of the actual yields by 806 ounces in 1909, and by 16,021 ounces in 1910, alluvial mining shows a decrease of 28,912 ounces, and lode mining a decrease of 78,526 ounces in 1910 as compared with 1909.

Deep mine.

On 31st December, 1910, there were 15 mines on the Bendigo gold-field with shafts over 3,000 feet deep, namely, Victoria Reef Quartz, 4,614 feet; New Chum Railway, 4,318 feet; Lazarus New Chum, 3,682 feet; New Chum and Victoria, 3,579 feet; North Johnson's, 3,498 feet; Carlisle, 3,451 feet; Lansell's 180, 3,365 feet; Clarence, 3,310 feet; Great Extended Hustler's, 3,290 feet; Ironbark, 3,250 feet; Victoria Consols, 3,114 feet; New Chum Consolidated, 3,099 feet; Eureka Extended, 3,060 feet; Princess Dagmar, 3,020 feet; and Johnson's Reef No. 2, 3,020 feet. The total number of shafts over 2,000 feet in depth at Bendigo is fifty-three.

The following are the deepest mines on other gold-fields:—Long Tunnel, Walhalla, 4,051 feet incline and 350 feet vertical, equal to 3,450 feet vertical; South Star, Ballarat, 3,180 feet; Long Tunnel Extended, Walhalla, 3,030 feet; Magdala, Stawell, 2,425 feet; Lord Nelson, St. Arnaud, 2,262 feet; South German, Maldon, 2,225 feet; and Jubilee, Scarsdale, 2,014 feet.

Dredge mining and hydraulic sluicing.

The number of gold dredging and hydraulic sluicing leases in force on 31st December, 1910, was 215, with an area of 17,630 acres. Prior to 1900 the yield of gold from dredging operations was 90,528 ounces, and from 1900 to 1910, 726,431 ounces were obtained from 5,187 acres worked, the average yield of gold being 140 ounces per acre, or 2.3 grains per cubic yard of material treated. The quantity of tin won by the same plants during the period 1900-10 was 546 tons. The following tables give particulars of the industry for 1910:—

DREDGE MINING AND HYDRAULIC SLUICING, 1910.

District.	Number of Plants.	Gold won during 1910.	Dividends paid during 1910.*
		oz.	£
Ararat and Stawell	1	685	...
Ballarat	13	10,584	988
Beechworth	54	54,483	44,085
Bendigo	3	275	...
Castlemaine	24	11,841	7,217
Gippsland...	7	5,803	6,300
Maryborough	5	3,477	...
Unspecified	6	1,171	...
Total	113	88,319	...

* These figures are merely approximate, as information was not furnished in connexion with some privately-owned plants.

DESCRIPTION OF DREDGING AND HYDRAULIC SLUICING PLANTS.

District.	Bucket Dredges.	Pump Hydraulic Sluices.	Jet Elevators.	Gravitation Hydraulic Sluicing.	Total.
Ararat	...	1	...	...	1
Ballarat	...	13	...	...	13
Beechworth	45	6	3	...	54
Bendigo	...	3	...	...	3
Castlemaine	3	17	4	...	24
Gippsland	5	1	1	...	7
Maryborough	...	5	...	...	5
Unspecified	...	...	...	6	6
Total	53	46	8	6	113

The 53 bucket dredges raised 15,445,005 cubic yards of material and won 59,510 ounces of gold; the 46 pump hydraulic sluicing plants dealt with 3,947,796 cubic yards of material for a return of 24,698 ounces of gold, the 8 hydraulic jet elevators put through 445,751 cubic yards of material for a return of 2,948 ounces of gold; and the 6 plants working by gravitation hydraulic sluicing, dealt with 166,415 cubic yards of material, which yielded 1,163 ounces of gold. The total quantity of material treated by these plants during 1910 was 20,004,967 cubic yards, representing an area of 704 acres, the amount of gold obtained being 88,319 ounces, and of tin 20 tons, as against a treatment of 20,173,018 cubic yards in 1909 for 88,969 ounces of gold, and 70 tons of tin. The yield of gold per cubic yard of material was 2.1 grains, in 1910, being the same as for the previous year. In 1910 the number of men employed in connexion with these 113 plants was 1,769, and their wages amounted to £158,292. Other returns in connexion with dredge-mining, &c., not referred to above, give an additional yield of 143 ounces for the year 1910.

Value of machinery on gold-fields.

The following is a return showing the value of machinery used in alluvial and quartz mining for the five years ended 1910:—

VALUE OF MACHINERY ON GOLD-FIELDS, 1906 TO 1910.

Year.	Approximate Value of Machinery Employed in—		
	Alluvial Mining.	Quartz Mining.	Total.
	£	£	£
1906	809,150	1.817.070	2,626,220
1907	964,120	1.935.125	2,899 245
1908	933,470	1.797.825	2.731,295
1909	850 11	1.643 072	2 493 383
1910	803,636	1.621,972	2,425 608

Gold-mining dividends.

The next return shows the amount paid in dividends in each mining district of the State for the last six years:—

DIVIDENDS PAID BY GOLD MINING COMPANIES IN EACH MINING DISTRICT, 1905 TO 1910.

Mining District.	Amount Distributed.					
	1905.	1906.	1907.	1908.	1909.	1910.
	£	£	£	£	£	£
Ararat and Stawell ...	102	...	...	...	5,275	22,519
Ballarat	66,700	62,700	51,675	43.500	47,863	32,217
Beechworth ...	70.413	65,599	53,189	78,245	54,114	46,551
Bendigo	228.028	251,727	120,880	133,114	159,273	99,421
Castlemaine ...	35.465	37,701	39,568	18,669	48.225	55,619
Gippsland	28,504	56,897	50,850	44,515	6,960	6,600
Maryborough ...	25,219	10,069	1,250	1,250	17,500	15,000
Total ...	454.431	484 693	317,412	319,293	339,210	277,927

Yields and dividends for the whole State for the last ten years are given below :—

YIELDS AND DIVIDENDS, 1901 TO 1910.

Year.	Value of Gold Produced.	Dividends Paid.
	£	£
1901	3,102,753	427,997
1902	3,062,028	472,136
1903	3,259,482	601,152
1904	3,252,045	623,398
1905	3,173,744	454,431
1906	3,280,478	484,693
1907	2,954,617	317,412
1908	2,849,8 8	319,293
1909	2,778,956	339,210
1910	2,422,745	277,927

The dividends paid in the years mentioned range from 11 to 19 per cent. of the gold produced, the average for the ten years being 14.3 per cent.

Gold raised in Australasia.

The following table summarizes the production of gold in Australasia from 1851, the year of its first discovery, and contains a statement of the quantity recorded as having been raised in the respective States at different periods. Prior to 1898, Victoria was almost invariably the leading gold-producing State of the group, but since then Western Australia has taken first place :—

GOLD RAISED IN AUSTRALASIA, 1851 TO 1910.

Period.	Victoria.	New South Wales.	Queensland.	South Australia.*	Western Australia.	Tasmania.	New Zealand.
	gross ozs.	gross ozs.	gross ozs.	gross ozs.	gross ozs.	gross ozs.	gross ozs.
1851-60	23,334,263	3,280,963	75,000	..	—	..	35,845
1861-70	16,276,566	3,542,912	250,000	..	—	3,504	5,507,004
1871-80	10,156,297	2,251,666	3,187,855	84,593	..	180,178	4,009,345
1881-90	7,103,448	1,164,452	3,925,620	209,275	46,967	397,983	2,265,616
1891-00	7,476,038	2,958,295	7,358,129	355,208	5,870,662	605,519	2,788,398
1851-00	64,346,612	13,198,288	14,796,604	649,076	5,917,629	1,187,184	14,606,208
	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.	fine ozs.
1901 ..	730,453	216,888	598,382	28,951	1,703,416	69,491	412,876
1902 ..	720,866	254,435	640,463	24,082	1,871,037	70,996	459,406
1903 ..	767,297	254,260	668,546	22,269	2,064,801	59,891	461,648
1904 ..	765,600	269,817	639,151	17,925	1,983,230	65,921	467,897
1905 ..	747,166	274,267	592,620	20,447	1,955,316	73,540	492,955
1906 ..	772,290	253,987	544,636	14,077	1,794,547	60,023	534,617
1907 ..	695,576	247,363	466,476	11,871	1,697,553	65,354	477,312
1908 ..	670,910	224,792	465,085	9,161	1,647,911	57,085	471,968
1909 ..	654,222	204,709	455,576	7,989	1,595,269	44,777	472,465
1910 ..	570,383	188,857	441,4 0	11,645	1,470,632	37,048	446,434

* Quantity received at Melbourne and Sydney Mints.

The total production of Australasia from 1851 to 1900 inclusive, was 114¾ million ounces (gross), more than half of which was produced in Victoria. The Australasian production for the nine years, 1901 to 1910, was over 38¼ million ounces (fine), to which Western Australia contributed 17¾ million ounces.

World's production of gold and silver.

The total production of gold and silver for all countries since 1860, and for the leading gold and silver producing countries in 1909, as set out in the following tables, have been extracted principally from the annual report issued in 1911 by the Director of the United States Mint. The figures relating to the year 1873 and subsequent years are those of the Bureau of the Mint, and have been compiled from information furnished by foreign Governments, and revised from the latest data:—

WORLD'S PRODUCTION OF GOLD AND SILVER SINCE 1860.

Year.	Gold.		Silver.	
	Ounces—Fine.	Value.	Ounces—Fine.	Value—Commercial.
		£		£
1860 to 1869	61,314,500	260,450,800	378,311,600	103,714,600
1870 to 1879	52,764,400	224,131,700	628,717,300	159,639,000
1880 to 1889	51,405,100	218,357,900	921,103,100	197,783,000
1890 to 1899	95,081,700	403,886,400	1,568,876,900	235,663,700
1900	12,315,100	52,312,000	173,591,400	22,115,800
1901	12,625,500	53,630,500	173,011,300	21,330,900
1902	14,354,700	60,975,600	162,763,500	17,726,200
1903	15,852,600	67,338,500	167,689,300	18,607,200
1904	16,804,400	71,381,300	164,195,300	19,569,200
1905	18,396,500	78,144,200	172,317,700	21,599,400
1906	19,471,100	82,708,900	165,054,500	22,957,200
1907	19,977,300	84,859,000	184,207,000	24,982,500
1908	21,430,400	91,031,800	203,236,800	22,338,700
1909	21,982,700	93,377,800	211,215,600	22,569,000
Total	433,776,000	1,842,586,400	5,274,291,300	910,596,400

WORLD'S PRODUCTION OF GOLD AND SILVER—PRINCIPAL COUNTRIES, 1909.

Country.	Gold.		Silver.	
	Ounces—Fine.	Value.	Ounces—Fine.	Value—Commercial.
		£		£
Africa	8,271,600	35,135,900	1,076,600	115,000
Australasia	3,435,000	14,591,200	16,359,300	1,748,000
Austria-Hungary	93,900	399,100	999,200	106,800
British India	501,100	2,128,600	...	...
Canada	473,600	2,011,700	27,878,600	2,978,900
Germany	3,300	14,200	5,3 2,900	569,800
Japan	183,200	778,100	4,278,400	457,200
Mexico	1,153,400	4,899,400	73,942,400	7,901,000
Peru	24,900	105,700	9,566,100	1,022,200
Russia	1.566,400	6,653,900	132,100	14,100
United States	4,821,700	20,481,500	54,721,500	5,847,200
Other Countries	1,454,600	6,178,500	16,928,500	1,808,800
Total	21,982,700	93,377,800	211,215,600	22,569,000

Coal production.

The following return shows the quantity of coal raised in each year, or group of years, since its first production:—

BLACK COAL RAISED IN VICTORIA TO 31ST DECEMBER, 1910.

Year.	Tons.
Prior to 1876	5,831
From 1876 to 31st December, 1890 ...	49,249
From 1891 to 31st December, 1900 ...	1,683,485
1901	209,329
1902	225,164
1903	64,200
1904	121,742
1905	155,136
1906	160,631
1907	138,584
1908	113,462
1909	128,173
1910	369,059
Total	3,424,045

Brown coal raised to 31st December, 1910, 50,116 tons.

The State coal-field.

The existence of coal deposits at the Powlett River was proved as far back as the year 1880, when two seams were cut, viz., one of 2 ft. 1 in. at 352 feet, and the other of 2 ft. 6 in. at 689 feet; but it was not until 1908 that systematic boring was commenced—the existence of a large area of payable coal being subsequently proved. The development of the field was undertaken by the Government shortly after the commencement of the New South Wales coal strike in November, 1909, and by the end of that month four shafts had been sunk on to the coal seam and equipped with temporary winding and pumping machinery, and the output of coal had commenced.

On the 17th December of the same year, the construction of a railway to the coal-field was authorized: platelaying was begun on the 23rd of the following month, and on 22nd February, 1910, the rails were laid to the coal shafts and a commencement was made with the transportation of coal.

With the view of preventing indiscriminate settlement, the Government has laid out a model township, formed roads and planted them with trees, at a cost of £7,797, and erected 100 miners' houses at a cost of £21,561. It has under construction a complete system of waterworks, on which over £40,000 has been expended; and it is now proceeding with the erection of an electric plant to supply light and power for the whole district at an estimated cost of £55,000. State brickworks and quarries are in full work, and the expenditure on these and other public works, such as a public hall, a State school, &c., to 30th June, 1910, was £14,518. The estimated revenue from the coal mine for 1910-1911 is £262,500, and the estimated expenditure £242,146. The area reserved for the mine is about 17 square miles, of which the central portion of 5 square miles has been proved by boring to contain 20,000,000 tons of coal. The output of coal for 1910 was 201,053 tons, worth £89,736 at the mine; and the total quantity raised up to the end of May, 1911, was 388,150 tons, valued at £171,480. In June, 1911, the daily output was 1,900 tons, and 1,100 men were employed in the mine and surface works. The average earnings of coal hewers at tonnage rates were 10s. 1½d. per shift in July, 1910; 14s. 4d. in September, and 16s. in December of that year. The average earnings for the current year (1911) up to June, were 13s. 8d. per shift.. The valuation of the borough of Wonthaggi has been fixed at £330,000.

Coal raised in Australasia.

The quantity of coal raised in the various States and in New Zealand from the date of the earliest records is given below. There is no record of any coal mining having been done in South Australia.

COAL PRODUCED IN AUSTRALASIA.

Year.	Tons of Coal raised in—					
	Victoria.	New South Wales.	Queensland.	Western Australia.	Tasmania.	New Zealand.
Prior to 1878	9,346	17,538,869	507,226	..	92,176	709,931
1878 to 1882..	13	8,503,937	305,692	..	54,010	1,408,893
1883 to 1887..	7,951	13,902,101	911,416	..	59,554	2,506,631
1888 to 1892..	83,967	17,738,842	1,444,669	..	216,882	3,179,846
1893 to 1897..	920,452	18,982,101	1,587,973	..	184,391	3,785,485
1898 to 1902..	1,151,329	26,721,213	2,440,078	434,716	242,114	5,566,597
1903 ..	64,200	6,354,846	507,801	133.000	51,805	1,420,193
1904 ..	121,741	6,019,809	512,015	138,550	61,612	1,537,838
1905 ..	155,136	6,632,138	529,326	127,364	50,464	1,585,756
1906 ..	160,631	7,626.362	606,772	149,755	52 895	1,729,536
1907 ..	138,584	8,657,924	683.272	142.372	55,900	1.831.009
1908 ..	113,462	9,147,025	696,332	175.248	61,068	1,860,975
1909 ..	128,173	7,019,879	756,577	214,302	66,162	1,911,247
1910 ..	369,059	8,173,508	871,166	262,166	82,445	..

NOTE.—For details of single years see issue of this publication for 1905.

Coal production of the world.

The total known coal production of the world (exclusive of brown coal and lignite) in 1908 was about 950 million tons (of 2,240 lbs.). The following return shows the production and consumption of coal in the principal coal-producing countries of the world.

COAL PRODUCED IN VARIOUS COUNTRIES, 1908.

Country.	Production.	Value per ton at Collieries.	Excess of Imports (+) or Exports (−)	Number of Men Employed under and over ground.
	Tons.	s. d.	Tons.	
Australasia—				
Victoria	113,462	11 5	+1,019,288	534
New South Wales ...	9,147,025	7 4	−4,488,579	17,734
Queensland	696,332	7 0	+49,755	1,223†
Western Australia ...	175,248	8 8	+129,786	280
Tasmania	61,068	8 0	+105,363	180
New Zealand	1,860,975	10 4	+187,306	3,894
Austria	13,652,000	8 6¼	+10,185,000‡	72,042
Belgium	23,179,000	13 1½	−664,000	145,277
British India	12,770,000	5 3	−98,000	129,173
Canada	9,720,000	10 8	+7,330,000	23,048
France	36,044,000	12 11¾	+16,951,000	191,132
German Empire	145,298,000	10 3½	−15,453,000	590,991
Japan	14,587,000	8 10¾	−2,832,000	126,999
Russian Empire*	25,583,000	10 4	+4,103,000	164,819
United Kingdom	261,529,000	8 11	−85,301,000	966,264
United States	371,288,000	5 11¾	−10,353,000	690,438

* Figures for 1907. † Census Figures, 1901. ‡ Austria-Hungary.

Stone quarries.

There were 94 stone quarries in which work was carried on during 1910; these gave employment to 1,141 persons, and the sum paid in wages was £101,395. These figures include the persons employed and wages connected with stone-breaking and tar-paving works, most of which are carried on in conjunction with quarries, and cannot be separated therefrom. The quantity and value of stone raised during the last six years are set forth in the following table:—

STONE QUARRIES: 1905 TO 1910.

Year.	Quantity of Stone Operated on—				Approximate Total Value of Stone Raised.
	Bluestone.	Free-stone	Granite.	Limestone.	
	c. yds.	c. yds.	c. yds.	c. yds.	£
1905	357,474	300	584	46,267	81,565
1906	393,876	222	983	48,991	63,272
1907	405,718	475	475	57,010	70,945
1908	491,446	1,594	713	54,671	84,479
1909	525,555	370	838	55,134	88,610
1910	636,029	5,469	345	58,274	114,955

During 1910 the Mines Department had the following boring plant at work:—Six diamond drills with calyx cutters, six Victoria drills with calyx cutters, and one Victoria percussion drill. Twelve of these machines were engaged in boring for coal, and put down 113 bores, the aggregate depth of which was 41,192 feet. The remaining drill was employed in boring for gold (alluvial) and sank 25 bores for an aggregate depth of 3,225 feet. Boring.

Government batteries are located in 23 districts, and during 1910 treated 2,827 tons of ore, which yielded 2,349 ounces of gold, the net cost to the Mines Department being £2,141. Government batteries.

There were 305 plants at work treating tailings by the cyanide process during 1910, this number representing a decrease of six in comparison with that for the year 1909. The total quantity of gold obtained in the year was 68,583 ounces, valued at £250,398, from 1,177,232 tons of tailings, or an average of 1 dwt. 4 grs. per ton, being a decrease of 80,106 in tonnage of tailings treated, and of 6,846 ounces in yield, as compared with the previous year. The records show that since the introduction of these methods, a grand total of 11,823,468 tons of tailings has been treated by cyanide and other processes for 1,005,262 ounces of gold, the yield being equal to an average of 1 dwt. 17 grs. per ton. Cyanidation.

The number of accidents happening in 1910 in connection with gold mining was 75, in which 12 persons were killed and 66 seriously injured. In the last twenty years the average number of men employed in gold mining was 26,109, and the average yearly number of accidents 108, 30 persons per annum being killed, and 86 injured, or 1.14 and 3.31 respectively per thousand employed. In coal mining during 1910, 3 persons were killed and 22 injured as the result of accidents, and during the twenty-two years, 1889-1910, accidents were responsible for 32 persons being killed and 138 being injured. Since 1905, only those non-fatal accidents have been recorded which incapacitated the sufferer from work for a period of at least fourteen days. Mining accidents.

Manufactories.

That which is regarded in the subsequent tables as constituting a factory is any establishment employing on the average four persons or more, also those employing less than four persons where machinery is worked by other than manual power, whether the business carried on is that of making or repairing for the trade (wholesale or retail) or for export. Definition of a factory.

The classification of industries adopted was drawn up in 1902 at a conference of Australian statisticians. Where two or more industries are carried on by one proprietor in the same building, each industry is, where possible, treated as a separate undertaking. The following table shows, for the year 1910, the number of factories in each class of industry, the volume of power used, the number of Classification of factories.

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1910.

persons employed, the wages paid, and the other chief items of expenditure, also the value of articles produced or work done:—

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of amounts drawn by Working Proprietors.	Fuel and Light used	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employés.	Working Proprietors.	Employés.				
							£	£	£	£
Class I.—Treating Raw Material the product of Pastoral Pursuits, or Vegetable Products, not otherwise classed.										
Boiling down	20	168	13	131	..	..	13,069	4,370	122,165	182,644
Bone milling	19	559	12	113	1	3	9,503	4,278	56,516	84,133
Tanning	55	1,390	58	1,424	..	5	140,959	9,992	885,672	1,137,608
Fellmongering	34	600	40	427	1	1	34,405	4,840	512,521	602,242
Chaffcutting and grain crushing ..	189	1,528	190	653	3	14	37,614	6,550	384,525	476,318
Other	7	47	3	206	..	..	18,696	122	43,966	66,965
Total	324	4,292	316	2,954	5	23	254,246	30,152	2,005,365	2,549,910
Class II.—Oils and Fats, Animal and Vegetable.										
Oil, Grease, Glue, Soap, and Candle..	21	303	15	562	..	19	56,440	14,601	395,399	565,989

Class III.—Processes relating to Stone, Clay, Glass, &c.										
Brick, pottery, &c.	122	3,162	117	1,696	..	34	178,868	67,531	22.928	387,108
Cement, including cement pipes ..	4	510	2	128	..	1	12,508	4,998	12.624	39,823
Glass, including bottles	7	99	15	622	..	7	54,762	20,397	22.426	120,174
,, bevelling	19	66	18	213	..	3	21,268	713	36.741	74,672
Marble and stone dressing	39	129	49	323	..	1	36,574	630	44.232	106,344
Other	21	84	22	219	..	2	22,326	5,637	14,392	56,670
Total	212	4,050	223	3,201	..	48	326,306	99,906	153,343	784,791
Class IV.—Working in Wood.										
Cooperage	11	34	11	67	..	..	6,870	58	9.375	19,885
Sawmilling, moulding, &c.	288	6,855	325	4,865	2	14	479,632	8,754	755,801	1,533,515
Mantelpiece	10	60	14	239	..	2	22,774	189	19,479	48,285
Wood carving, turning	34	295	39	215	..	4	18,014	1,447	23.076	57,153
Other	7	29	10	121	..	..	9,905	203	22,042	39,935
Total	350	7,273	399	5,507	2	20	537,195	10,651	829,773	1,698,773
Class V.—Metal Works, Machinery, &c.										
Agricultural implement	50	810	62	2,183	..	10	231,919	21,537	300.718	742,326
Engineering, iron foundry, &c. ..	290	3,583	351	5,968	2	45	615,704	66,693	757,270	1,805,199
Railway workshop	15	799	..	3,555	..	4	436,525	14.180	484,497	1,013,124
Sheet-iron, tin, &c.	63	239	56	1,093	1	52	90,077	2.813	183.732	328,468
Brass, copper smithing	54	269	66	647	2	25	55,694	4.105	70,798	162,829
Wireworking	16	138	17	204	..	7	19,422	809	66,380	113,707
Metallurgical, &c., cyanide ..	98	380	117	572	..	1	53,940	4.889	90,965	203,271
Oven, range	17	74	16	169	..	1	15,771	832	19,193	47,381
Other	47	789	46	445	2	2	42,450	4,344	131,845	219,264
Total	650	7,081	731	14,836	7	147	1,561,502	120,202	2,105,398	4,635,569

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION. 1910.—*continued.*

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of amounts drawn by Working Proprietors.	Fuel and Light used.	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employés.	Working Proprietors.	Employés.				
							£	£	£	£
Class VI.—Connected with Food and Drink or the preparation thereof.										
Bacon curing	25	388	28	298	..	9	30,035	4,179	408,119	483,469
Butter, cheese, butterine	204	2,443	52	1,170	3	39	121,128	19,690	2,714,800	2,990,867
Meat freezing, preserving, &c. ..	14	2,599	10	749	..	10	69,202	23,010	543,821	679,521
Biscuit	4	148	3	696	..	381	63,018	8,159	270,120	432,367
Flourmilling	62	4,404	46	732	..	2	84,863	23,903	2,210,086	2,486,741
Jam, sauce, &c.	25	273	15	780	..	632	90,184	8,379	460,118	676,484
Oatmeal, starch, &c.	23	1,043	20	285	..	201	35,923	6,374	233,631	320,540
Sugar, confectionery, &c.	26	798	26	1,074	3	905	139,586	33,939	1,328,976	1,635,728
Aerated water, cordial, &c. ..	148	385	132	959	6	21	84,229	3,796	123,927	351,308
Malt	18	197	4	160	..	1	18,951	6,040	164,046	228,141
Brewing	31	2,348	26	1,013	..	3	139,946	28,484	362,965	836,485
Distilling	6	160	7	67	..	..	9,095	2,049	26,751	45,205
Condiments, coffee, cocoa, &c. ..	11	500	5	182	..	93	23,643	3,547	171,217	243,621
Tobacco, &c.	14	456	12	924	..	1,312	182,972	2,526	624,918	1,155,995
Other	22	846	12	239	1	15	24,104	11,442	14,895	78,585
Total	633	16,988	398	9,328	13	3,624	1,116,879	185,517	9,658,390	12,645,057

Class VII.—Clothing and Textile Fabrics, and Fibrous Material.										
Woollen mill	9	2,041	8	728	..	921	98,573	13,247	210,545	426,336
Clothing, Tailoring, &c.	397	243	382	1,810	20	7,230	493,504	10,028	885,112	1,676,148
Dressmaking and millinery ..	533	179	60	188	423	8,726	309,009	6,089	603,077	1,102,325
Underclothing, shirt	145	352	54	200	104	5,332	195,900	5,515	478,325	801,145
Hat, cap	42	358	42	678	10	1,160	124,635	5,932	174,872	376,154
Hosiery	25	128	14	51	15	633	29,482	843	63,304	110,844
Oilskin, waterproof clothing ..	4	8	3	43	1	149	10,681	328	20,362	38,892
Boot, shoe	144	991	184	4,160	6	2,482	455,997	7,295	963,110	1,620,179
Umbrella	9	17	10	62	1	173	13,214	347	55,084	84,291
Rope, twine, &c.	8	1,029	9	426	..	309	48,363	3,926	178,753	289,755
Sail, tent, &c.	12	14	11	82	..	49	8,450	112	29,979	47,736
Other	21	55	17	145	10	298	25,295	1,003	70,330	127,395
Total	1,349	5,415	794	8,573	590	27,462	1,813,103	54,665	3,732,853	6,701,200
Class VIII.—Books, Paper, Printing, Engraving, &c.										
Printing	299	1,892	372	4,492	6	964	584,045	19,889	524,249	1,684,601
Account-book, stationery, paper, &c.	21	964	17	813	..	649	96,191	12,034	134,021	312,119
Fancy box	22	62	22	137	3	539	32,902	832	49,583	109,727
Die sinking, engraving, &c. ..	15	33	14	137	..	2	13,255	562	10,935	35,998
Other	12	62	15	94	..	4	10,420	678	21,376	41,911
Total	369	3,013	440	5,673	9	2,158	736,813	33,995	740,164	2,184,356
Class IX.—Musical Instruments ..	5	191	4	135	..	11	14,908	173	6,361	23,416
Class X.—Arms and Explosives ..	8	130	5	118	..	263	24,456	1,309	60,850	122,066

FACTORIES—POWER, WORKERS, WAGES, ETC., AND PRODUCTION, 1910.—*continued.*

Nature of Industry.	Number of Manufactories.	Actual Horse-power of Engines used.	Average Number of Persons Employed.				Value of—			
			Males.		Females.		Wages paid exclusive of amounts drawn by Working Poprietors.	Fuel and Light used.	Materials Used.	Articles Produced or Work Done.
			Working Proprietors.	Employés.	Working Proprietors.	Employés.				
							£	£	£	£
Class XI.—Vehicles and Fittings, Saddlery, Harness, &c.										
Coach, motor building, cycle ..	337	481	392	3,104	..	30	252,072	10,364	287,083	692,861
Saddle, harness	60	10	64	435	..	64	36,966	385	59,872	118,776
Other	13	16	16	138	..	1	10,958	230	14,308	30,417
Total	410	507	472	3,677	..	95	299,996	10,979	361,263	842,054
Class XII.—Shipbuilding, Fitting, &c.	10	1,118	12	110	..	..	12,260	710	9,961	34,184
Class XIII.—Furniture, Bedding, &c.										
Upholstery, bedding, &c.	47	183	34	340	6	141	37,618	1,363	117,386	183,124
Cabinet, including billiard table ..	148	337	177	1,596	..	43	150,811	2,107	199,239	419,600
Picture frame	22	40	21	191	1	43	15,849	579	28,865	56,215
Other	11	67	10	184	..	3	16,186	776	37,583	65,165
Total	**228**	**627**	**242**	**2,221**	**7**	**230**	**220,464**	**4,825**	**383,073**	**724,104**

Class XIV.—Drugs, Chemicals, and By-products.										
Blacking, blue, &c.	13	136	14	158	..	120	17,325	762	105,798	170,788
Chemical	34	1,434	28	776	3	211	99,070	10,423	457,659	794,009
Other	27	162	34	152	1	4	9,483	372	22,428	44,404
Total	74	1,732	76	1,086	4	335	125,878	11,557	585,885	1,009,201
Class XV.—Surgical and Scientific Appliances	14	13	7	45	..	5	4,569	128	3,459	11,855
Class XVI.—Timepieces, Jewellery, and Platedware	69	144	83	699	..	56	75,471	2,302	142,397	291,817
Class XVII.—Heat, Light, and Energy.										
Electric Light	16	13,962	..	521	..	2	62,266	43,358	634	231,604
Gas, coke	47	740	1	1,418	..	2	199,308	1,479	212,092	733,910
Other	14	1,193	13	187	..	282	30,538	3,634	46,846	111,864
Total	77	15,895	14	2,126	..	286	292,112	48,471	259,572	1,077,378
Class XVIII.—Leatherware (except Saddlery and Harness)	30	107	38	342	..	206	35,606	1,015	155,611	223,256
Class XIX.—Wares, not elsewhere included										
Rubber goods	10	465	8	545	..	195	67,777	7,482	287,219	424,839
Brush, broom	14	27	17	174	1	46	19,166	467	59,091	95,300
Basket, wickerware	16	2	21	82	..	..	5,785	28	5,828	15,739
Total	40	494	46	801	1	241	92,728	7,977	352,138	535,878
Grand Total	4,873	69,373	4,315	61,994	638	35,229	7,600,932	639,135	21,941,255	36,660,854

The amount of wages paid during the year (£7,600,932) represents an average payment for all employés of £78 4s., an increase of £4 13s. on the average for 1909, of £6 12s. on that for 1908, of £8 18s. on that for 1907, and of £10 10s. on that for 1906, but along with this increase there has been a slight change in the relative proportions of male and female workers during the five years, the proportions being:—64 per cent. males and 36 per cent. females in 1910; 63 per cent. males and 37 per cent. females in 1909; 64 per cent. males and 36 per cent. females in 1908; and 65 per cent. males and 35 per cent. females in 1907 and 1906. The above average wage for 1910 is very much below the general rates of wages as shown in the table "Wages in Melbourne" on page 732, the reason being that the rates there mentioned relate to adult workers only, whereas the average payment of £78 4s. relates to all employés, adult and juvenile, male and female, apprentices and improvers, employed in each industry. Further, all hands are not continuously employed, nor are all factories working throughout the whole year.

Outlay and output of factories.

The proportion per cent. that each of the items of outlay bore to the value of the output in the last two years is shown in the next statement.

OUTLAY AND OUTPUT OF FACTORIES: 1909 AND 1910.

—	1909.		1910.	
	Value.	Proportion per cent.	Value.	Proportion per cent.
	£		£	
Wages	6,807,851	20·7	7,600,932	20·7
Fuel and Light ...	566,768	1·7	639,135	1·7
Materials	19,706,530	59·9	21,941,255	59·9
	27,081,149	82·3	30,181,322	82·3
Articles produced or work done	32,898,235	100·0	36,660,854	100·0
Margin for profit and miscellaneous expenses	5,817,086	17·7	6,479,532	17·7

The percentage of the total of the various items of outlay to the value of articles produced was in each of the last two years less by .8 than in 1908, chiefly owing to a reduction in the proportionate value of materials used. The percentage that the difference between outlay and output, available for miscellaneous expenses and profit, bore to the output was consequently .8 more than in 1908.

The following grouping shows the factories arranged according to the number of persons employed:— Classification according to persons employed

Under 4 hands	703 factories	1,722 persons.
4 hands	584 ,,	2,336 ,,
5 to 10 hands	1,734 ,,	12,083 ,,
11 to 20 hands	885 ,,	12,888 ,,
21 to 50 hands	602 ,,	18,801 ,,
51 to 100 hands	194 ,,	13,566 ,,
101 hands and upwards	171 ,,	40,780 ,,
Total	4,873 ,,	102,176 ,,

Of the 4,873 establishments, 3,239 used steam, gas, electric or other motive power, and employed 84,452 persons; and 1,634 used manual labour only, and employed 17,724 persons.

In the next return will be found particulars for the years 1909 and 1910 of the factories in the metropolitan and country districts. Factories, metropolitan and country.

FACTORIES AND PERSONS EMPLOYED, METROPOLIS AND COUNTRY: 1909 AND 1910.

Nature of Industry.	1909.			1910.		
	No. of Manufactories.	Average Number of Persons Employed.		No. of Manufactories.	Average Number of Persons Employed.	
		Males.	Females		Males.	Females
Metropolitan Area.						
1. Treating raw material, the product of pastoral pursuits, &c.	85	1,940	14	85	1,959	8
2. Oils and fats, animal and vegetable ..	11	505	14	11	491	18
3. Processes relating to stone, clay, glass, &c.	89	2,410	22	92	2,542	21
4. Working in wood	141	3,129	16	151	3,433	19
5. Metal works, machinery, &c. ..	410	10,506	87	412	11,932	134
6. Connected with food and drink, &c. ..	181	6,471	3,546	181	6,537	3,437
7. Clothing and textile fabrics, &c. ..	1,012	7,737	23,422	1,051	7,856	24,095
8. Books, paper, printing, engraving, &c.	236	4,697	1,982	245	4,915	2,069
9. Musical instruments	4	39	1	5	139	11
10. Arms and explosives	3	69	183	5	88	207
11. Vehicles, &c., saddlery, harness, &c. ..	207	2,137	55	212	2,363	63
12. Shipbuilding, fitting, &c.	11	108	..	9	116	..
13. Furniture, bedding, &c.	190	2,113	214	209	2,316	231
14. Drugs, chemicals, and by-products ..	47	939	284	48	920	331
15. Surgical and scientific appliances ..	10	45	5	14	52	5
16. Timepieces, jewellery, and plated ware	59	731	43	63	755	54
17. Heat, light, and energy	24	1,703	104	27	1,852	285
18. Leatherware, except saddlery and harness	31	387	110	30	383	206
19. Wares not elsewhere included ..	41	819	242	40	847	242
Total	2,792	46,485	30,344	2,890	49,493	31,436

FACTORIES AND PERSONS EMPLOYED—*continued.*

Nature of Industry.	1909.			1910.		
	No. of Manufactories.	Average Number of Persons Employed.		No. of Manufactories.	Average Number of Persons Employed.	
		Males.	Females		Males.	Females
Country Districts.						
1. Treating raw material, the product of pastoral pursuits, &c.	242	1,358	17	239	1,311	20
2. Oils and fats, animal and vegetable ..	11	92	1	10	86	1
3. Processes relating to stone, clay, glass, &c.	109	848	28	120	882	27
4. Working in wood	188	2,171	4	199	2,473	3
5. Metal works, machinery, &c. ..	242	3,545	15	238	3,635	20
6. Connected with food and drink, &c. ..	458	3,131	185	452	3,189	200
7. Clothing and textile fabrics, &c. ..	296	1,529	3,743	298	1,511	3,957
8. Books, paper, printing, engraving, &c.	119	1,203	101	124	1,198	98
10. Arms and explosives	3	35	59	3	35	56
11. Vehicles, &c., saddlery, harness, &c. ..	197	1,783	23	198	1,786	32
12. Shipbuilding, fitting, &c.	2	20	..	1	6	..
13. Furniture, bedding, &c.	19	130	5	19	147	6
14. Drugs, chemicals, and by-products ..	23	199	5	26	242	8
16. Timepieces, jewellery, and platedware	5	21	2	6	27	2
17. Heat, light, and energy	48	268	1	50	288	1
19. Wares not elsewhere included	1	4	..	..	..	..
Total	1,963	16,337	4,189	1,983	16,816	4,431
State.						
1. Treating raw material, the product of pastoral pursuits, &c.	327	3,298	31	324	3,270	28
2. Oils and fats, animal and vegetable ..	22	597	15	21	577	19
3. Processes relating to stone, clay, glass, &c.	198	3,258	50	212	3,424	48
4. Working in wood	329	5,300	20	350	5,903	22
5. Metal works, machinery, &c. ..	652	14,051	102	650	15,567	154
6. Connected with food and drink, &c. ..	639	9,602	3,731	633	9,726	3,637
7. Clothing and textile fabrics, &c. ..	1,308	9,266	27,165	1,349	9,367	28,052
8. Books, paper, printing, engraving, &c.	355	5,900	2,083	369	6,113	2,167
9. Musical instruments	4	39	1	5	139	11
10. Arms and explosives	6	104	242	8	123	263
11. Vehicles, &c., saddlery, harness, &c. ..	404	3,920	78	410	4,149	95
12. Shipbuilding, fitting, &c.	13	128	..	10	122	..
13. Furniture, bedding, &c.	209	2,243	219	228	2,463	237
14. Drugs, chemicals, and by-products ..	70	1,138	289	74	1,162	339
15. Surgical and scientific appliances ..	10	45	5	14	52	5
16. Timepieces, jewellery, and platedware	64	752	45	69	782	56
17. Heat, light, and energy	72	1,971	105	77	2,140	286
18. Leatherware, except saddlery and harness	31	387	110	30	380	206
19. Wares not elsewhere included ..	42	823	242	40	847	242
Total	4,755	62,822	34,533	4,873	66,309	35,867

The factories in the metropolitan area in 1910 exceeded by 98 the number in 1909 and by 228 that in 1908, whilst those in country districts numbered 20 more than in 1909 and 37 more than in 1908.

The industries in the different classes showing a larger number of factories in 1910 than in 1909, both metropolitan and country, are as follows:—

Class 1—Boiling down, 1. Class 3—Brick, pottery, 14; marble, stone, 2; modelling, 1. Class 4—Forest saw-milling, 6; saw-milling, moulding, joinery, 21. Class 5—Nail, 1; iron safe, door, 1; sheet-iron, tin, 2; spring, 1; brass, copper-smithing, 3. Class 6—Fish curing, 1; flour, 3; jam, pickle, sauce, 1; aerated water, cordial, 4; ice, 4. Class 7—Clothing, tailoring, 23; underclothing, &c., 15; hat, cap, 7; hosiery, 4; boot, shoe, 8; fur, 1. Class 8—Printing, 15; photo. lithography, 1. Class 9—Organ, pianoforte, 1. Class 10—Ammunition, 2. Class 11—Motor, cycle, 4; perambulator, 1; saddle, harness, 6. Class 13—Upholstery, bedding, flock, 9; cabinet making, 8; picture frame, 2. Class 14—Essential oil, 4. Class 15—Surgical, optical, &c., appliances, 4. Class 16—Gold-smithing, 5. Class 17—Electric apparatus, 1; electric light, 3; match, 1. Class 19—Basket, wicker, 2.

The industries in which the number of factories was less in 1910 than in 1909 are:—

Class 1—Tanning, fellmongering, 4. Class 2—Soap, candle, 1. Class 3—Glass, 2; filter, stone, 1. Class 4—Mantelpiece, 2; wood-carving, turnery, 4. Class 5—Agricultural implement, 2; engineering, boilermaking, iron foundry, 3; oven, range, 1; pattern, 1; metallurgical, 1; cyanide, 2. Class 6—Bacon curing, 1; butter, cheese, 8; meat freezing or preserving, 1; oatmeal, maizena, starch, arrowroot, 2; confectionery, 1; malt, 2; brewing, 1; distilling, 1; salt, 2. Class 7—Dressmaking, &c., 15; rope, twine, &c., 2. Class 8—Account-book, stationery, and rubber stamp, 2. Class 11—Coach, carriage, &c., 5. Class 12—Ship, boat, building, 1; graving dock, &c., 2. Class 18—Leather belting, 1. Class 19—Brush, broom, 2; rubber goods, 2.

Since 1909 workers in metropolitan factories have increased by 4,100, there having been an addition of 3,008 males and 1,092 females. Workers in country factories have during the same period increased by 721; the number of males being greater by 479 and that of females by 242 than in 1909.

The industries in the State showing the largest increases in the average number of workers employed in 1910, as compared with 1909, are as follows:—Brick, pottery, and earthenware, with an increase of 157 males but a loss of 5 females; saw-milling (forest), with an increase of 138 males but a loss of 1 female; saw-milling, moulding, joinery, &c., with an increase of 453 males and 2 females; agricultural implement, with an increase of 362 males and 1 female; engineering, &c., with an increase of 548 males and 8 females; railway workshop, with an increase of 682 males; confectionery, with an increase of 44 males and 102 females; clothing, tailoring, &c., with an increase of 109 males and 419 females; underclothing, &c., with an

increase of 10 males and 204 females; hat, cap, with an increase of 78 males and 124 females; printing, with an increase of 197 males and 89 females; cycle, motor, with an increase of 113 males and 3 females; cabinet making, with an increase of 141 males and 11 females; and match, &c., with an increase of 63 males and 179 females.

The following are the industries which show the largest decreases in the number of persons employed as compared with the previous year:—Cyanide, 89 males; biscuit, 86 males and 25 females; tobacco, &c., 216 females less an increase of 15 males; woollen, 58 males and 2 females; and boot, shoe, 79 males less an increase of 17 females.

Factories and works for nine years.

The following summary shows the power used, persons employed, and value of machinery, land, and buildings for each of the last nine years:—

FACTORIES—POWER, EMPLOYÉS, ETC.: 1902 TO 1910.

Year.	Number of Factories.	Factories using Machinery worked by—				Actual Horse-Power of Engines Used.
		Steam.	Gas.	Electricity, Oil, Water, Wind, or Horse.	Manual Labour.	
1902	4,003	1,328	755	330	1,590	43,821
1903	4,151	1,316	724	437	1,674	42,750
1904	4,208	1,304	734	509	1,661	40,859
1905	4,264	1,276	715	615	1,658	43,492
1906	4,360	1,255	709	712	1,684	48,765
1907	4,530	1,270	727	838	1,695	52,703
1908	4,608	1,220	741	962	1,685	58,945
1909	4,755	1,192	779	1,098	1,686	63,761
1910	4,873	1,169	794	1,276	1,634	69,373

Year.	Average Number of Persons Employed			Approximate Value of—		
	Males.	Females.	Total.	Machinery and Plant.	Land.	Buildings and Improvements.
				£	£	£
1902	49,658	23,405	73,063	5,082,023	3,045,291	5,125,969
1903	49,434	23,795	73,229	5,010,896	2,855,174	5,112,771
1904	50,554	25,733	76,287	6,027,134	2,721,076	4,919,975
1905	52,925	27,310	80,235	6,187,919	2,767,071	5,004,167
1906	56,339	28,890	85,229	6,450,355	2,857,411	5,204,699
1907	59,691	31,212	90,903	6,771,458	2,932,036	5,444,606
1908	60,873	32,935	93,808	6,957,606	2,972,959	5,616,068
1909	62,822	34,533	97,355	7,140,304	2,903,506	5,738,838
1910	66,309	35,867	102,176	7,601,085	2,973,916	6,038,347

This table shows that there has been considerable progress during the last nine years. The factories have increased to the extent of 870, the actual horse-power of engines by 25,552, the persons employed by 29,113, of whom 16,651 were males and 12,462 females, the approximate value of machinery and plant by £2,519,062, and that of buildings, &c., by £912,378. A noticeable feature in

connexion with the power employed is the increase in the number of factories using electricity; in 1910 these numbered 954, an increase of 795 since 1902.

In the next table the persons employed in factories during the last four years are grouped according to the nature of their work. The total number of persons shows an increase of 4,821 compared with 1909, and of 11,273 compared with 1907 :— Persons employed, male and female.

TOTAL PERSONS EMPLOYED.

	1907.	1908.	1909.	1910.
Males ...	59,691	60,873	62,822	66,309
Females ...	31,212	32,935	34,533	35,867
Total ...	90,903	93,808	97,355	102,176

CLASSIFICATION OF PERSONS EMPLOYED.

	1907.	1908.	1909.	1910.
Working Proprietors—				
Males	3,975	4,056	4,172	4,315
Females	629	629	643	638
Managers and Overseers—				
Males	2,318	2,222	2,324	2,399
Females	395	388	420	478
Accountants and Clerks—				
Males	2,314	2,461	2,540	2,592
Females	432	478	531	653
Engine-drivers and Firemen—				
Males	1,544	1,568	1,560	1,587
Workers in Factories—				
Males	45,319	46,545	48,251	51,569
Females	28,400	30,046	31,298	32,527
Factory Workers working in their own homes—				
Males	115	106	122	69
Females	1,314	1,351	1,573	1,515
Carters and Messengers—				
Males	3,000	2,945	2,949	2,880
All Others—				
Males	1,106	970	904	898
Females	42	43	68	56

The number of children under 16 years of age employed in factories has decreased considerably during the last two years, as will be seen from the following statement :— Children employed.

AVERAGE NUMBER OF CHILDREN UNDER 16 YEARS OF AGE, EMPLOYED IN FACTORIES, 1906 TO 1910.

Year.	Males.	Females.	Total.
1906	3,213	2,997	6,210
1907	3,253	3,095	6,348
1908	3,049	3,065	6,114
1909	2,817	2,496	5,313
1910	2,753	2,174	4,927

The following is a statement of the rates of wages ruling in the various industries in Melbourne during 1910, the information having been compiled from determinations of Wages Boards or collected direct from the employers :—

WAGES IN MELBOURNE, 1910.

A.—Wages for Adult Workers in Classified Manufacturing Industries.

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class I.—Treating Raw Material the product of pastoral pursuits or vegetable products not otherwise classed.			
[Order 1.—Animal products.			
Boiling down ..	Men employed in boiling down and bone mills	..	45s. per week
Bone milling ..		..	..
	Carters	45s. to 50s. per week	..
Sausage casing	Sausage skin cleaners	42s. to 48s. ,,	45s. per week
Tanning	Slicker whiteners ..	..	52s. ,,
	Fleshers	..	49s. ,,
	Jiggers and grainers ..	..	47s. ,,
	Rollers and strikers ..	..	45s. ,,
	Machine shavers ..	..	45s. ,,
	Scudders, unhairers, and stoners	..	44s. ,,
	Fancy leather machinists	..	42s. ,,
	Labourers in sheds, vats, &c.	..	40s. ,,
Fellmongering	Foremen scourers, tanners, headers, and trotters	..	45s. ,,
	Men in charge of limes	..	45s. ,,
	Hands at burring and fleshing machines	..	42s. ,,
	Wool sorters ..	..	45s. ,,
	Wool pressers and others	..	36s. ,,
Order 2.—Vegetable products.			
Chaff-cutting	Storemen	..	47s. ,,
	Labourers and carters	45s. to 48s. per week	..
Class II.—Oils and Fats, Animal and Vegetable.			
Oil, grease, and glue ..	Labourers	..	7s. per day
Soap and soda	Soapmakers ..	..	55s. per week.
	Assistant soapboilers	..	50s. ,,
	Foremen	..	50s. ,,
	Men in charge of milling-room	..	48s. ,,
	Mixers	..	45s. ,,
	General hands ..	..	42s. ,,
	Wrappers, packers, and stampers—male	..	42s. ,,
	Wrappers, packers, and stampers—female	..	25s. ,,
Candle	Stillmen	..	48s. ,,
	Acidifiers, glycerine distillers, and press-room gangers	..	45s. ,,
	Candle room gangers	..	47s.6d. ,,
	Candle moulders ..	..	44s.6d. ,,
	Other adult workers..	..	42s. ,,
	Carters	45s. to 50s. per week	..

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class III.—Processes relating to Stone, Clay, Glass, &c.			
Brick	Patternmakers ..	..	1s. 4½d. per hr.
	Bricklayers ..	..	1s. 3d. ,,
	Turners and fitters ..	..	1s. 3d. ,,
	Engine-drivers ..	11½d. to 1s. 0½d. per hr.	..
	Burners on kilns ..	..	1s. 1½d. per hr.
	Blacksmiths ..	..	1s. 0½d. ,,
	Carpenters	..	1s. 3d. ,,
	Facemen	1s. 1½d. to 1s. 1½d. pr hr.	..
	Drawers	..	1s. 3d. per hr.
	Machine drivers, riggers	..	1s. 1d. ,,
	Setters	..	1s. 2d. ,,
	Firemen	..	11½d. ,,
	Pan and crusher attendants	..	1s. 0½d. ,,
	Wet pan attendants	..	10½d. ,,
	Clayholemen ..	..	1s. 0½d. ,,
	Hand moulders ..	..	1s. ,,
	Wheelers	..	11d. ,,
	Truckers	..	11d. ,,
	Blacksmiths' strikers	..	10½d. ,,
	Loftmen, yardmen ..	..	10½d. ,,
	Lime grinders, crushers and mixers	..	1s. 1½d. ,,
	Sand elevator feeders and pitmen	..	1s. ,,
Glazed pipes	Burners	56s. 3d. to 62s. 6d. per week	..
	Flangers	..	54s. per week
	Setters, pressers, junction stickers, men in charge of plunges, head drawers	..	45s. ,,
	Labourers	40s. to 42s. per week	..
General pottery	Burners	60s. to 62s. 6d. ,,	..
	Pressers, stoneware and flower pot throwers	45s. to 50s. ,,	..
	Handlers, turners, jiggerers	..	45s. per week
	Placers, dippers ..	40s. to 45s. per week	..
	Sagger makers ..	..	42s. per week
	Mould makers ..	..	50s. ,,
	,, ,, assistants	..	45s. ,,
	Labourers	40s. to 42s. per week	..
	Terra-cotta pressers and plungers	..	45s. per week
	,, clayhole facemen	..	8s. 4d. per day
	,, breakers and fillers	..	7s. 4d. ,,
	Females employed in making general pottery	..	20s. per week
Tiles	Tile moulders and pressers	..	42s. per week
	Others—male ..	..	40s. ,,
	,, female ..	..	20s. ,,
Lime, cement, cement pipes ..	Labourers	7s. 6d. to 8s. per day	..
Asbestos	Machinists	36s. to 42s. per week	40s. per week
Glass bottle works	Furnacemen (two or more producers)	..	52s. 6d. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class III.—continued.			
Glass bottle works—*continued.*	Furnacemen (one producer)	..	38s 6d per wk.
	Foremen, sorters, lathe workers	..	42s. ,,
	Pipe menders, wind pipe repairers	39s. to 40s. per week	..
	Sorters, lehrmen, labourers	..	36s. per week
	Teasers, firemen's assistants, light labourers	30s. to 33s.9d. per wk.	..
Flint glass works	Castor place makers..	..	70s. per week
	,, blowers	..	57s.6d. ,,
	Chimney and general work makers (1st class)	..	60s. ,,
	Chimney and general work blowers (1st class)	..	48s. ,,
	Chimney and general work makers (2nd class)	..	51s. ,,
	Chimney and general work blowers (2nd class)	..	42s. ,,
	Mould blowers (1st class)	..	57s.6d. ,,
	Mould blowers (2nd class)	..	50s. ,,
	Mould blowers (3rd class)	..	42s. ,,
	Pot makers ..	..	52s. ,,
	Firemen	..	42s. ,,
	Sand blasters and packers	..	40s. ,,
Glass bevelling, &c. ..	Embossers	48s. to 50s. per week	..
	Stained glass cutters	..	57s. per week
	Glaziers and fixers of lead lights	..	48s. ,,
	Cementers	..	40s. ,,
	Plate glass cutters ..	48s. to 52s. per week	..
	,, glaziers ..	4 s. to 50s. ,,	..
	,, glaziers assistants and packers	..	45s. per week
	Sheet glass cutter ..	..	46s. ,,
	Bevellers and silverers	..	48s. ,,
Marble, stone-dressing ..	Carvers in marble and stone	..	82s.6d. ,,
	Carvers' assistants ..	..	69s. 8d. ,,
	Letter cutters ..	64s. 2d. to 66s. per week	..
	Monumental carvers..	..	69s 8d per wk.
	Monumental stone, slate, and other cutters	..	5:s. 8d. ,,
	Kerbstone cutters ..	..	55s. ,,
	Machinists, planing and turning	..	66s. ,,
	Machinists, polishing and sanding	48s. 9d. to 56s. per week	..
	Labourers	..	50s. per week
Stone filter	Filtermakers ..	..	48s. ,,
Modelling	Modellers	12s. to 14s. per day	..
	Shop hands ..	10s. to 11s. ,,	..
	Pressers and casters	48s. to 50s. per week	48s. per week
Asphalt	Asphalters and tarpavers	7s. 6d. to 9s. per day	8s. per day

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class IV.—Working in Wood.			
Cooperage	Coopers	..	62s. per week
Corkcutting	Corkcutters	35s. to 55s. per week	40s. ,,
Bellows	Bellows-makers	36s. to 45s. ,,	37s. ,,
Saw-milling, moulding, joinery, sash, door, box, &c.	Foremen (various)	48s. to 72s. ,,	..
	Box makers and box nailing machine workers	..	48s. per week
	Box printing machine workers	..	45s. ,,
	Carpenters and joiners	54s. to 62s. per week	..
	Mantelpiece makers	..	52s. per week
	Millwrights, engineers, engine-drivers, and steam crane workers	48s. to 60s. per week	..
	Stokers	..	45s. per week
	Labourers, box stackers	39s. to 48s. per week	..
	Stackers, timber	..	48s. per week
	Stackers and sorters on wharf	..	1s. 3d. per hr.
	Stackers, casual, public yards	..	1s. 3d. ,,
	Stackers, casual, private yards	..	1s. 1½d. ,,
	Stackers (foremen)	..	1s. 6d. ,,
	Wire nail machine workers	..	51s. per week
	Other machine workers	45s. to 64s. per week	..
	Polishers, coaters	..	50s. per week
	Painters and glaziers	..	51s. ,,
	Pullers out	36s. to 45s. per week	..
	Sawyers	48s. to 63s. ,,	..
	Saw sharpeners	..	57s. per week
	Blacksmiths	..	54s. ,,
	Blacksmiths' strikers	..	42s. ,,
	Salesmen, tally and order men	..	48s. ,,
Wood-carving, turning	Carvers and turners	..	54s. ,,
Class V.—Metal Works, Machinery, &c.			
Agricultural implement	Pattern makers	..	60s. per week
	Blacksmiths, fitters, turners, wheelwrights and carpenters	..	54s. ,,
	Blacksmiths' strikers	..	42s. ,,
	Iron annealers	..	45s. ,,
	Drillers	..	42s. ,,
	Belt cutters	..	45s. ,,
	Machinists, iron	..	48s. ,,
	,, wood	42s. to 58s. per week	..
	Sheet iron workers	..	48s. per week
	Assemblers	..	45s. ,,
	Painters	51s. to 54s. per week	..
	Engine-drivers	45s. to 54s. ,,	..
	Labourers, yardmen	39s. to 45s. ,,	..
Engineering, boilermaking, iron foundry	Blacksmiths	10s. to 14s. per day	..
	Strikers	7s. to 8s. ,,	..
	Fitters and turners	10s. to 11s. ,,	..
	Boilermakers and platers	..	10s. per day
	Riveters	9s. to 10s. per da	..
	Bank pipe moulders	8s. 4d. to 10s. 8d. ,,	..
	Vertical pipe moulders	..	8s. per day

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class V.—continued.			
Engineering, &c.—*continued.*	Coremakers, pipe ..	8s. 4d. to 10s. 8d. per day	..
	Finishers and casters	..	10s. per day
	Furnacemen	..	8s. ,,
	Pipe dressers ..	..	7s.4d. ,,
	Labourers	..	7s. ,,
	Iron casting moulders —heavy	..	10s. ,,
	Iron casting moulders —light	8s. to 9s. per day	..
	Iron coremakers—heavy	..	10s. per day
	Iron coremakers—light	8s. to 9s. per day	..
	Steel moulders and core makers	..	10s. per day
	Steel crucible furnacemen	..	10s ,,
	Steel converter furnacemen	..	9s. ,,
	Furnacemen's assistants	..	8s. ,,
	Steel and iron dressers	7s. 2d. to 7s. 6d. per day	..
	Annealers and labourers	7s. to 7s. 4d. per day	..
Cutlery	Cutlers and sawmakers	60s. to 80s. per week	..
	Knifesmiths ..	50s. to 55s. ,,	..
	Saw and tool grinders and sharpeners	45s. to 55s. ,,	..
Nail, barbed wire	Nail makers ..	55s. to 60s. ,,	..
	Labourers	37s. 6d. to 40s. ,,	37s. 6d per wk
	Barbed wire workers	42s. 6d. to 50s. ,,	47s. 6d. ,,
Iron safe, door	Fireproof safe, &c., makers	45s. to 80s. ,,	60s. ,,
Tinsmithing, galvanized iron, sheet iron, japanning	General tinsmiths, sheet iron and spouting workers, repairers and heavy work stampers	..	52s. ,,
	Light work stampers..	..	48s. ,,
	Labourers' stackers ..	..	42s. ,,
	Canister makers and repairers	..	50s. ,,
	Soldering machinists	..	48s. ,,
	Other ,,	..	45s. ,,
	Japanners and gilders—Ornamental ..	..	52s. ,,
	Other	43s. to 48s. per week	..
Stove, range, oven ..	Stove and oven fitters	47s. to 51s. ,,	..
	Electroplaters ..	54s. to 62s. ,,	..
Pattern making	Pattern makers ..	..	66s. per week
Meter	Fitters	..	48s. ,,
Spring	Spring fitters and spiral spring makers	..	56s. ,,
	Engine-drivers and smiths	..	54s. ,,
	Stokers	..	45s. ,,
	Elliptic heading and spring eye machinists	..	50s. ,,
	Other machinists ..	..	42s. ,,
	Strikers, emery wheel finishers and others	..	42s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class V.—continued.			
Brass, copper smithing ..	Brass moulders, finishers	..	48s. per week
	Brass polishers ..	..	42s. ,,
	Dressers, furnacemen	..	36s. ,,
	Coremakers, male ..	..	45s. ,,
	,, female	..	30s. ,,
	Coppersmiths ..	48s. to 57s. per week	..
Lead, shot, pewter ..	Labourers in lead and shot factories	45s. to 50s. ,,	48s. per week
Wire working	Wire workers ..	..	51s. ,,
	Weavers	..	52s. ,,
	Weavers' strikers ..	..	42s. ,,
Wire mattrass	Machine operators ..	56s to 64s. per week	..
	Weavers, framemakers	..	50s. per week
	Weavers (female) ..	..	34s. ,,
Smelting, chlorination, cyanide, pyrites	Metallurgists and assayers	£3 5s. to £5 per week	..
	Cyaniders	40s. to 55s. ,,	..
	Chlorinators ..	40s. to 55s. ,,	..
	Smelters	50s. to 70s. ,,	..
	Roasters	40s. to 42s. ,,	..
	Furnacemen ..	46s. to 60s. ,,	..
	Labourers	40s. to 48s. ,,	..
Bedstead, fender	Blacksmiths ..	..	48s. per week
	Fitters-up	..	51s. ,,
	Chill fitters ..	56s. to 64s. per week	..
	Frame setters ..	..	54s. per week
	Chippers	..	43s. ,,
	Mounters of bedstead pillars	43s. to 51s. per week	..
	Grinders and polishers	..	57s. per week
	Japanners	43s. to 51s. per week	..
	Fitters (fender) ..	..	51s. per week
	Electroplaters ..	..	66s. ,,
	,, assistants	..	56s. ,,
	Brass lacquer and plate work polishers	..	48s. ,,
	Packers and storemen	..	43s. ,,
	Japanners and polishers—female	..	39s.6d. ,,
	Wrappers—female ..	..	19s. 6d. ,,
Class VI.—Connected with Food and Drink, or the preparation thereof.			
Order 1.—Animal Food.			
Bacon-curing	Foremen curers ..	..	60s. per week
	Assistant ,, ..	46s. to 50s. per week	..
	Foremen, cutting ..	..	60s. per week
	Assistants ,, ..	..	52s. 6d. ,,
	Foremen, slaughtering	..	60s. ,,
	Assistants ,,	..	52s. 6d. ,,
	Foremen, small goods	..	60s. ,,
	Assistants ,,	..	50s. ,,
	Foremen, smoking, rolling, &c.	..	55s. ,,
	Assistants, smoking, rolling, &c.	45s. to 52s. 6d. per week	..
	General workers ..	45s. to 52s. 6d. ,,	..
Butter, cheese, concentrated milk	Factory managers ..	60s. to 90s. ,,	70s. per week
	Butter makers, and churners	45s. to 50s. ,,	47s. 6d. ,,
	Labourers, packers ..	35s. to 40s. ,,	37s. 6d. ,,
Butterine, margarine ..	Labourers	30s. to 42s. ,,	40s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
***Class VI.—Order* 1—continued.**			
Meat preserving, freezing ..	Slaughtermen ..	..	27s. 6d. per 100 sheep
	Digestor hands, tallow-men	42s. to 50s. per week	..
	Boners	..	48s. per week
	Preservers' assistants	40s. to 50s. per week	..
	Tinsmiths (canister makers)	..	50s. per week
	Labourers, packers ..	40s. to 48s. per week	..
	Chambermen ..	..	48s. per week
Order* 2.—*Vegetable Food, including products not foods but usually associated with the manufacture of foods.			
Biscuit	Factory foremen ..	55s. to 80s. per week	..
	Forewomen ..	25s. to 40s. ,,	..
	Cake makers ..	46s. to 56s. ,,	..
	Biscuit bakers, mixers	43s. to 54s. ,,	..
	Machine hands ..	35s. to 42s. ,,	36s. per week
	Packers—male ..	37s. 6d. to 39s. ,,	..
	female ..	16s. to 20s. ,,	..
Confectionery	Confectioners ..	..	54s. per week
	Head storemen ..	..	50s. ,,
	Storemen and labourers	..	42s. ,,
	Chocolate dippers—female	..	22s. ,,
	General workers—male	..	36s. ,,
	female	..	20s. ,,
Flour mill	Millers and millwrights	..	55s. ,,
	Packermen ..	42s. to 48s. per week	..
	Other adult mill employés	..	42s. per week
	Engine-drivers ..	..	48s. ,,
	Head storemen ..	..	48s. ,,
	Other adult store hands	..	45s. ,,
Jam, fruit-preserving, pickle, sauce, vinegar	Foremen	50s. to 80s. per week	..
	Adult males ..	..	45s. per week
	Females over 18 years	19s. to 21s. per week	..
Oatmeal, cornflour, macaroni	General hands—male	32s. to 60s. ,,	..
	female	13s. to 25s. ,,	..
Starch	Foremen	..	48s. per week
	Millers, stonedressers	..	42s. ,,
	General hands—male	..	36s. ,,
	female	..	22s.6d. ,,
	Engine-drivers ..	..	50s. ,,
Sugar, treacle refining ..	Vacuum hands and others	42s. to 115s. per week	..
Order* 3.—*Drinks and Stimulants.			
Aerated waters, cordials ..	Cordial makers ..	55s. to 80s. per week	60s. per week
	Bottlers by hand or rack other than automatic	..	45s. ,,
	Bottlers by automatic rack	..	42s. 6d. ,,
	All others	..	39s. ,,
Malt	Persons engaged in turning floors, screening malt and barley, &c.	..	54s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class VI.—*Order* 3—continued.			
Brewing	Top and cellarmen, cask washers, storemen, &c.	..	51s. per week
	Rackers, corkers ..	..	51s. ,,
	Packers, loaders ..	..	45s. ,,
	Syphoners	32s. to 37s. per week	..
	Headers-up	..	32s. per week
	Wirers and clippers ..	27s. to 32s. 6d. ,,	..
Distilling	Stillmen	..	60s. per week
	Brewhouse millhouse hands (skilled)	..	54s. ,,
	Coopers	..	52s. ,,
	General labourers and bottling hands	45s. to 48s. per week	..
Condiments, coffee, chicory, cocoa, chocolate, spice, &c.	General hands—male	36s. to 60s. ,,	..
	female	13s. to 25s. ,,	20s. per week
Ice, refrigerating	Chamber hands ..	..	1s. per hour
	Ice pullers and stackers	..	1s. ,,
	General hands and rabbit packers	..	10½d. ,,
	Engine-drivers and firemen	42s. to 60s. per week	48s. per week
	Carters	45s. to 50s. ,,	..
Order 4.—*Narcotics.*			
Tobacco, cigar, cigarette ..	Flake coverers ..	60s. to 80s. per week	65s. per week
	,, ,, (female)	35s. to 45s. ,,	..
	General hands in press-rooms &c. (unskilled)	48s. to 57s. ,,	..
	Gangers in press room	..	63s. per week
	Cigar makers (piecework) males	50s. to 65s. per week	..
	Cigar makers (piecework) females	20s. to 22s. 6d. ,,	..
	Cigarette makers (hand)—female	20s. to 30s. ,,	25s. per week
	Persons re-tying box or sorting cigars	..	54s. ,,
	Persons stripping and booking cigar leaf	..	48s. ,,
	Persons stripping bunch wrapper leaf	..	40s. ,,
Class VII.—*Clothing and Textile Fabrics and Fibrous Materials.*			
Order 1.—*Textile.*			
Woollen, cloth, blanket, rug ..	Foremen	55s. to 60s. per week	..
	Pattern weavers ..	..	54s. per week
	Tuners	..	52s. ,,
	Power-loom weavers ..	..	30s. ,,
	Spinners	36s. to 42s. per week	..
	Labourers	33s. 6d. to 42s. ,,	..
	Wool scourers ..	..	42s. per week
	Fettlers	..	42s. ,,
	Dye house labourers ..	..	42s. ,,
	Wool dryers, warpers	..	42s. ,,
	Willey house labourers	..	42s. ,,
	Warpers—female ..	..	28s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class VII.—continued.			
Order 2.—Dress.			
Clothing, tailoring	Order—		
	Cutters—male and female	..	60s. per week
	Tailors	..	55s. ,,
	Pressers—male and female	..	50s. ,,
	Trimmers ..	..	47s.6d. ,,
	Other females ..	..	22s.6d. ,,
	Ready made—		
	Cutters, stock—male and female	..	55s. ,,
	Machinists, examiners—male	..	45s. ,,
	Folders	..	40s. ,,
	Seam pressers—male and female	..	30s. ,,
	Brushers	..	25s. ,,
	Tailoresses, machinists, buttonhole makers	..	21s. ,,
Corset	Corset makers—female	20s. to 30s. per week	25s. per week.
Dressmaking, millinery ..	Dressmakers in charge	50s. to 120s. ,,	..
	Dressmakers' assistants—female	..	16s. per week
	Mantlemakers (in charge)—female	50s. to 80s. per week	..
	Mantlemakers' assistants—female	..	16s. per week
	Milliners in charge ..	50s. to 80s. per week	..
	Milliners' assistants—female	..	22s.6d. per wk
Shirtmaking, underclothing ..	Shirt, pyjama, and collar makers—female	..	20s. ,,
	Underclothing makers—female	..	20s. ,,
Hat, cap	Body makers, and finishers—silk hats	50s. to 60s. per week	55s. ,,
	Shapers, silk hats ..	60s. to 70s. ,,	65s. ,,
	Crown sewers, silk hats—female	20s. to 30s. ,,	25s. ,,
	Trimmers, silk hats—female	22s. 6d. to 26s. ,,	25s. ,,
	Bodymakers, felt hats	70s. to 90s. ,,	77s.6d. ,,
	Blockers ,,	65s. to 70s. ,,	..
	Finishers ,,	70s. to 100s. ,,	75s. per week
	Shapers ,,	..	65s. ,,
	Binders and trimmers, felt hats—female	20s. to 25s. per week	..
	Machinists, straw hats—female	22s. 6d. to 30s. ,,	25s. per week
	Trimmers straw hats—female	20s. to 25s. ,,	22s. 6d. ,,
	Blockers, pressers—women's hats	42s. 6d. to 47s. 6d. per week	..
	Machinists, caps—female	17s. 6d. to 25s. per week	20s. per week
Hosiery	Machinists, knitting—female	22s. 6d. to 35s. per week	27s.6d. ,,
	Machinists, sewing—female	20s. to 35s. ,,	22s.6d. ,,
	Linkers—female ..	20s. to 30s. ,,	24s. ,,
	Pressers—male ..	48s. to 60s. ,,	50s. ,,
	,, female ..	20s. to 30s. ,,	25s. ,,
	Winders—female ..	16s. to 20s. ,,	18s. ,,
	Menders, &c.—female	18s. to 25s. ,,	20s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class VII.—Order 2—continued.			
Oilskin, waterproof clothing	Male cutters ..	..	50s. per week
	Male garment makers	..	45s. ,,
	Female garment makers and machinists	..	22s. 6d. ,,
	Needle hands, female	..	17s. 6d. ,,
Boot, shoe	Makers, finishers, clickers, stuff-cutters, male and female	..	54s. ,,
	Other females with four years' experience	..	22s. 6d. ,,
Furrier	Cutters	50s. to 70s. per week	60s. ,,
	Machinists—female ..	20s. to 25s. ,,	22s. 6d. ,,
	Sewers—female ..	17s. 6d. to 20s. ,,	..
Umbrella, parasol	Frame makers ..	40s. to 50s. ,,	40s. per week
	Cutters	40s. to 55s. ,,	40s. ,,
	Finishers—male ..	27s. 6d. to 40s. ,,	30s. ,,
	Machinists—female ..	20s. to 25s. ,,	22s. 6d. ,,
	Tippers ,, ..	17s. 6d. to 20s. ,,	..
Dye works	Dyers	60s. to 80s. ,,	70s. per week
	Dyers' assistants and cleaners	40s. to 50s. ,,	45s. ,,
	Pressers—male ..	..	50s. ,,
	female ..	..	30s. ,,
Ostrich feather	Feather dyers ..	60s. to 70s. per week	65s. ,,
	,, ,, assistants	35s. to 40s. ,,	37s. 6d. ,,
	Feather curlers, dressers, finishers—female	15s. to 30s. ,,	20s. ,,
Order 3.—*Fibrous Materials and Textiles not elsewhere included.*			
Bag, sack (including calico bag)	Bagmenders ..	20s. to 35s. per week	30s. per week
	Calico bag-makers—female	15s. to 20s. ,,	17s. 6d. ,,
Rope, twine	Undefined—male ..	42s. to 70s. ,,	45s. ,,
	female ..	15s. to 25s. ,,	20s. ,,
Tarpaulin, tent, sail ..	Tarpaulin and tent makers	40s. to 50s. ,,	48s. ,,
	Sailmakers	..	60s. ,,
	Tarpaulin, tent, sail makers—female	15s. to 22s. 6d. per week	20s. ,,
Class VIII.—Books, Paper, Printing, Engraving, &c.			
Printing (including lithographic printing, electrotyping, stereotyping)	Printers—Compositors	..	60s. per week
	,, machinists	..	60s. ,,
	Proof readers ..	..	64s. ,,
	Printers—Linotype and monoline operators	70s. to 84s. per week	..
	Printers—monotype perforating machine operators	63s. to 77s. ,,	..
	Persons employed on monotype casting machines	..	45s. 6d. per wk.
	Feeders and others—male	..	36s. ,,
	Feeders and others—female	..	20s. ,,
	Lithographers ..	..	56s. ,,
	Stereotypers ..	..	60s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
***Class VIII.*—continued.**			
Bookbinding, account book making, stationery, &c.	Bookbinders, paper rulers, guillotine machine cutters	..	56s. per week
	Feeders and others—male	..	36s. ,,
	Pagers, folders, staplers, &c.—female	..	18s. ,,
	Sewers and feeders—female	..	20s. ,,
Ink, printing ink	Ink makers ..	45s. to 70s. per week	50s. ,,
Paper	Paper, &c., makers ..	..	60s. ,,
	Beatermen	54s. to 60s. per week	..
	Breakermen ..	45s. to 48s. ,,	..
	General hands ..	39s. to 45s. ,,	..
	Engine-drivers ..	54s. to 60s. ,,	..
Paper bag, box, &c. ..	Machine box cutters—male and female	..	56s. per week
	Other workers—male	..	45s. ,,
	Box-makers—female	22s. to 25s. per week	..
	Cardboard carton cutters	..	52s. per week
	All other carton workers—male	..	45s. ,,
	Carton workers—adult female	..	18s. ,,
	Paper bag machinists	55s. to 56s. per week	..
	,, ,, guillotine cutters	..	50s. per week
	,, ,, makers—female	..	18s. ,,
Die sinking, engraving, &c. ..	Copper plate engravers	..	80s. ,,
	Die sinkers ..	..	60s. ,,
	Engravers, general ..	52s. 6d. to 70s. per week	..
	Process engravers ..	50s. to 90s. ,,	..
Class IX.—Musical Instruments.			
Organ, pianoforte	Organ builders ..	..	58s. per week
Class X.—Arms and Explosives.			
Ammunition	Cartridge operators—female	17s. 6d. to 30s. per wk.	20s. per week
	Mechanics (fitters, &c.)	55s. to 72s. ,,	..
	Labourers	42s. to 50s. ,,	..
Explosive	Nitro-glycerine workers	42s. to 55s. ,,	48s. per week
	Acid workers ..	45s. to 48s. ,,	..
	Labourers	36s. to 42s. ,,	36s. per week
Fireworks, fuse	Fireworks makers—male	37s. 6d. to 45s. ,,	..
	Fireworks makers—female	12s. 6d. to 16s. ,,	..
Class XI.—Vehicles, Fittings, Saddlery, Harness, &c.			
Coach, waggon, tramcar, spoke and felloe, wheelwright	Bodymakers, smiths, painters, trimmers	..	54s. per week
	Vycemen, strikers' labourers	..	42s. ,,
	Wheelwrights, wheelers' machinists, axle makers, blacksmiths	..	54s. ,,

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class XI.—continued.			
Coach, &c.—*continued.*	Face plate workers and screw-cutting turners	..	52s. per week
	Centre turners, strikers, steam hammer drivers	..	42s. ,,
	Labourers	..	42s. ,,
	Trimmers and machinists—female	..	25s. ,,
Carriage lamp	Lamp makers ..	..	52s. ,,
Cycle	Foremen	60s. to 62s. 6d. per week	..
	Assemblers ..	..	45s. per week
	Filers	..	45s. ,,
	Frame builders ..	..	50s. ,,
	General repairers ..	..	48s. ,,
	Screw cutters and turning lathe men	..	57s. 6d. ,,
	Wheel builders ..	..	45s. ,,
	Foremen rim makers	..	55s. ,,
	Braziers	..	50s. ,,
	Other workers ..	..	45s. ,,
Perambulator	Wickerworkers ..	..	55s. ,,
	Upholsterers ..	..	48s. ,,
	Fitters up	30s. to 40s. per week	35s. ,,
Saddlery, harness	Saddle collar and harness makers	..	54s. ,,
	Machinists—female ..	..	24s. ,,
Saddle-tree, saddlers' ironmongery, &c.	Saddle-tree makers ..	50s. to 60s. per week	55s. ,,
Whip	Thong makers ..	..	44s. ,,
Class XII.—Ship Building, Fitting, &c.			
Dock, slip	Shipwrights ..	..	12s. per day
	Foundry and shipsmiths	10s. to 11s. per day	..
	Painters	..	55s. per week
	Labourers	..	8s. 8d. per day
	Stevedores' men and lumpers	..	1s. 3d. per hr.
	Wharf labourers ..	..	1s. 1½d. ,,
Boat building	Boat builders (skilled)	48s. to 60s. per week	48s. per week
Class XIII.—Furniture, Bedding, &c.			
Bedding, flock, upholstery ..	Bedding and mattress makers	..	50s. per week
	All females over four years' experience	..	25s. ,,
	Upholsterers ..	..	56s. ,,
Carpet	Carpet planners ..	60s. to 65s. per week	..
	Carpet and linoleum layers	..	56s. per week
	Makers and repairers—female	..	25s. ,,
Curled hair	Curled hair, horsehair workers	40s. to 42s. per week	..
Furniture, cabinet making, chair, billiard table	Cabinet, chair, and couch makers	..	56s. per week
	Carvers, turners, polishers	..	56s. ,,
	Billiard table and cushion makers	..	56s. ,,
	Machinists	58s. to 64s. per week	..
	Females (four years' experience)	..	25s. per week

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class XIII.—continued.			
Picture frame	Joiners, gilders ..	45s. to 50s. per week	..
	Machinists	..	52s. per week
	Mount cutters ..	45s. to 48s. per week	..
	Compo workers and stainers	37s. 6d. to 50s. ,,	..
	Mounters, packers ..	35s. to 40s. ,,	..
	Adult females ..	..	21s. per week
Venetian blind, window blind	Venetian blind makers	42s. to 48s. per week	42s. ,,
Class XIV.—Drugs, Chemicals, and By-products.			
Baking powder	Skilled, undefined ..	36s. to 60s. per week	..
	Wrappers—female ..	12s. 6d. to 20s. ,,	..
Blacking, black lead, blue, polishes, &c.	Grinders and mixers ..	..	48s. per week
	Others	..	40s. ,,
	Adult females ..	..	25s. ,,
Chemical, drug, horse and cattle medicine	Makers of pharmaceutical preparations	60s. to 80s. per week	60s. ,,
	Others (unskilled) working in drugs, &c.; disinfectant makers	30s. to 50s. ,,	40s. ,,
	Packers—female ..	15s. to 22s. 6d. ,,	20s. ,,
Essential oil	Essence blenders ..	35s. to 55s. ,,	40s. ,,
Fertilizer	Acid tank cleaners, and pit emptiers in superphosphate works	..	54s. ,,
	Men attending roasters and acid chambers	..	51s. ,,
	Men feeding elevators, weighing and bagging machine attendants	..	49s. ,,
	Labourers	..	48s. ,,
Paint, varnish, white-lead ..	Paint and varnish makers	55s. to 70s. per week	55s. ,,
	Paint and varnish makers' assistants	..	40s. ,,
Class XV.—Surgical and Scientific Appliances.			
Optical, philosophical instrument, &c.	Opticians, &c. ..	40s. to 60s. per week	..
Surgical appliance, instrument	Surgical instrument makers	40s. to 60s. ,,	..
Class XVI.—Timepiece, Jewellery, Platedware.			
Electroplating	Persons mixing and working solutions and electric current	60s. to 66s. per week	..
	Whetstone grinders ..	..	55s. per week
	Liners and hand decorators	..	54s. ,,
	Grinders and polishers	45s. to 51s. per week	..
	Finishing coaters and rim centerers	..	49s. per week
	Machine cleaners and others	..	48s. ,,
	Lacquerers and burnishers	..	46s. ,,
	Persons dipping, first coaters, and frame cleaners	40s. to 43s. per week	..

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupations.	Wages.	
		Range.	General Rate.
Class XVI.—continued.			
Goldsmithing, jewellery, goldbeating	Engravers and chasers	..	60s. per week
	Chainmakers, mounters, ringmakers, setters, silversmiths, &c.	..	50s. ,,
	Other workers ..	..	36s. ,,
	Female chain makers or repairers	..	35s. ,,
Watchmaking, &c. ..	Watchmakers ..	45s. to 70s. per week	..
Class XVII.—Heat, Light, and Energy.			
Electric apparatus	Engine fitters and turners	60s. to 66s. per week	..
	Winders	48s. to 60s. ,,	54s. per week
Electric light	Engine-drivers ..	..	10s. per day
	,, ,, assistants	..	8s. 6d. ,,
	Firemen	..	9s. ,,
	Dynamo attendants	..	8s. ,,
	Electrical fitters ..	..	9s. 6d. ,,
	Switchboard attendants	..	9s. 6d. ,,
	Linemen	..	8s. 6d. ,,
	Carboners ..	..	8s. ,,
	Patrolmen	..	9s. 6d. ,,
	Wirers	..	9s. ,,
	Trimmers	..	8s. ,,
	Labourers	..	8s. ,,
Gas and coke	Stokers	9s. 9d. to 10s. per day	9s. 9d. ,,
	Enginemen ..	9s. to 9s. 6d. ,,	..
	Purifiers	8s. to 8s. 6d. ,,	..
	Sulphate workers ..	..	9s. 6d. per day
	Stove repairers and fitters	48s. to 51s. per week	..
	Service and main layers	57s.9d. to 71s.6d. ,,	..
	Gas inspectors ..	57s.9d. to 71s.6d. ,,	..
	Labourers	8s. to 8s. 3d. per day	..
Match	Match and vesta makers —female (piecework)	20s. to 35s. per week	..
	Box makers — female (piecework)	12s. to 35s. ,,	..
	Storemen, packers ..	35s. to 45s. ,,	40s. per week
Ironfounders' dust, charcoal dust	Foremen	..	52s. 6d. ,,
	Mill hands and others	42s. to 48s. per week	..
Hydraulic power	Enginemen ..	..	10s. per day
	Firemen	8s. to 10s. per day	..
	Fitters	..	11s. per day
	Main layers ..	..	10s. ,,
	Special labourers ..	..	8s. 4d. ,,
	Ordinary labourers ..	..	7s. 6d. ,,
Class XVIII. — Leatherware (excluding Saddlery and Harness.)			
Leather belting	Foremen	..	60s. per week
	Belt makers ..	48s. to 50s. per week	48s. ,,
	Machinists	45s. to 48s. ,,	..
Portmanteau, gladstone bag..	Foremen	..	60s. per week
	Male workers ..	..	52s. ,,
	Female workers ..	20s. to 25s. per week	..

WAGES IN MELBOURNE, 1910—*continued.*

Industries.	Occupation.	Wages.	
		Range.	General Rate.
Class XIX.—Wares not elsewhere included.			
Basket, wickerware ..	Wicker and bamboo workers	54s. to 55s. pe week	..
	Upholsterers ..	..	48s. per week.
Broom, brushware	Millet broom sorters..	42s. 6d. to 52s. 6d. per week	..
	Storemen and labourers	..	45s. per week.
	Brush machinists ..	48s. to 64s. per week	..
	Paint brush makers ..	..	60s. per week.
	Brush finishers ..	..	50s. ,,
	Bottle, flue, wire, and bass brush makers	..	48s. ,,
	Draw-bench and treadle knot machine workers	..	21s. ,,
Rubber goods (including cycle tires)	Calendar hands ..	..	54s. ,,
	Mill hands, mixers ..	..	48s. ,,
	Compound scale hands	..	45s. ,,
	Spreaders, hose, belting &c., hands	..	45s. ,,
	Tire makers, repairers, wrappers	..	45s. ,,
	Press hands ..	..	43s. ,,
	Heaters, textile cutters, lathe, surgical and tube makers	..	42s.6d. ,,
	Drum tire and forcing machine hands	..	42s. ,,
	General workers ..	..	40s. ,,
	Cleaners ..	..	32s. 6d. ,,
	Female workers ..	..	22s. 6d. ,,

WAGES IN MELBOURNE, 1910—*continued.*

B.—WAGES FOR SERVANTS AND ADULT WORKERS IN UNCLASSIFIED CALLINGS, TRADES AND INDUSTRIES.

Industry or Service.	Occupations.	Wages.	
		Range.	General Rate.
Educational*	Governesses ..	£30 to £40 per annum	..
	,, advanced	£40 to £80 ,,	..
	Teachers in private schools—		
	Males (elementary)	£80 to £120 ,,	..
	,, (advanced) ..	£150 to £300 ,,	..
	Females (elementary)	£30 to £50 ,,	..
	,, (advanced) ..	£50 to £150 ,,	..
Clerical	Bookkeepers ..	40s. to 70s. per week	..
	Shorthand clerks and typists—male	30s. to 60s. ,,	..
	Shorthand clerks and typists—female	20s. to 40s. ,,	..
Domestic servants*—males ..	Coachmen, footmen, grooms, gardeners	20s. to 30s. ,,	..
	Butlers	25s. to 40s. ,,	25s. per week
females	Cooks	16s. to 30s. ,,	20s. ,,
	Laundresses ..	16s. to 20s. ,,	16s. ,,
	Housemaids ..	12s. to 15s. ,,	13s. ,,
	Nursemaids ..	10s. to 15s. ,,	12s. ,,
	General servants ..	10s. to 17s. 6d. ,,	14s. ,,
	Girls	8s. to 10s. ,,	9s. ,,
Hotel servants*—males ..	Barmen	25s. to 40s. ,,	30s. ,,
	Waiters	20s. to 30s. ,,	25s. ,,
	Boots	12s. to 20s. ,,	15s. ,,
	Ostlers	17s 6d. to 25s. ,,	20s. ,,
	Cooks	25s. to 60s. ,,	35s. ,,
females ..	Barmaids	15s. to 25s. ,,	20s. ,,
	Waitresses	15s. to 25s. ,,	17s.6d. ,,
	Housemaids ..	15s. to 25s. ,,	17s.6d. ,,
	Cooks	25s. to 35s ,,	30s. ,,
Building	Bricklayers ..	..	12s. per day
	Bricklayers' labourers	..	9s. 6d. ,,
	Tuckpointers ..	..	66s. per week
	Carpenters (foremen)	..	69s 8d ,,
	,, other ..	..	64s. 2d. ,,
	,, labourers ..	..	52s. 3d. ,,
	Painters, paperhangers, signwriters, grainers	..	55s. ,,
	Plasterers	..	10s. 4d. per day
	Plumbers (foremen) ..	..	71s. 6d. per wk.
	,, first-class work	..	66s. ,,
	,, second ,, ,,	..	57s. 9d. ,,
	Slaters	..	10s. per day
Baking	Foremen or single hands	..	65s. per week
	Vienna and rye bread bakers	..	62s. ,,
	Adult workers and machine dough makers	..	60s. ,,
	Jobbers	..	1s. 6d. per hr.
	Carters	..	40s. per week
	Pastrycooks ..	46s. to 56s. per week	..
	General workers—male	..	30s. per week
	,, ,, female	..	17s 6d. ,,
	Ornamental workers—female	20s. to 32s. per week	..
Butchering	Slaughtermen ..	..	60s. per week
	Shopmen	..	57s. 6d.,,
	General butchers ..	..	47s. 6d.,,
	Lorry drivers ..	..	45s. ,,
	Delivery cart drivers	..	40s. ,,

* With board and lodging.

WAGES IN MELBOURNE, 1910—*continued.*

Industry or Service.	Occupations.	Wages.	
		Range.	General Rate.
Carters	Drivers of one horse vehicles	..	45s. per week
	Drivers of two horse vehicles	..	50s. ,,
	Drivers of three horse vehicles	..	54s. ,,
	Drivers of jinkers and boiler trucks	50s. to 60s. per week	..
	Drivers of motor vehicles	..	50s. per week
Coal and wood yards ..	Yardmen in charge	..	42s. ,,
	Other yardmen ..	..	40s. ,,
	Carters	40s. to 45s. per week	..
Coal and coke yards ..	Yardmen	..	52s. per week
	Carters	45s. to 50s. per week	..
Drapery	Senior assistants—male	..	50s. per week
	Junior assistants—male	37s. 6d. to 43s. per week	..
	Pattern cutters, cashiers, &c.	37s. 6d. to 50s. ,,	..
	Junior assistants (females)	20s. to 27s. 6d. ,,	..
Men's clothing (retail shops) ..	Managers	..	70s. per week
	Assistants (over 23 years of age)	..	55s. ,,
	Other adult employés	..	42s. 6d. ,,
Farriery	Foremen	..	57s. 6d. ,,
	Journeymen ..	..	50s. ,,
Grocery	Managers	..	60s. ,,
	Employés over 24 years of age	..	50s. ,,
	Employés, other ..	40s. to 45s. per week	..
	Storemen, packers ..	..	42s.6d. per week
	Carters	40s. to 45s. per week	..
Hairdressing	Employés—male, full hands	..	55s. per week
	Employés—male, other	45s. to 50s. per week	..
	,, female ..	40s to 46s. ,,	..
Laundry	Laundresses ..	21s. to 30s. ,,	24s. per week
Photography	Operators	60s. to 140s. ,,	..
	Printers	40s. to 70s. ,,	..
	Retouchers—female ..	15s. to 40s. ,,	..
	Finishers—female ..	10s. to 20s. ,,	15s. per week
	Makers of photographic materials	36s. to 65s. ,,	45s. ,,
	Finishers, packers—female	17s. 6d. to 25s. ,,	17s.6d. ,,
Quarry	Hammermen ..	51s. to 63s. per week	..
	Pitcher and cube dressers	..	63s. per week
	Facemen	..	57s. ,,
	Spallers	48s. to 57s. per week	..
	Machine borers ..	..	57s. per week
	Pluggers and machine feeders	..	51s. ,,
	Loaders, truckers, strippers and labourers	..	48s. ,,

The average weekly wages paid to males and females employed in all industries working under Wages Boards' determinations, and in those for which Wages Boards have not been appointed, have been compiled by the Chief Inspector of Factories, and are given in the following statement. The results are, however, not comparable with those obtained by the Government Statist, as the figures

of the Inspector of Factories refer not to the whole State but only to those parts of it in which the Factories Acts are in operation, also because they include particulars relating to a number of bakery, butchery, carpentry, plumbing, and other similar establishments which do not come under the definition of a factory as adopted by the Australian statisticians.

EMPLOYÉS UNDER WAGES BOARDS AND AVERAGE WAGES.

—	Males.		Females.	
	No.	Average Weekly Wage.	No.	Average Weekly Wage.
		£ s. d.		£ s. d.
Apprentices and improvers ...	11,622	0 18 8	12,422	0 9 7
General workers (mostly young persons)	1,343	0 17 9	901	0 12 2
Persons employed at minimum wage or over	25,412	2 12 8	11,336	1 3 7
Piece workers	1,701	2 9 6	3,224	1 2 0
Total	40,078	2 1 6	27,883	0 16 10

NOTE.—The average weekly wage of females is low on account of its being based on figures which include a large number of apprentices.

EMPLOYÉS OUTSIDE OF WAGES BOARDS, AND AVERAGE WAGES.

—	No.	Average Weekly Wage.
		£ s. d.
Males	9,349	1 18 10
Females	6,520	0 17 6
Total	15,869	1 10 1

Tanneries, &c.

There were in operation at the close of 1910, 89 tanning, fellmongering and wool washing establishments. The average number of persons employed was 1,956, and the wages paid during the year to the employés (excluding working proprietors) amounted to £175,364. The following table shows the approximate value of

the machinery, plant, land, buildings, and improvements during each of the last ten years:—

VALUE OF TANNERIES: 1901 TO 1910.

Year.	Approximate Value of—		
	Machinery and Plant in Use.	Land.	Buildings and Improvements.
	£	£	£
1901	99,710	47,750	98,950
1902	103,329	54,179	104,114
1903	110,796	48,341	112,407
1904	109,095	41,979	104,005
1905	114,863	46,301	112,714
1906	114,951	47,139	110,155
1907	124,064	51,194	123,124
1908	133,376	53,713	129,664
1909	142,429	54,208	125,700
1910	141,702	55,858	136,991

The quantity of bark used in connexion with tanning operations in 1910 was 10,081 tons. The output of tanneries for each of the last ten years was as follows:—

OUTPUT OF TANNERIES, ETC.: 1901 TO 1910.

Year.	Number Tanned of—			Sheep Skins Stripped.	Wool Washed (weight after washing).
	Hides.	Calf Skins.	Sheep and other Skins.		
				No.	lbs.
1901 ...	406,260	181,522	676,936	615,614	8,511,171
1902 ...	424,786	189,886	313,166	453,660	5,279,916
1903 ...	397,367	179,425	629,465	925,263	6,197,723
1904 ...	381,473	134,003	674,105	651,672	5,285,409
1905 ...	393,695	139,506	544,145	562,705	4,543,927
1906 ...	485,620	132,210	518,139	612,598	5,676,464
1907 ...	492,572	188,007	548,765	851,516	7,230,675
1908 ...	498,947	127,798	1,027,460	1,253,875	7,803,992
1909 ...	495,964	175,563	1,020,656	1,090,967	8,089,643
1910 ...	496,200	186,993	1,007,343	1,241,693	8,242,456

The figures for 1909 and 1910 do not include skins and wool dealt with in small tanneries. The work done in such tanneries in 1908 was the tanning of 1,540 hides, 1,620 calf skins, and 4,916 sheep and other skins. The value of the leather imported into Victoria from oversea countries during 1910 was £222,451.

There were sixteen soap and candle works in operation in 1910. These factories employed 540 persons, of whom twelve were working proprietors. The amount of the wages paid to the employés in that year was £51,518. The value of the machinery, plant, land, buildings, and improvements, and the quantity of soap and candles produced in each of the last ten years were as follows:— Soap and candle works.

SOAP AND CANDLE WORKS—VALUE AND PRODUCTS: 1901 TO 1910.

Year.	Approximate Value of—			Products.	
	Machinery and Plant in Use.	Land.	Buildings and Improvements.	Soap.*	Candles.
	£	£	£	cwt.	cwt.
1901 ...	97,260	42,870	60,940	132,031	47,313
1902 ...	91,325	39,967	56,852	150,698	49,406
1903 ...	103,411	42,288	64,354	138,045	45,052
1904 ...	101,486	38,295	62,961	162,126	41,521
1905 ...	105,529	36,605	61,558	150,261	42,049
1906 ...	104,244	36,171	59,829	154,570	43,094
1907 ...	106,326	35,921	60,239	153,478	47,688
1908 ...	109,768	36,517	62,379	162,757	37 705
1909 ...	111,252	36,029	63,565	176,162	45,460
1910 ...	113,418	36,142	63,782	187,433	44,768

* Not including soap made in small soap works not classified as factories, viz., 11,109 cwt. in 1901, 14,490 cwt. in 1902, 13,369 cwt. in 1903, 7,902 cwt. in 1904, 7,185 cwt. in 1905, 11,706 cwt. in 1906, 10,527 cwt. in 1907, 7,125 cwt. in 1908, 5,458 cwt. in 1909, and 5,479 cwt. in 1910.

The quantity of tallow used in 1910 in the manufacture of soap and candles was 141,771 cwt. in factories, and 2,578 cwt. in minor works.

The imports from oversea countries in 1910 included 1,160,349 lbs. of soap valued at £40,868, and 113,205 lbs. of candles valued at £2,995.

The brickyards and potteries at which work was carried on during the year numbered 122. The persons employed numbered 1,847, of whom 117 were working proprietors, and the sum of £178,868 was paid to the employés in wages. The value of land, plant, buildings, &c., was £370,117. The estimated value of the bricks made in these brickyards in 1910 was £271,814. Brickyards potteries, &c.

The number of bricks made, and the value of pottery and of pipes and tiles manufactured during each of the last ten years, were returned as follows:—

BRICKS, POTTERY, PIPES, AND TILES: 1901 TO 1910.

Year.	Number of Bricks Made.*	Value of –	
		Pipes and Tiles.	Pottery.
		£	£
1901	84,898,000	73,060	23,695
1902	90,545,280	71,074	27,289
1903	77,826,631	81,732	34,572
1904	80,026,511	53,454	31,438
1905	90,990,284	56,086	27,205
1906	112,966,270	58,349	27,570
1907	123,281,100	66,390	29,070
1908	124,985,542	72,024	33,029
1909	129,302,810	77,305	32,624
1910	145,809,500	83,397	31,897

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

The expansion of building operations, especially in Melbourne and suburbs, during the last five years, is demonstrated by the number of bricks made.

Forest saw-mills, &c.

The number of forest saw-mills being worked in 1910 was 139. The employés numbered 1,767, and the working proprietors 164; while the wages paid amounted to £158,733. The approximate value of machinery, plant, land, buildings, and improvements during each of the last ten years, appears in the following statement, together with the quantity and value of timber sawn:—

FOREST SAW-MILLS: 1901 TO 1910.

Year.	Approximate Value of—			Timber Sawn.	
	Machinery and Plant in use.	Land.*	Buildings and Improvements.	Quantity.	Value
	£	£	£	Super. ft.	£
1901	91,810	6,170	13,500	46,495,885	134,310
1902	81,898	6,380	11,854	40,494,660	128,430
1903	80,039	1,495	10,797	38,841,322	116,845
1904	89,760	1,966	12,301	49,250,000	147,750
1905	87,757	2,553	10,861	47,635,358	142,905
1906	90,305	1,168	9,286	51,103,000	153,309
1907	99,723	1,421	11,199	55,873,500	181,590
1908	98,804	2,669	13,095	54 602,200	177,460
1909	115,121	2,609	15,551	56,039,200	189,130
1910	125,528	2,202	16,067	70,947,200	248,320

* Value of land occupied by saw-mills only since 1902.

The other factories in which operations on wood were carried on numbered 211, and comprised cooperage works (11), which gave employment to 78 persons, including 11 working proprietors, and paid the sum of £6,870 in wages; cork-cutting works (3), in which were engaged 5 working proprietors, and 62 employés who were paid £4,188 in wages; dairy and domestic implements and bellows works (4), employing 64 persons, inclusive of 5 working proprietors, and paying £5,717 in wages; saw-milling, moulding, and joinery works (149), employing 3,275 persons inclusive of 163 working proprietors, and paying £320,899 in wages; mantelpiece works (10), employing 255 persons inclusive of 14 working proprietors, and paying £22,774 in wages; and wood carving and turnery works (34), employing 258 persons inclusive of 39 working proprietors, and paying £18,014 in wages. The amount paid in wages to workers in wood, other than those employed in forest saw-mills, was £378,462; and the approximate value of land, buildings, machinery, &c., in use in the works was £491,909.

Firewood, &c.

It is estimated that the approximate value of the production of firewood for consumption in a year is £429,000. In addition, there are supplies of railway sleepers, piles, posts and rails, shingles, and timber for mines obtained from the forests, but it has been found impossible to procure reliable information as to their value.

Agricultural Implement Works.

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

AGRICULTURAL IMPLEMENT WORKS, 1904 TO 1910.

Year.	No. of Factories.	Employés.	Wages Paid.	Approximate Value of—		
				Fuel, &c., Used.	Material Used.	Output.
			£	£	£	£
1904	50	1,440	129,559	6,965	171,691	431,476
1905	53	1,565	145,651	7,964	171,850	443,114
1906	53	1,685	148,610	8,928	194,730	478,509
1907	55	1,553	147,675	9,554	188,173	452,841
1908	52	1,381	134,884	9,253	177,488	437,023
1909	52	1,831	181,391	12,697	242,922	611,293
1910	50	2,193	231,919	21,537	300,718	742,326

The figures show a considerable improvement in the output during the last two years, as a consequence of which there has been a substantial increase in the number of hands employed and in the wages paid. The wages averaged for each employé £89 19s. 5d. in 1904 and £105 15s. 1d. in 1910. The stripper-harvester, which is a Victorian invention, is one of the principal implements manufactured. This strips the grain, and bags it ready for market in one operation.

It is the leading item in machinery exported from Victoria, being in good demand not only in other Australian States, but also in the Argentine and South Africa.

Bacon and ham curing.

There were 25 establishments curing bacon and hams in 1910. The persons employed numbered 335, of whom 28 were working proprietors. The wages paid to employés amounted to £30,035. Further details of the industry for the last ten years are as follows:—

BACON CURING: 1901 TO 1910.

Year.	Approximate Value of—			Pigs Slaughtered for Curing.	Weight of Bacon and Hams Cured.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	No.	lbs.
1901 ...	27,900	8,690	27,670	109,283	11,485,460
1902 ...	29,611	9,231	30,625	112,244	11,507,224
1903 ...	26,810	5,721	23,415	88,541	9,633,206
1904 ...	27,822	5,641	25,730	104,604	11,229,768
1905 ...	28,335	5,941	25,650	117,582	11,360,698
1906 ...	28,217	6,031	29,140	135,492	12,910,575
1907 ...	25,530	5,245	26,575	145,513	13,609,144
1908 ...	26,448	5,190	27,653	129,677	11,518,404
1909 ...	26,092	5,190	28,650	123,067	11,245,195
1910 ...	26,799	5,265	29,410	142,429	13,455,397

This table does not include pigs slaughtered for curing, nor bacon and hams cured in small curing works; the pigs so slaughtered numbered 3,145 in 1901, 2,295 in 1902, 2,438 in 1903, 2,124 in 1904, 2,801 in 1905, 2,680 in 1906, 2,771 in 1907, 2,263 in 1908, 2,691 in 1909, and 1,637 in 1910; the quantity (in pounds) of bacon and hams cured was 211,250 in 1901, 195,098 in 1902, 181,745 in 1903, 194,102 in 1904, 246,374 in 1905, 252,348 in 1906, 244,837 in 1907, 194,328 in 1908, 294,088 in 1909, and 142,524 in 1910.

In addition, the following quantities of bacon and hams were returned as having been cured on farms:—3,314,906 lbs. in 1901, 2,736,048 lbs. in 1902, 2,689,900 lbs. in 1903, 3,428,074 lbs. in 1904, 4,826,593 lbs. in 1905, 4,888,243 lbs. in 1906, 3,691,739 lbs. in 1907, 2,698,669 lbs. in 1908, 2,375,290 lbs. in 1909, and 2,983,440 lbs. in 1910. The total quantity of bacon and hams cured in 1910 was thus 16,581,361 lbs.—an increase of 2,666,788 lbs. as compared with 1909.

Butter and cheese factories.

The number of butter and cheese factories, exclusive of creameries, was 203 in 1910. Of these factories, 155 made butter, 10 made butter and cheese, 5 made butter and concentrated and condensed milk, and 33 made cheese only. There were 89 creameries attached to the factories. The number of persons employed was 1,261, of whom 52 were working proprietors, representing an increase

of 71 on the number for the previous year. The approximate value of machinery, plant, land, buildings, and improvements was £513,292. The quantity of milk received at the factories and creameries was 146,656,005 gallons in 1906, 137,866,515 gallons in 1907, 104,980,863 gallons in 1908, 116,034,058 gallons in 1909, and 149,490,103 gallons in 1910. The output from butter and cheese factories during each of the last ten years was as follows:—

BUTTER AND CHEESE FACTORIES: 1901 TO 1910.

Year.	Butter Made.	Cream Sold.	Cheese Made.	Concentrated Milk Made.
	lbs.	gallons.	lbs.	gallons.
1901 ...	40,824,928	50,092	2,073,940	266,083
1902 ...	32,927,546	23,739	2,128,835	243,904
1903 ...	40,707,377	17,882	3,602,988	236,581
1904 ...	55,058,391	7,242	2,599,443	226,810
1905 ...	52,274,639	16,513	2,447,938	232,310
1906 ...	63,231,222	20,332	2,852,687	309,138
1907 ...	59,050,231	25,442	2,691,957	390,388
1908 ...	44,383,168	17,527	2,473,682	315,129
1909 ...	49,554,628	19,417	3,167,955	332,125
1910 ...	65,063,516	29,910	2,707,630	257,820

Butter and cheese made on farms.

In addition to the quantity of butter and cheese made in the factories, the following quantities were returned as having been made on farms:—Butter, 6,032,644 lbs. in 1901, 6,300,208 lbs. in 1902, 5,978,350 lbs. in 1903, 5,944,450 lbs. in 1904, 5,332,182 lbs. in 1905, 4,856,946 lbs. in 1906, 4,696,123 lbs. in 1907, 4,078,230 lbs. in 1908, 5,611,927 lbs. in 1909, and 5,540,271 lbs. in 1910; cheese, 1,900,728 lbs. in 1901, 1,720,726 lbs. in 1902, 2,078,527 lbs. in 1903, 2,148,408 lbs. in 1904, 1,849,412 lbs. in 1905, 2,024,906 lbs. in 1906, 1,705,952 lbs. in 1907, 1,854,962 lbs. in 1908, 1,857,879 lbs. in 1909, and 1,823,263 lbs. in 1910.

Total butter and cheese made.

Taking the returns of butter from all sources, the largest quantity 70,603,787 lbs., was made in 1910, the returns for 1907, 1908, and 1909 being 63,746,354 lbs., 48,461,398 lbs., and 55,166,555 lbs. respectively.

The largest quantity of cheese returned as having been made in factories and on farms was 5,681,515 lbs. in 1903. The quantities made in 1908, 1909, and 1910 were 4,328,644 lbs., 5,025,834 lbs., and 4,530,893 lbs. respectively.

Exports of butter and cheese.

In 1910 there were exported to countries outside Australia 39,694,122 lbs. of butter valued at £1,780,044, of which 38,673,470 lbs. valued at £1,734,531 were produced in Victoria. Of these

exports a quantity representing 90 per cent. of the value was sent to the United Kingdom. The quantity of cheese exported to oversea countries was 306,162 lbs., and the value £7,957. The whole of this quantity was made within the State.

Meat freezing and preserving works.

The works for freezing and preserving meat numbered 13 in 1910, and employed 754 persons and 9 working proprietors, the wages of the employés amounting to £68,585. The approximate value of machinery, plant, land, buildings, and improvements in 1910 was £316,545. The output in each of the last ten years was as follows :—

MEAT FREEZING AND PRESERVING, 1901 TO 1910.

Year.	Frozen.			
	Cattle.	Sheep.	Rabbits.	Poultry.
	Qrs.	No.	No.	No.
1901...	6,395	417,721	3,990,460	71,490
1902...	1,338	375,178	6,218,422	34,228
1903...	1,424	294,906	7,003,022	41,460
1904...	3,394	459,963	8,086,776	46,820
1905...	5,656	649,107	10,259,904	51,705
1906...	4,248	651,914	9,538,535	72,410
1907...	10,760	866,498	6,413,560	56,275
1908...	16,508	773,396	4,057,896	22,826
1909...	17,360	941,309	2,832,924	22,440
1910...	36,464	1,573,516	2,660,604	60,312

Year.	Preserved.			
	Beef.	Mutton.	Rabbits.	Other Meats, &c.
	Cwt.	Cwt.	Cwt.	Cwt.
1901...	3,304	2,417	26,303	2,758
1902...	7,705	14,913	16,537	6,102
1903...	8,796	2,653	17,380	4,725
1904...	4,248	491	14,977	1,301
1905...	4,866	1,435	6,665	776
1906...	6,011	1,700	496	1,512
1907...	11,944	2,478	64	2,229
1908...	7,557	2,309	1,730	1,391
1909...	8,382	2,349	540	1,267
1910...	13,589	8,876	1,389	2,534

NOTE.—In addition to the above, 15,249 calves, 1,959 pigs, and 25,952 hares were treated at freezing works in 1905; 6,947 calves, 2,580 pigs, and 38,397 hares in 1906; 8,047 calves, 2,196 pigs, and 55,196 hares in 1907; 11,662 calves, 2,296 pigs, and 29,796 hares in 1908; 3,059 calves, 225 pigs, and 8,724 hares in 1909; and 3,893 calves, 1,557 pigs, and 29,532 hares in 1910.

The following statement shows the imports and exports (excluding Inter-State transfers) of frozen and preserved meats, other than bacon and ham, during 1910:— Imports and exports of meats.

MEATS IMPORTED AND EXPORTED OVERSEA, 1910.

—	Imports.		Exports.	
	Quantity.	Value.	Quantity.	Value.
Meats, Frozen—		£		£
Mutton	934 lbs.	18	22,219,793 lbs.	259,042
Lamb			35,119,134 "	501,533
Beef	3,279 "	39	4,088,285 "	44,230
Pork	29,346 "	755	154,044 "	3,638
Rabbits and Hares	...	...	...	68,469
Poultry	1,410 "	41	...	2,247
Game	1,114 "	102	484 "	20
Other	36 "	2	498,228 "	8,822
Meats—Fresh and smoked ...	1,211 "	39	...	...
" Potted and concentrated	...	6,959	...	9
" Preserved in tins ...	87,448 "	3,871	1,058,572 "	19,139
" Not elsewhere included	402 cwt.	863	992 cwt.	1,528
Total value ...	...	12,689	...	908,677

The number of flour mills in 1910 was 62, and the number of persons employed in them 780, of whom 46 were working proprietors. The wages paid to employés amounted to £84,863. Further particulars for ten years are given in the following table:— Flour mills.

FLOUR MILLS: 1901 TO 1910.

Year.	Approximate Value of—			Wheat Ground into Flour.	Flour Made.
	Machinery and Plant.	Land.	Buildings and Improvements.		
	£	£	£	bushels.	tons.
1901	280,130	70,530	175,520	9,482,175	190,845
1902	256,980	76,121	171,125	8,491,224	170,696
1903	261,530	68,917	166,869	5,762,849	115,368
1904	235,508	52,220	147,559	10,012,476	202,314
1905	238,139	56,910	157,785	10,282,491	209,058
1906	243,149	59,540	163,322	10,892,056	219,166
1907	264,566	63,157	174,150	11,731,183	235,185
1908	254,671	57,167	167,573	9,564,068	192,687
1909	226,571	50,801	155,728	10,644,123	215,547
1910	242,851	52,697	165,165	11,218,870	225,282

In addition to the flour made, the wheat ground produced 6,264,322 bushels of bran and 3,839,803 bushels of pollard. Other grain operated on amounted to 75,704 bushels in 1901, 126,765 bushels in 1902, 139,702 bushels in 1903, 157,403 bushels in 1904, 75,595 bushels in 1905, 111,719 bushels in 1906, 123,885 bushels in 1907, 123,879 bushels in 1908, 45,487 bushels in 1909, and 35,507 bushels in 1910.

Exports of bread-stuffs.

During the year 1910, 1,411,876 lbs. of biscuits valued at £25,460, and 68,964 tons of flour valued at £609,960 were exported from Victoria to countries beyond Australia.

Jam, pickle, and sauce works.

There were, in 1910, 25 establishments in which the manufacture of jams, pickles, and sauces was carried on; the number of persons employed therein was 1,427, of whom 15 were working proprietors. The wages paid to the employés amounted to £90,184, and the value of machinery, plant, land, and buildings was £150,016. The materials used and the output for each of the last seven years were as follows:—

JAM, PICKLE, AND SAUCE WORKS: 1904 TO 1910.

Year.	Fruit Used.	Sugar Used.	Jams and Jellies Made.	Fruit Preserved.	Fruit Pulped.	Sauce Made.	Pickles Made.
	cwt.	cwt.	cwt.	cwt.	cwt.	pints.	pints.
1904 ...	199,306	97,057	190,151	22,408	115,295	2,143,555	920,163
1905 ...	175,119	107,382	192,579	35,395	44,450	2,029,644	859,160
1906 ...	195,902	107,194	203,038	43,138	56,619	2,943,380	889,938
1907 ...	218,276	105,518	190,211	33,819	95,885	3,257,471	1,253,280
1908 ...	191,282	133,283	226,481	31,336	18,783	3,014,835	1,187,136
1909 ...	265,353	143,427	268,927	40,746	49,797	3,607,968	1,324,392
1910 ...	311,168	159,439	303,733	49,797	38,017	4,173,936	1,264,728

These works also candied fruit peel amounting to 3,283 cwt. in 1908 to 4,802 cwt. in 1909, and to 3,902 cwt. in 1910.

Sugar refineries.

Only one sugar refinery was at work in 1910, and, as it is the practice to refrain from disclosing the details of a single business, information relating to this industry cannot be given for that year.

The following are the particulars for each of the eight years, 1900 to 1907 :—

SUGAR REFINERIES: 1900 TO 1907.

Year.	Number of Sugar Refineries.		Actual Horse-power of Engines Used.	Average Number of Persons Employed.	Approximate Value of—			Cane Sugar Treated (Raw).	Sugar Refined.	Treacle Refined.
	Total.	Using Steam Engines.			Machinery and Plant.	Land.	Buildings and Improvements.			
					£	£	£	cwt.	cwt.	cwt.
1900	2	2	424	301	74,500	7,000	56,000	1,004,913	944,049	34,080
1901	2	2	424	324	74,500	7,000	56,000	1,129,586	1,052,742	40,320
1902	2	2	424	346	82,000	10,000	76,500	952,801	879,521	51,052
1903	2	2	474	344	83,500	10,000	76,500	1,087,005	1,025,583	51,109
1904	2	2	506	343	83,500	10,000	76,500	1,123,381	1,071,995	36,803
1905	2	2	526	352	87,500	10,000	76,900	1,143,742	1,079,454	42,219
1906	2	2	776	409	88,550	10,000	83,400	1,317,172	1,238,010	47,109
1907	2	2	777	495	88,550	10,000	90,050	1,157,751	1,092,876	33,470

The raw sugar treated is imported. The quantity of cane sugar imported into Victoria during 1909 was 1,523,197 cwt., of which 1,253,044 cwt. came from Queensland, and 166,254 cwt. from Java. During the same year 105,721 cwt. of cane sugar was exported, of which 97,441 cwt. was sent to other States of Australia.

Production of sugar in Victoria.

The effort being made to revive the beet sugar industry in Victoria directs attention to a possible new source of wealth to the farmer. In 1896 Parliament passed an Act making available £100,000, of which £62,000 was expended in promoting the establishment of the industry on the basis of £2 for every £1 of private capital subscribed. A company was formed, and a substantial building, equipped with a modern plant, was erected at Maffra, in Gippsland. Starting with every essential for success, and with a guarantee that 1,500 acres of beet would be sown by local landholders, the industry after various vicissitudes, was compelled to cease operations after two manufacturing campaigns, and the building and plant which fell into the hands of the Government under the terms of its mortgage remained idle for twelve years.

In seeking for the causes of past failures, the more extended knowledge now possessed of the problems surrounding the industry indicates that they were mainly attributable to want of experience on the part of beet-growers, combined with unprecedentedly dry seasons and an unsuitable class of field labour; for, while no particular skill is required in beet growing, yet the crop demands prompt attention at the period of thinning or spacing, and, moreover, calls for the exercise of particular care in keeping it clean during growth. In this, beet-growing is not singular, as onion-growing necessitates the most painstaking care if maximum crops are to be secured, and the production of potato and maize crops also calls for the assistance of a large amount of unskilled labour.

After the closing of the factory in 1899 efforts were made from time to time by successive Governments to recreate interest in beet-growing, but it was not until 1910 that any definite campaign was undertaken.

In that year numerous experimental beet plots were established throughout Gippsland in order to familiarize land-holders with beet-growing, lectures were given explanatory of the Government proposals and different phases of the industry, and a system of field labour was organized.

The object of the campaign conducted in 1910-11 was to demonstrate that beet could be profitably grown, and that a fine white sugar could be manufactured. Both these ends were attained, as many farmers who grew beet made a successful business of it, and the sugar produced compares with any manufactured in the Commonwealth. The following particulars relate to the season 1910-11 :—Quantity of sugar beet harvested, 5,969 tons; area from which obtained, 458 acres; quantity of marketable sugar manufactured and in process of manufacture, 554 tons; number of persons employed in the factory, 122; number of persons employed in the field, 100.

With the object of putting the industry on a sound footing, the Government has purchased large areas at Boisdale and Kilmany Park. These estates are in railway communication with Maffra, and are being cut up into small holdings under the Closer Settlement Board, which are allotted to settlers subject to the proviso that each must grow a certain area of beet. The farmers in the Gippsland district have taken up the matter more enthusiastically than formerly, and growers who made a profit last year are considerably increasing their areas. Beet is now being grown from Bairnsdale to Nar Nar Goon, and in addition a number of small experimental plots are being planted on the Great Southern line in the Western District, and in the northern irrigation areas.

The price to be received in 1912 will be increased from 16s. to £1 per ton of beet. The State will pay 14s. per ton, and the Commonwealth will grant a bounty equal to about 6s. per ton of beet. Railway freights have been reduced, seed is being provided at cost price, and every encouragement is being given to farmers to become beet growers. It is anticipated that 600 acres will be placed under beet during the season 1911-12. As far as can be foreseen every difficulty likely to arise in connexion with the planting, thinning and harvesting has been provided for, and should the climatic conditions be even moderately favorable there should be approximately 8,000 tons of beets to be converted into sugar. The factory is being put into good order and several alterations of a time and labour-saving nature are to be made. The prospects for the future of this industry are exceptionally bright and in a few years Victoria should be producing and manufacturing all the sugar she needs. The annual consumption of sugar in the State averaged 66,000 tons during the five years 1905-1909.

Breweries. In 1910 work was carried on in 31 breweries or in one less than in the previous year, and there were employed 1,042 persons or 20 more than in 1909. The wages paid during the year amounted

to £139,946. The approximate value of the machinery, plant, land, buildings, and improvements, the materials used, and the quantity of beer made during each of the last ten years were as follows:—

BREWERIES: 1901 TO 1910.

Year.	Approximate Value of—			Materials Used—			Beer Made.
	Machinery and Plant.	Land.	Buildings and Improvements.	Sugar.	Malt.	Hops.	
	£	£	£	cwt.	bushels.	lbs.	gallons.
1901 ...	212,280	236,310	271,600	113,686	608,445	650,214	16,563,068
1902 ...	211,036	228,990	273,325	115,258	625,441	677,262	17,162,680
1903 ...	209,492	229,965	277,383	102,651	552,042	569,981	15,423,149
1904 ...	231,687	229,965	291,180	100,430	530,771	544,524	14,927,873
1905 ...	232,354	198,760	291,738	99,230	529,067	582,012	15,176,439
1906 ...	235,980	197,985	289,982	101,692	533,531	623,249	16,409,465
1907 ...	249,579	212,785	316,262	106,004	542,806	665,236	16,900,336
1908 ...	268,009	155,922	273,273	109,347	556,040	684,879	17,582,833
1909 ...	245,606	65,775	231,546	103,146	503,761	632,339	16,552,594
1910 ...	281,702	68,069	249,848	112,240	540,390	663,394	18,605,737

Distilleries.

The number of distilleries in 1910 was 6, or one less than in 1909; but the persons employed decreased from 99 to 74 during the year. The estimated value of the machinery, plant, land, buildings, and improvements was £144,215. Although there has been some improvement in the last nine years, the industry is still behind what it was in 1901. The materials used in manufacture, and the quantity of spirits distilled in each of the last ten years, were as follows:—

DISTILLERIES: 1901 TO 1910.

Year.	Materials Used.							Spirits Distilled.
	Wine.	Malt.	Wheat.	Maize.	Other Grain.	Sugar and Molasses.	Beer.	
	Gal.	Bush.	Bush.	Bush.	Bush.	lbs.	Gal.	Proo gal.
1901	148,584	123,394	1,541	16,000	2,464	2,853,760	2,265	490,550
1902	128,272	16,744	87	11,880	2,507	1,780,016	...	190,644
1903	207,621	...	...	...	...	...	1,187	41,083
1904	293,836	...	...	...	...	...	...	58,745
1905	348,791	...	...	...	...	199,360	...	85,690
1906	324,005	13,038	...	...	...	101,024	...	94,674
1907	413,242	141,876	...	...	...	49,280	...	375,183
1908	591,248	53,761	...	...	...	...	...	220,690
1909	379,979	117,197	...	...	...	...	...	314,370
1910	605,204	25,345	...	...	...	649,152	...	223,560

Spirits made by vine-growers for fortifying wine are not included in this table. The following quantities were distilled for that purpose during the last ten years in vineyards:—38,058 gallons in 1901, 49,867 gallons in 1902, 56,851 gallons in 1903, 73,210 gallons in 1904, 78,163 gallons in 1905, 60,521 gallons in 1906, 53,517 gallons in 1907, 50,954 gallons in 1908, 30,976 gallons in 1909, and 13,427 gallons in 1910.

Tobacco, &c., manufactories.

Fourteen tobacco manufactories were in operation in 1910, and in that year the employés numbered 2,236 and their wages amounted to £182,972. In addition to the employés there were 12 working proprietors. The value of machinery, plant, land, buildings, and improvements was £283,735. The output of these factories has materially increased, as will be seen from the particulars for the last ten years given in the following table:—

TOBACCO FACTORIES: 1901 TO 1910.

Year.	Unmanufactured Leaf Operated on.		Quantity Manufactured of—			
	Australian	Imported.	Tobacco.	Snuff.	Cigars.	Cigarettes.
	lbs.	lbs.	lbs.	lbs.	No.	No.
1901... ...	230,113	2,542,580	2,365,831	1,133	13,025,840	125,693,600
1902... ...	205,434	1,379,905	1,630,510	550	11,936,455	100,817,104
1903... ...	304,049	2,052,100	2,390,976	813	9,336,975	58,928,535
1904... ...	266,053	2,768,873	3,166,767	1,122	12,419,426	73,304,100
1905... ...	265,219	3,597,887	3,981,357	1,051	14,324,536	103,673,300
1906... ...	431,941	4,172,065	4,650,113	516	18,782,205	131,161,460
1907... ...	332,271	4,479,073	4,782,061	993	17,740,782	146,699,600
1908... ...	269,354	5,566,522	5,831,117	605	19,741,355	178,776,650
1909... ...	202,723	4,759,856	5,162,959	610	19,368,491	141,105,750
1910... ...	195,279	5,225,078	5,510,099	577	21,310,111	135,108,700

NOTE.—The quantity manufactured in small factories (£5 licences) is included in the above table.

Woollen mills.

There were 9 woollen mills working in 1910, and the number of persons employed therein was 1,657, of whom 8 were working proprietors. The wages paid to employés amounted to £98,573, and the approximate value of the machinery, plant, land, buildings, and improvements to £381,766. The value of the raw materials used in mills during the year was £210,545, and that of the goods manufactured in the same period, £426,336. The quantities of wool and cotton used and of goods manufactured in each of the last ten years were as follows:—

WOOLLEN MILLS: 1901 TO 1910.

Year.	Quantity of Scoured Wool Used.	Quantity of Cotton Used.	Goods Manufactured—			
			Tweed and Cloth.	Flannel.	Blankets	Shaw's and Rugs.
	lbs.	lbs.	yards.	yards.	No. of Pairs.	No.
1901 ...	2,023,509	250,184	818,975	2,229,617	49,302	4,600
1902 ...	2,149,897	273,335	708,749	2,612,343	67,609	5,718
1903 ...	2,130,100	368,749	662,381	3,201,275	77,601	6,565
1904 ...	2,368,871	211,256	697,726	3,301,004	86,253	8,431
1905 ...	2,663,587	499,630	738,924	3,355,013	145,106	8,516
1906 ...	2,825,218	658,882	840,649	3,637,846	146,628	8,383
1907 ...	3,311,097	914,003	867,789	4,088,383	199,743	12,089
1908 ...	3,210,925	965,042	922,176	4,396,862	228,621	15,222
1909 ...	3,093,383	880,934	949,674	4,713,571	225,148	15,189
1910 ...	3,136,442	955,894	890,281	4,640,401	191,651	18,185

The development which has taken place in the boot industry in recent years is portrayed in the following tables :— Boot factories.

BOOT FACTORIES: 1901 TO 1910.

Year.	Number of Factories.	Number of Operatives, &c.	Value of Land, Buildings and Machinery.	Wages Paid.
			£	£
1901 ...	111	4,871	219,930	*
1902 ...	132	5,101	223,290	*
1903 ...	136	5,267	229,396	299,176
1904 ...	131	5,655	241,342	332,749
1905 ...	136	5,810	243,549	330,023
1906 ...	134	5,755	253,436	332,538
1907 ...	139	6,303	292,474	368,503
1908 ...	139	6,348	284,982	371,081
1909 ...	136	6,894	294,167	415,011
1910 ...	144	6,832	324,529	455,997

* No record.

OUTPUT OF BOOT FACTORIES: 1901 TO 1910.

Year.	Goods Manufactured—	
	Boots and Shoes.	Slippers *
	No. of pairs.	No. of pairs.
1901	3,125,799	92,174
1902	3,613,487	216,483
1903	3,574,761	150,012
1904	4,065,881	189,108
1905	3,951,033	165,892
1906	4,001,580	175,575
1907	4,290 122	182,039
1908	4,164,410	193,949
1909	4,649,130	231,791
1910	4,847,368	191,204

* Includes canvas shoes and house-boots, except for the year 1901.

Materials used in Victorian boot factories were valued at £884,329 in 1909, and at £963,110 in 1910; the value of the output for the same years being £1,487,789 and £1,620,179 respectively.

Great strides have been made in recent years in the use of electricity for lighting and motive power purposes, as will be seen from the succeeding statement. The electricity supplied in 1910 represents an increase of 192 per cent. on that supplied in 1902. Electric light and power works.

ELECTRIC LIGHT AND POWER WORKS: 1902 TO 1910.

Year.	Number of Stations.	Horse-power of Machinery.	Persons Employed.*	Wages Paid.	Electricity Supplied.
				£	British Units.
1902 ...	7	7,178	147	†	6,450,560
1903 ...	7	4,955	149	18,785	5,626,568
1904 ...	7	5,226	222	22,422	6,644,343
1905 ...	7	6,753	251	23,356	7,698,394
1906 ...	9	9,130	363	38,398	9,760,046
1907 ...	11	9,948	398	44,489	12,542,614
1908 ...	12	11,702	441	50,442	14,310,482
1909 ...	13	13,293	442	54,621	16 471,368
1910 ...	16	13,962	523	62,266	18,832,467

* Prior to 1904 persons engaged in the distribution of electricity are excluded. † No record.

In 1902 machinery and plant, land, buildings, and improvements connected with electric light and power works were valued at £281,683; in 1910 the value was £826,188.

Gasworks.

The approximate value of machinery and plant, land, buildings, and improvements connected with gasworks in Victoria was £1,164,720 in 1901, and £1,719,696 in 1910. The gas made in the latter year was 58 per cent. in excess of that made in 1901.

GASWORKS: 1901 TO 1910.

Year.	Coal Used.	Gas Made.	Coke Produced.	Number of Works.	Persons Employed.*	Wages Paid.
	tons.	cubic feet.	tons.			£
1901	159,374	1,567,649,380	84,546	46	625	†
1902	169,356	1,642,652,799	92,308	47	758	†
1903	166,018	1,628,889,400	94,947	47	679	81,928
1904	166,307	1,649,396,000	97,357	48	872	104,383
1905	168,007	1,707,184,000	98,559	48	989	128,372
1906	178,251	1,810,405,800	105,909	48	1,125	138,701
1907	189,190	1,975,892,500	112,050	48	1,272	157,525
1908	206,408	2,144,834,000	126,530	47	1,298	168,077
1909	217,473	2,292,988,400	131,695	47	1,390	181,965
1910	235,532	2,476,528,100	139,423	47	1,421	199,308

* Prior to 1904 persons engaged in the distribution of gas are excluded. † No record.

Oil was used as well as coal in the manufacture of gas, the number of gallons consumed each year being 108,531 in 1902, 105,651 in 1903, 117,114 in 1904, 137,247 in 1905, 154,486 in 1906, 163,215 in 1907, 187,237 in 1908, 196,176 in 1909, and 228,034 in 1910.

Total production

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

VALUE OF VICTORIAN PRODUCTION: 1907 TO 1910.

Produce.	Value in—			
	1907.	1908.	1909.	1910.
Cultivation.	£	£	£	£
Wheat	2,443,906	4,405,303	5,501,605	5,512,060
Oats	791,162	989,844	777,547	909,295
Barley, Malting	185,498	192,964	121,365	172,717
Barley, Other	56,009	60,345	43,816	54,665
Maize	87,973	116,402	119,725	96,166
Other Cereals	45,947	47,404	36,844	50,834
Grass and Clover Seed ...	2,671	4,540	3,290	4,066

VALUE OF VICTORIAN PRODUCTION: 1907 TO 1910—*continued.*

Produce.	Value in— 1907.	1908.	1909.	1910.
	£	£	£	£
Cultivation—continued.				
Potatoes	383,145	411,840	517,775	534,515
Onions	108,155	138,408	98,325	63,723
Other Root Crops	36,842	42,811	29,245	35,160
Hay	3,023,128	3,256,308	2,432,840	2,455,560
Straw	133,898	246,682	239,385	158,834
Green Forage	149,742	157,665	141,465	179,565
Tobacco	3,967	4,748	3,691	3,783
Grapes, not made into wine, raisins, &c.	37,243	33,103	31,181	26,704
Raisins, ordinary	56,737	41,489	35,919	35,854
" sultanas	53,511	60,994	94,639	96,408
Currants	19,296	21,472	49,334	48,829
Wine	68,280	89,819	61,996	90,828
Hops	5,502	5,105	4,322	5,247
Other Crops	36,082	37,468	39,117	48,943
Fruit grown for Sale in Orchards and Gardens	411,412	400,055	449,497	551,280
Fruit in Private Orchards and Gardens	9,798	8,542	9,060	8,100
Market Gardens	225,550	231,975	255,350	269,450
Total	8,375,454	11,005,286	11,097,333	11,412,586
Dairying and Pastoral.				
Milk Consumed in natural state	749,618	760,658	805,480	950,940
Butter made	2,855,305	2,388,743	2,493,990	3,109,510
Cheese made ...	109,948	126,252	130,670	105,340
Cream made (not for butter) ...	22,430	21,320	19,850	22,480
Concentrated Milk	78,078	63,026	66,425	46,940
Horses produced	273,700	15,274	261,268	388,556
Cattle "	2,056,198	298,606	1,602,858	1,860,888
Sheep "	1,716,908	597,880	1,317,320	1,298,740
Pigs "	424,660	380,650	470,081	541,785
Wool "	3,878,431	3,556,168	4,044,755	4,318,100
Total	12,165,276	8,208,577	11,212,697	12,643,279
Mining.				
Gold	2,954,617	2,849,838	2,778,956	2,422,745
Coal	79,731	64,778	76,945	189,254
Stone from Quarries (including limestone)	70,945	84,479	88,610	114,955
Other Metals and Minerals ...	41,766	31,950	26,257	24,202
Total	3,147,059	3,031,045	2,970,768	2,751,156
Forest Produce.				
Timber (Forest Saw-mills only)	181,590	177,460	189,130	248,315
Firewood (estimated) ...	391,000	396,750	402,600	428,670
Bark for Tanning	62,580	56,694	66,520	70,570
Total	635,170	630,904	658,250	747,555

 1,665.576

VALUE OF VICTORIAN PRODUCTION: 1907 TO 1910—*continued.*

Produce.	Value in—			
	1907.	1908.	1909.	1910.
Miscellaneous.	£	£	£	£
Honey and Beeswax ...	14,380	28,488	19,768	25,926
Poultry production (estimated)	1,525,000	1,547,000	1,570,000	1,592,000
Rabbits and Hares	132,823	85,506	58,734	47,650
Fish	66,621	71,910	75,101	72,187
Total	1,738,824	1,732,904	1,723,603	1,737,763
Total Value of Primary Products	26,061,783	24,608,716	27,662,651	29,292,339
Manufacturing—Added Value*	11,212,871	11,673,693	12,748,654	14,189,438
Grand Total ...	37,274,654	36,282,409	40,411,305	43,481,777

* Exclusive of value of output of bark mills, butter and cheese factories, and forest saw-mills as regards Victorian timbers) included above.

Dairying and pastoral production show a considerable advance in 1910 as compared with 1909, the favorableness of the seasons experienced in 1910 being specially reflected in the increased production of milk and butter. In 1908 the rearing of stock was attended with heavy losses, on account of adverse weather. An illustration of the progress made in the manufacturing industries is contained in the figures relating to the value of the output therefrom.

The value of production per head of the total population in each of the last four years was as follows:—

VALUE OF PRODUCTION PER HEAD OF POPULATION: 1907 TO 1910.

Produce.	Value of Produce per head in—			
	1907.	1908.	1909.	1910.
	£ s. d.	£ s. d.	£ s. d.	£ s. d.
Cultivation	6 14 4	8 13 11	8 12 10	8 15 8
Dairying and Pastoral... ...	9 15 2	6 9 9	8 14 8	9 14 7
Mining	2 10 6	2 7 11	2 6 3	2 2 4
Forest	0 10 2	0 10 0	0 10 3	0 11 6
Miscellaneous	1 7 11	1 7 5	1 6 10	1 6 9
Total Primary Produce	20 18 1	19 9 0	21 10 10	22 10 10
Manufactures	8 19 10	9 4 6	9 18 7	10 18 5
Grand Total	29 17 11	28 13 6	31 9 5	33 9 3