

CHAPTER XXIV.

MANUFACTURING INDUSTRY.

§ 1. General.

1. **Introduction.**—A complete statistical account of the growth of the manufacturing industry in Australia cannot be given owing to the fact that prior to 1906 the necessary statistics were not collected by the several States on a definite and uniform basis. A standard classification of manufacturing industries was formulated at a conference of Australian Statisticians in 1902 and adopted by all States in 1906. Figures on this basis were prepared for 1907 and subsequent years.

Prior to the federation of the Australian States in 1901, the manufacturing industry in Australia was primarily engaged in the production of goods for local use, mainly of food commodities, furniture, bricks, clothing made from imported materials, printing, the repair rather than the manufacture of machinery, and the preliminary treatment of primary products, such as wool-scouring and sawmilling.

After federation, steady expansion of the manufacturing industry resulted from the removal of interstate trade barriers and the operation of a uniform protective tariff. This expansion was quickened as a result of the demands created by the 1914-18 War, the curtailment of imports, and the rapid growth of spending power within the community. New and more advanced development took place, iron and steel works and many related and subsidiary industries were established, extensive manufacture of machinery was begun, and a wide range of high-grade products—textiles, metal manufactures, electrical goods, etc.—was added to the list of commodities made in Australia.

A check was made in this expansion by the world-wide economic depression of 1929-33, but returning general prosperity and the opportunities opened to local manufacturers by import restrictions initiated revival in 1933 and, with depreciation of Australian currency, gave renewed stimulus to manufacturing enterprise. As economic conditions improved, the tariff, revenue duties and primage were reduced, but without materially prejudicing the progress of local manufactures.

When war broke out in September, 1939, Australia became a major source of supply for British countries east of Suez and in meeting these demands, as well as those arising locally because of interruption of overseas importations, existing manufacturing industries expanded, and new enterprises were developed rapidly for the production of all classes of munitions, aircraft, ships, many new kinds of machinery and metal manufactures, scientific equipment, textiles, chemicals, etc. The outbreak of war with Japan, the basing of Allied armed forces in Australia, and Australian responsibilities for supplies in the South-west Pacific Area, gave added impetus to these developments, and manufacturing in Australia outstripped all previous levels.

The cessation of war production and the transition of industry to a peace-time basis temporarily retarded progress, but from 1945-46 onward, there was renewed expansion of the manufacturing industries to which an inflow of capital from overseas contributed.

2. **Decentralization of Manufacturing Industries.**—Following upon a report by the Secondary Industries Commission, the Commonwealth Government called a conference of Commonwealth and State Ministers in August, 1945 to formulate a national policy for the decentralization of secondary industries. It was agreed that the State Governments should seek to promote decentralization along the lines appropriate to each, providing necessary services, assistance and concessions to the full extent of State resources. The Commonwealth undertook to collaborate in all matters of Commonwealth industrial policy affecting the development and location of industry, to investigate in association with the States the prospects of developing secondary industries in selected areas, to advise the States of developments desirable for defence purposes, and to provide financial assistance for projects of national importance where the cost would be great relative to the State's resources.

The Commonwealth has assisted decentralization by allocating to private industry munitions and other defence buildings in decentralized areas and accommodating migrants in provincial centres with prospects of development. Oversea firms contemplating establishment in Australia are encouraged to select locations in rural areas or the less industrialized States.

3. Commonwealth Division of Industrial Development.—The Secondary Industries Commission was established in 1943 to investigate post-war uses for munitions factories, to plan for the transition of secondary industries from war-time to peace-time activities, and generally to seek to increase industrial efficiency and to explore opportunities for new industries. The Commission was disbanded in April, 1950.

The functions of the Division of Industrial Development (formed in February, 1945 as the Secondary Industries Division of the Department of Post-war Reconstruction) were extended in August, 1948 to include the encouragement of industrial development, the exercising of Commonwealth responsibilities for the decentralization of industry, the promotion of industrial efficiency (especially the study of technical, production, and managerial problems and the dissemination and application of new knowledge and methods), the encouragement of the development of technological institutes and the publication of studies of the structure and operation of Australian manufacturing industries. The Division was attached to the Ministry of National Development when formed in March, 1950 to plan the development of national resources and to promote decentralization and regional development in conjunction with the States.

4. Customs and Excise Tariffs and Bounties on Manufactures.—Particulars of Australian customs and excise tariffs, and the constitution and functions of the Australian Tariff Board in relation to matters affecting the industrial development of Australia, are given in Chapter VII.—Trade.

Bounties are paid by the Commonwealth Government to encourage local manufacture of certain products. The Statutory provisions usually fix a term of operation of the bounty, provide for payment at a rate varying according to changes in the corresponding customs duty, specify the annual maximum amount of bounty payable, and require the bounty to be withheld or reduced if a manufacturer's net profit in production of the commodity exceeds a certain rate or if rates of wages and conditions of employment in production of the commodity do not conform to prescribed standards.

5. Scientific Research and Standardization.—(i) *The Commonwealth Scientific and Industrial Research Organization.* The function of this Organization, reference to which also appears in Chapter XXIX., is to initiate and conduct research in connexion with industries in Australia, to train research workers, to establish industrial research studentships and fellowships, to make grants in aid of pure scientific research, to establish industrial research associations in various industries, to provide for testing and standardization of scientific equipment, to conduct an information service relating to scientific and industrial matters, and to act for Australia in liaison with other countries in matters of scientific research.

(ii) *The Standards Association of Australia.* This Association, which is referred to also in Chapter XXIX., acts as the national standardizing organization of Australia and issues standard specifications for materials and codes of practice. Specifications and codes are prepared and revised periodically in accordance with the needs of industry, and standards are evolved and accepted by general consent.

(iii) *The National Association of Testing Authorities.* The National Association of Testing Authorities organizes national testing facilities throughout Australia to serve private and governmental needs. Laboratories may register voluntarily in respect of tests within their competence and the Association ensures the maintenance of their standards of testing. It is expected that there will be general acceptance of certificates of tests issued in the name of the Association by the registered laboratories.

6. **Definitions in Factory Statistics.**—The statistics relating to factories have been compiled from returns supplied annually by manufacturers to, and tabulated by, the several State Statisticians, in the terms of the Statistical Acts of the States. A return must be supplied in respect of every factory, which is defined for this purpose as an establishment where four or more persons are employed or where power (other than manual) is used in any manufacturing process. This definition includes factories in educational and charitable institutions, reformatories, and other public institutions (except penitentiaries) but does not cover smallgoods makers, laundries, farriers, photography studios, florists and seedsmen, and most abattoirs.

If a manufacturing business is conducted in conjunction with any other activity, particulars relating to the manufacturing section only are included in the statistics. Where two or more industries are conducted in the same establishment, a separate return is obtained for each industry, if practicable.

Manufacturers are requested to state in their returns particulars as to the number, age, wages, etc., of their employees, the value of premises and equipment, the horse-power of machinery, the value, and in most cases the quantities, of raw materials and fuel used, and quantities and values of principal materials and articles produced. The returns obtained from manufacturers are not intended to show a complete record of the income or expenditure of factories nor to show the profits or losses of factories collectively or individually.

The *average number of persons* employed is quoted on two different bases: the average during the period of operation and the average over the whole year. Of these the former is simply the aggregate of the average number of persons employed in each factory during its period of operation (whether the whole or only part of the year). This average is used only in respect of details relating to classification according to number of persons employed. The latter, which is used in all other instances, is calculated by reducing the average number working in the factories (irrespective of period of operation) to the equivalent number working for a full year.

Working proprietors are included in all employment figures other than those relating to monthly employment and age dissections, but salaries and wages paid in all cases exclude drawings by working proprietors.

The *value of factory output* is the value of the goods manufactured or their value after passing through the particular process of manufacture and includes the amount received for repair work, work done on commission and receipts for other factory work. The basis of valuation of the output is the selling value of the goods at the factory, exclusive of all delivery costs and charges and excise duties, but inclusive of bounty and subsidy payments to the manufacturer of the finished article.

The *value of production* is the value added to raw materials by the process of manufacture. It is calculated by deducting from the value of factory output the value (at the factory) of the materials used, containers and packing, power, fuel, and light used, tools replaced, and materials used in repairs to plant (but not depreciation charges).

In the process of manufacture, many goods are treated in several industries, the output of one becoming the raw materials of another, so that such commodities are counted more than once in the aggregate value of output and of raw materials. Examples are raw sugar passing from the mills to the refinery, metals from the smelters which become raw materials in establishments concerned in the production of metal goods, and timber from the sawmills used in furniture factories and in joinery. On the other hand, the aggregate value of production is assessed without duplication, the value added by each industry being taken into account once only. For this reason the value of production, and not the value of the output, is used as a measure of activity in the manufacturing industries as a whole.

In the special case of Government factories and workshops, the value of output is, in most cases, estimated by adding 10 per cent. to the value of materials and fuel used and other factory costs, including salaries and wages paid.

7. **Classification of Factories.**—In the compilation of statistical data relating to factories in Australia, a standard classification of manufacturing industries, formulated at a conference of Australian Statisticians in 1902 and revised from time to time, was used until the year 1929–30. A new classification was introduced in 1930–31, and this in turn was revised and extended (principally in regard to the placement and composition of sub-classes) in accordance with decisions of the Statisticians' Conference, 1945.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or total factory activity. Particulars of certain of the sub-classes shown below are published in the latter portion of this chapter and full details for all sub-classes may be found in the *Secondary Industries Bulletin*, published annually.

The principal classes and sub-classes in the current classification of factories are as follows :—

CLASSIFICATION OF FACTORIES.

CLASS I.—TREATMENT OF NON-METALLIFEROUS MINE AND QUARRY PRODUCTS.

Coke Works.
Briquetting and Pulverized Coal.
Carbide.
Lime, Plaster of Paris, Asphalt.
Fibrous Plaster and Products.
Marble, Slate, etc.
Cement.
Asbestos Cement Sheets, etc.
Other Cement Goods.
Other.

CLASS II.—BRICKS, POTTERY, GLASS, ETC.

Bricks and Tiles, Fire Bricks and Fire-clay Goods.
Earthenware, China, Porcelain, Terra-cotta.
Glass (other than Bottles).
Glass Bottles.
Other.

CLASS III.—CHEMICALS, DYES, EXPLOSIVES, PAINTS, OILS, GREASE.

Industrial and Heavy Chemicals and Acids.
Pharmaceutical and Toilet Preparations.
Explosives.
White Lead, Paints, Varnish.
Oils, Vegetable.
Oils, Mineral.
Oils, Animal.
Boiling Down, Tallow Refining.
Soap and Candles.
Chemical Fertilizers.
Inks, Polishes, etc.
Matches.
Other.

CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES.

Smelting, Converting, Refining and Rolling of Iron and Steel.
Foundries—Ferrous.
Plant, Equipment and Machinery.
Other Engineering.
Extracting and Refining of other Metals, Alloys.
Electrical Machinery, Cables and Apparatus.
Construction and Repair of Vehicles (to groups).
Ship and Boat Building and Repairing, Marine Engineering.
Cutlery and Small Hand Tools.
Agricultural Machines and Implements.
Non-Ferrous Metals—
Rolling and Extrusion.
Foundries, Casting, etc.
Iron and Steel Sheets.
Sheet Metal Working, Pressing, and Stamping.
Pipes, Tubes and Fittings—Ferrous.
Wire and Wire Netting (including Nails).
Stoves, Ovens and Ranges.
Gas Fittings and Meters.
Lead Mills.

CLASS IV.—INDUSTRIAL METALS, MACHINES, CONVEYANCES—continued.

Sewing Machines.
Arms, Ammunition (excluding Explosives).
Wireless and Amplifying Apparatus.
Other Metal Works.

CLASS V.—PRECIOUS METALS, JEWELLERY, PLATE, Jewellery.

Watches and Clocks (including Repairs).
Electroplating (Gold, Silver, Chromium).

CLASS VI.—TEXTILES AND TEXTILE GOODS (NOT DRESS).

Cotton Ginning.
Cotton Spinning and Weaving.
Wool—Carding, Spinning, Weaving.
Hosiery and other Knitted Goods.
Silk, Natural.
Rayon, Nylon and other Synthetic Fibres.
Flax Mills.
Rope and Cordage.
Canvas Goods, Tents, Tarpaulins, etc.
Bags and Sacks.
Other.

CLASS VII.—SKINS AND LEATHER (NOT CLOTHING OR FOOTWEAR).

Furriers and Fur Dressing.
Woolscouring and Felmongery.
Tanning, Currying, and Leather Dressing.
Saddlery, Harness, Whips.
Machine Belting.
Bags, Trunks, etc.

CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready-made Clothing.
Waterproof and Oilskin Clothing.
Dressmaking.
Millinery.
Shirts, Collars, Underclothing.
Foundation Garments.
Handkerchiefs, Ties, Scarves.
Hats and Caps.
Gloves.
Boots and Shoes (not rubber).
Boot and Shoe Repairing.
Boot and Shoe Accessories.
Umbrellas and Walking Sticks.
Dyeworks and Cleaning.
Other.

CLASS IX.—FOOD, DRINK AND TOBACCO.

Flour Milling.
Cereal Foods and Starch.
Animal and Bird Foods.
Chaffcutting and Corn Crushing.
Bakeries (including Cakes and Pastry).
Biscuits.
Sugar Mills.

CLASS IX.—FOOD, DRINK AND TOBACCO—
continued.

Sugar Refining.
Sugar Confectionery (including Chocolate).
Jam, Fruit and Vegetable Canning.
Pickles, Sauces, Vinegar.
Bacon Curing.
Butter Factories.
Cheese Factories.
Condensed and Dried Milk Factories.
Margarine.
Meat and Fish Preserving.
Condiments, Coffee, Spices, etc.
Ice and Refrigerating.
Salt Refining.
Aerated Waters, Cordials, etc.
Breweries.
Distilleries.
Wine Making.
Cider and Perry Making.
Malting.
Bottling.
Tobacco, Cigars, Cigarettes, Snuff.
Dehydrated Fruit and Vegetables.
Ice-cream.
Sausage Skins.
Arrowroot.
Other.

CLASS X.—SAWMILLS, JOINERY, BOXES, ETC.,
WOOD TURNING AND CARVING.

Sawmills.
Plywood and Veneer Mills.
Bark Mills.
Joinery.
Cooperage.
Boxes and Cases.
Basketware and Wickerware (including Sea-grass
and Bamboo Furniture).
Perambulators.
Wall and Ceiling Boards (not Plaster or Cement).
Other.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.

Billiard Tables, Cabinet and Furniture Making and
Upholstery.
Bedding and Mattresses.
Furnishing Drapery, etc.

CLASS XII.—FURNITURE OF WOOD, BEDDING,
ETC.—*continued.*

Picture Frames.
Blinds.
Other.

CLASS XIII.—PAPER, STATIONERY, PRINTING,
BOOKBINDING, ETC.

Newspapers and Periodicals.
Printing—
Government.
General, including Bookbinding.
Manufactured Stationery.
Sterotyping and Electrotyping.
Process and Photo Engraving.
Cardboard Boxes, Cartons and Containers.
Paper Bags.
Paper Making.
Pencils, Penholders, Chalks, Crayons.
Other.

CLASS XIV.—RUBBER.

Rubber Goods and Tyres Made.
Tyre Retreading and Repairing.

CLASS XV.—MUSICAL INSTRUMENTS.

Gramophones and Gramophone Records.
Pianos, Piano-Players, Organs.
Other.

CLASS XVI.—MISCELLANEOUS PRODUCTS.

Linoleum, Leather Cloth, Oil Cloth, etc.
Bone, Horn, Ivory and Shell.
Plastic Moulding and Products.
Brooms and Brushes.
Optical Instruments and Appliances.
Surgical and other Scientific Instruments and
Appliances.
Photographic Materials, including Developing and
Printing.
Toys, Games and Sports Requisites.
Artificial Flowers.
Other.

CLASS XVII.—HEAT, LIGHT, AND POWER.

Electric Light and Power.
Gas Works.

8. Factory Development since 1901—Australia.—The development of the manufacturing industries in Australia at intervals since 1901 is summarized in the following table :—

FACTORIES : AUSTRALIA.

Year.	Facto- ries.	Employ- ment.(a)	Salaries and Wages Paid.(b)	Value of—				
				Materials and Fuel Used.	Output.	Pro- duction. (c)	Land and Build- ings.	Plant and Ma- chinery
	No.	'000.	£'000.	£'000. (d)	£'000. (d)	£'000. (d)	£'000. (d)	£'000. (d)
1901	11,143	198	27,528	81,703	133,022	51,259	32,701	31,516
1911	14,455	312	27,528	213,579	323,993	110,434	60,831	68,655
1920-21	17,113	367	62,932	172,480	290,799	118,310	172,211	124,498
1930-31	21,751	339	62,455	297,003	500,420	203,417	130,930	143,662
1938-39	26,941	505	106,743	515,324	867,648	352,324	186,939	185,545
1945-46	31,184	745	205,819	600,164	1,011,026	410,862	193,152	189,693
1946-47	34,768	805	237,174	720,822	1,210,110	489,297	211,143	213,719
1947-48	37,356	849	285,765	856,609	1,425,378	568,769	232,740	246,494
1948-49	40,070	890	339,219	983,924	1,645,456	661,532	259,549	285,602
1949-50	41,596	917	385,797	1,306,963	2,150,835	843,872	302,755	336,615
1950-51	43,147	969	491,715	1,609,839	2,634,766	1,024,867	359,490	410,144
1951-52	45,844	978	611,789					

(a) 1901 and 1911—average employment during period of operation. Later years relate to average employment over whole year. Working proprietors are included in all years. (b) Excludes drawings by working proprietors. (c) Value of output less value of materials and fuel, etc., used. (d) Not available.

§ 2. Number of Factories.

1. Number of Factories in each State.—The following table shows the number of factories operating in each State in the years 1938-39, 1945-46 and 1948-49 to 1951-52:—

FACTORIES : NUMBER.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39	9,464	9,250	3,087	2,067	2,129	944	26,941
1945-46	12,287	10,195	2,945	2,395	2,280	1,082	31,184
1948-49	16,087	12,702	4,083	2,927	2,925	1,346	40,070
1949-50	16,346	13,231	4,494	3,046	3,023	1,456	41,596
1950-51	17,129	13,504	4,776	3,141	3,111	1,486	43,147
1951-52	18,144	14,758	4,918	3,245	3,267	1,512	45,844

2. Number of Factories in Industrial Classes.—(i) *Australia.* The next table shows the number of factories in Australia during 1938-39, 1945-46 and 1948-49 to 1951-52 classified in the industrial classes agreed upon by the Conference of Statisticians in 1930. This classification, which was introduced during 1930-31, superseded the grouping which had been in use since 1902. Details of some of the principal industries included in the table will be found in § 11, page 888.

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
I. Treatment of Non-metalliferous Mine and Quarry Products	564	591	1,025	1,126	1,235	1,316
II. Bricks, Pottery, Glass, etc. ..	471	410	544	561	583	601
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	666	886	1,010	1,006	1,020	1,049
IV. Industrial Metals, Machines, Conveyances	7,255	8,816	11,801	12,362	13,106	14,513
V. Precious Metals, Jewellery and Plate ..	290	337	623	619	629	662
VI. Textiles and Textile Goods (not Dress) ..	611	883	1,065	1,155	1,190	1,246
VII. Skins and Leather (not Clothing or Footwear)	533	651	746	751	761	785
VIII. Clothing (except Knitted)	4,314	5,215	6,533	6,620	6,684	6,989
IX. Food, Drink and Tobacco	5,202	5,865	6,659	6,796	6,865	7,033
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	2,822	3,148	4,530	4,893	5,165	5,546
XI. Furniture of Wood, Bedding, etc. ..	1,149	1,140	1,726	1,820	1,936	2,052
XII. Paper, Stationery, Printing, Book-binding, etc.	1,816	1,703	1,942	1,981	2,010	2,084
XIII. Rubber	299	308	391	404	411	430
XIV. Musical Instruments	34	41	64	59	66	68
XV. Miscellaneous Products	413	714	947	985	1,032	1,039
Total, Classes I. to XV.	26,439	30,708	39,606	41,138	42,693	45,413
XVI. Heat, Light and Power	502	476	464	458	454	431
Grand Total	26,941	31,184	40,070	41,596	43,147	45,844

Although not the best index of manufacturing activity, the number of factories affords some indication of the development of secondary industries. Except for the two war years 1941-42 and 1942-43, when there were decreases, the number of factories increased each year from 1931-32 to 1951-52; in the latter year the number of factories in Australia reached the record total of 45,844 or 70.2 per cent. greater than in 1938-39.

(ii) *States, 1951-52.* The following table shows the number of factories in each State classified according to the nature of the industry :—

FACTORIES : NUMBER IN INDUSTRIAL CLASSES, 1951-52.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	439	436	93	158	138	52	1,316
II. Bricks, Pottery, Glass, etc. ..	287	142	51	59	45	17	601
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	521	315	67	73	49	24	1,049
IV. Industrial Metals, Machines, Conveyances ..	5,856	4,557	1,541	1,098	1,067	394	14,513
V. Precious Metals, Jewellery and Plate ..	276	241	36	51	52	6	662
VI. Textiles and Textile Goods (not Dress) ..	450	672	31	45	36	12	1,246
VII. Skins and Leather (not Clothing or Footwear) ..	346	294	53	47	35	10	785
VIII. Clothing (except Knitted) ..	3,090	2,542	490	387	414	66	6,989
IX. Food, Drink and Tobacco ..	2,456	2,038	1,035	644	560	300	7,033
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	2,084	1,394	895	283	407	483	5,546
XI. Furniture of Wood, Bedding, etc. ..	678	702	276	149	160	87	2,052
XII. Paper, Stationery, Printing, Book-binding, etc. ..	863	766	180	125	120	30	2,084
XIII. Rubber ..	158	128	58	43	25	18	430
XIV. Musical Instruments ..	32	21	4	6	5	..	68
XV. Miscellaneous Products ..	484	406	48	42	50	9	1,039
Total Classes I. to XV. ..	18,020	14,654	4,858	3,210	3,163	1,508	45,413
XVI. Heat, Light and Power ..	124	104	60	35	104	4	431
Grand Total ..	18,144	14,758	4,918	3,245	3,267	1,512	45,844

§ 3. Classification of Factories according to Number of Persons Employed.

1. *General.*—The size classification of factories is based on the average weekly number of persons employed during the period of operation (including working proprietors). Prior to 1945-46 there was no dissection of the "over 100 employees" group, but for that and subsequent years this group was subdivided into the seven size groups as shown in the table below.

2. *States, 1951-52.*—The following table shows, for each State, the number of factories classified according to the average number of persons employed :—

FACTORIES : CLASSIFICATION ACCORDING TO SIZE OF FACTORY, 1951-52.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Aust.
NUMBER OF FACTORIES.							
Under 4 ..	5,926	4,789	1,524	917	1,389	626	15,171
4 ..	1,552	1,267	457	308	140	157	3,881
5 to 10 ..	4,876	3,714	1,420	857	864	371	12,102
11 to 20 ..	2,549	2,141	686	523	409	172	6,480
21 to 50 ..	1,960	1,720	501	368	301	102	4,952
51 to 100 ..	653	585	152	140	101	52	1,683
101 to 200 ..	343	291	105	75	42	18	874
201 to 300 ..	104	109	44	18	12	4	291
301 to 400 ..	54	43	8	14	5	2	126
401 to 500 ..	24	31	5	8	1	..	69
501 to 750 ..	48	39	8	5	2	4	106
751 to 1,000 ..	20	14	5	4	..	2	45
Over 1,000 ..	35	15	3	8	1	2	64
Total ..	18,144	14,758	4,918	3,245	3,267	1,512	45,844

The relative importance of large and small factories is illustrated by a classification of the average number of persons employed according to the size of factory in which they work :—

FACTORIES : CLASSIFICATION OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1951-52.

Size of Factory (Persons employed).	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4	11,889	9,640	3,232	1,986	2,848	1,322	30,917
4	6,208	5,068	1,828	1,232	560	628	15,524
5 to 10	33,978	25,739	9,849	5,985	5,698	2,510	83,759
11 to 20	37,089	31,472	10,134	7,574	5,780	2,514	94,563
21 to 50	61,266	53,922	15,434	11,531	9,518	3,186	154,857
51 to 100	45,229	41,016	10,631	9,544	6,932	3,402	116,754
101 to 200	47,809	40,520	14,727	10,173	5,516	2,476	121,221
201 to 300	25,325	26,501	10,576	4,417	2,841	921	70,581
301 to 400	19,075	14,654	2,629	4,671	1,674	643	43,346
401 to 500	10,689	13,623	2,366	3,492	401	..	30,571
501 to 750	30,420	23,551	4,529	3,051	1,269	2,308	65,128
751 to 1,000	17,864	11,863	4,256	3,633	..	1,792	39,408
Over 1,000	63,028	27,989	5,328	17,434	2,617	2,928	119,324
Total	409,869	325,558	95,519	84,723	45,654	24,630	985,953
Average per Factory	22.59	22.06	19.42	26.11	13.97	16.29	21.51

3. Australia, 1938-39, 1945-46 and 1948-49 to 1951-52.—In the following table factories in Australia are classified according to the number of persons employed in conformity with the practice prior to 1945-46.

FACTORIES : CLASSIFICATION ACCORDING TO NUMBER OF PERSONS EMPLOYED. AUSTRALIA.

Year.	Establishments Employing on the Average—							
	20 and under.		21 to 100.		101 and upwards.		Total.	
	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.	Es- tablish- ments.	Persons em- ployed.
1938-39—								
Number	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average per establish- ment .. ..	..	5.89	..	42.60	..	287.55	..	21.25
1945-46—								
Number	24,819	154,242	5,080	211,781	1,285	390,538	31,184	756,561
Average per establish- ment .. ..	..	6.21	..	41.69	..	303.92	..	24.26
1948-49—								
Number	32,394	200,889	6,226	257,204	1,450	439,595	40,070	897,688
Average per establish- ment .. ..	..	6.20	..	41.31	..	303.17	..	22.40
1949-50—								
Number	33,673	207,600	6,442	266,027	1,481	455,187	41,596	928,814
Average per establish- ment .. ..	..	6.17	..	41.37	..	307.16	..	22.33
1950-51—								
Number	34,885	214,044	6,665	274,621	1,597	488,245	43,147	976,910
Average per establish- ment .. ..	..	6.14	..	41.20	..	305.84	..	22.65
1951-52—								
Number	37,634	224,763	6,635	271,611	1,575	489,579	45,844	985,953
Average per establish- ment .. ..	..	5.97	..	40.94	..	310.84	..	21.51

§ 4. Power Equipment in Factories.

1. **General.**—In 1936-37 statistics of power equipment in factories were collected on a basis different from that previously in use. Information now obtained relates to the "rated horse-power" of engines ordinarily in use and of engines in reserve or idle, omitting obsolete engines. In addition, particulars of the power equipment of Central Electric Stations are collected in greater detail. To avoid duplication it is essential that some distinction should be made between Central Electric Stations and other classes of industries. In the following tables Central Electric Stations have been treated separately from other factories.

In para. 2 below, 836 factories are shown in 1951-52 as using no power other than hand-power, the distribution of these factories among the various industries being as follows:—Fibrous Plaster and Products, 50; Industrial and Heavy Chemicals and Acids and Pharmaceutical and Toilet Preparations, 15; Galvanized Ironworking, Tinsmithing, 33; Tailoring and Ready-made Clothing, 230; Dressmaking, 53; Millinery, 18; Bakeries, 86; Cabinet and Furniture Making, 12; all other industries, 339.

2. **Rated Horse-power of Engines in Factories other than Central Electric Stations.**—The following table shows the number of factories using power-driven machinery, those using manual labour only, and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1951-52:—

FACTORIES(a) : TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1951-52.

State.	Number of Establishments.(a)			Rated Horse-power of Engines and Motors.	
	Using Power.	Others.	Total.	Ordinarily in use.(b)	In Reserve or Idle (omitting obsolete).
New South Wales	18,012	47	18,059	1,502,010	196,253
Victoria	14,397	293	14,690	998,927	142,256
Queensland	4,682	192	4,874	366,939	42,942
South Australia	3,086	127	3,213	269,057	35,730
Western Australia	3,016	151	3,167	156,240	23,473
Tasmania	1,484	26	1,510	164,210	28,838
Australia.. ..	44,677	836	45,513	3,457,383	469,492

(a) Excludes Central Electric Stations.
factories.

(b) Excludes motors driven by electricity generated by

3. **Rated Horse-power of Engines and Electric Motors Ordinarily in Use.**—(i) *According to Type, States.* Particulars of the types and the total rated horse-power of engines, etc., ordinarily in use in each State are given below:—

FACTORIES(a) : TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1951-52.

State.	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
N.S.W. ..	106,643	77,752	2,606	75,835	88,569	363	1,150,242	81,707	1,502,010
Victoria ..	24,929	41,149	1,642	17,544	20,922	1,261	391,480	39,184	998,927
Queensland ..	86,544	16,960	6,219	10,340	20,118	..	226,758	57,465	366,939
S. Australia ..	5,891	7,371	1,628	3,402	13,452	10	237,303	19,775	269,057
W. Australia ..	10,406	..	1,588	6,798	15,245	..	122,223	7,598	156,240
Tasmania ..	2,299	2,003	1	8,785	1,836	192	149,094	..	164,210
Australia ..	236,712	145,235	13,684	122,704	160,142	1,826	2,777,088	205,729	3,457,383

(a) Excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(ii) *According to Type, Australia.* In the following table details of the total rated horse-power of the various types of engines in use are given for Australia for the years 1938-39, 1945-46 and 1948-49 to 1951-52.

FACTORIES(a) : TYPES AND TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, AUSTRALIA.

Year.	Steam.		Internal Combustion.			Water.	Motors driven by electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
1938-39 ..	268,409	84,149	32,916	17,971	55,799	1,616	1,017,912	179,890	1,478,772
1945-46 ..	236,378	117,736	20,481	23,876	56,189	1,737	1,755,936	226,602	2,211,433
1948-49 ..	229,953	120,289	16,024	55,158	72,165	1,515	2,249,360	177,296	2,744,404
1949-50 ..	232,047	135,217	15,035	67,986	92,151	1,703	2,421,174	186,566	2,905,313
1950-51 ..	230,664	140,145	15,879	91,415	114,260	1,882	2,635,713	181,788	3,250,938
1951-52 ..	232,512	149,435	13,684	122,704	160,142	1,826	2,770,080	205,729	3,457,383

(a) Excludes Central Electric Stations. (b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1951-52.* The next table shows the total rated horse-power of engines and electric motors ordinarily in use in the various classes of industry in each State.

FACTORIES(a) : TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS ORDINARILY IN USE, 1951-52.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-ferrous Mine and Quarry Products ..	76,093	42,372	11,453	12,961	8,470	13,297	164,646
II. Bricks, Pottery, Glass, etc. . .	42,806	27,529	6,755	6,862	6,648	2,138	92,738
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	86,286	77,355	5,832	15,800	23,588	2,382	211,243
IV. Industrial Metals, Machines, Conveyances ..	700,768	288,331	80,516	122,972	37,811	46,253	1,276,651
V. Precious Metals, Jewellery and Plate ..	4,783	5,296	402	1,017	521	71	12,090
VI. Textiles and Textile Goods (not Dress) ..	59,871	85,666	4,940	6,918	2,146	4,931	164,472
VII. Skins and Leather (not Clothing or Footwear) ..	18,982	18,648	4,561	4,699	2,359	1,454	50,703
VIII. Clothing (except Knitted) ..	30,647	25,861	3,261	2,712	1,954	526	64,961
IX. Food, Drink and Tobacco ..	171,808	159,982	146,227	48,439	30,744	15,127	572,327
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	152,537	106,141	80,056	23,545	32,836	30,719	425,834
XI. Furniture of Wood, Bedding, etc. . .	18,001	16,928	7,371	5,844	3,911	1,799	53,854
XII. Paper, Stationery, Printing, Bookbinding, etc. . .	59,632	75,516	7,395	11,628	4,422	44,741	203,334
XIII. Rubber ..	44,781	40,387	5,771	2,474	387	325	94,125
XIV. Musical Instruments ..	2,922	444	48	12	7	..	3,433
XV. Miscellaneous Products ..	17,471	18,201	487	1,614	436	336	38,545
Total, Classes I. to XV. ..	1,487,388	988,657	365,075	267,497	156,240	164,099	3,428,956
XVI. Gas Works ..	14,622	10,270	1,864	1,560	..	111	28,427
Grand Total ..	1,502,010	998,927	366,939	269,057	156,240	164,210	3,457,383

(a) Excludes Central Electric Stations.

4. Capacity of Engines and Generators installed in Central Electric Stations.—
(i) *According to Type, Australia.* Particulars of the type and the capacity of engines and generators installed in Central Electric Stations in Australia in 1951-52 are given in the following table:—

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, AUSTRALIA, 1951-52.

Particulars.	Capacity of Engines and Generators.						
	Steam.		Internal Combustion.				Total.
	Reciprocating.	Turbine.	Gas.	Light Oils.	Heavy Oils.	Water.	
Engines installed.. Rated H.P.	16,452	2,833,181	19,765	7,986	277,183	422,825	3,577,392
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	10,741	2,106,508	13,541	5,289	174,069	310,634	2,620,782
Effective capacity .. „	10,364	1,808,220	10,310	3,995	159,994	304,569	2,297,452
Horse-power equivalent—							
Total installed .. H.P.	14,398	2,823,732	18,151	7,090	233,336	416,399	3,513,106
Effective capacity .. „	13,893	2,423,883	13,820	5,355	214,469	408,268	3,079,688

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1951-52 are given in the next table.

CENTRAL ELECTRIC STATIONS : POWER EQUIPMENT, 1951-52.

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Engines installed.. Rated H.P.	1,372,050	932,384	371,596	327,157	265,955	308,250	3,577,392
Generators installed—							
Kilowatt capacity—							
Total installed .. K.W.	1,062,735	651,688	264,248	238,675	181,836	221,600	2,620,782
Effective capacity .. „	911,646	607,186	168,443	222,747	171,230	216,200	2,297,452
Horse-power equivalent—							
Total installed .. H.P.	1,424,575	873,575	354,219	319,939	243,748	297,050	3,513,106
Effective capacity .. „	1,222,043	813,921	225,794	298,588	229,530	289,812	3,079,688

§ 5. Employment in Factories.

1. *Number Employed.*—(i) *General.* All persons employed in the manufacturing activities of a factory, including proprietors who work in their own business and “outworkers” (see para. 4 (ii), page 867), are counted as factory employees, while those employed in selling and distributing, such as salesmen, travellers, collectors, carters employed solely on outward delivery of manufactured goods and retailing storemen are excluded. Prior to 1945-46 the occupational grouping collected was (i) working proprietors; (ii) managers and overseers; (iii) accountants and clerks; (iv) enginedrivers and firemen; (v) workers in factory, skilled and unskilled; (vi) carters and messengers; and (vii) persons working regularly at home for the establishment. This grouping did not record separate details for technical staff (e.g., chemists, draftsmen, etc.) and supervisory staff and in 1945-46 the set-up on the collection form was amended to obtain the following groupings:—(i) Working proprietors; (ii) managerial and clerical staff including salaried managers and working directors; (iii) chemists, draftsmen and other laboratory and research staff; (iv) foremen and overseers; (v) skilled and unskilled workers; (vi) carters (excluding delivery only), messengers and persons working regularly at home.

Prior to the year 1928-29 average employment in factories was computed by dividing the sum of the number employed each week by the number of weeks worked. The figures therefore represented the average number employed over the period worked, which, for many factories, was less than a full year. Commencing with the year 1928-29 the figures represent the equivalent average number employed over a full year of fifty-two weeks. The classification of factories according to the number of persons employed (*see* § 3, p. 859), however, is still based on the old method, but for all other purposes the average number engaged over the full year is used.

(ii) *Australia.* Particulars of the numbers employed, the increase in employment and the rate per cent. of such increase are given for years 1938-39, 1945-46 and 1948-49 to 1951-52 in the following table:—

FACTORIES : EMPLOYMENT, AUSTRALIA.

Year.	Males.			Females.			Persons.		
	Number Employed.	Increase on Preceding Year.		Number Employed.	Increase on Preceding Year.		Number Employed.	Increase on Preceding Year.	
		Number.	Per Cent.		Number.	Per Cent.		Number.	Per Cent.
1938-39 ..	412,591	3,989	0.98	152,515	1,957	1.30	565,106	5,946	1.06
1945-46 ..	548,888	12,995	2.42	196,370	-18,316	-8.53	745,258	-5,321	-0.71
1948-49 ..	669,961	29,036	4.53	220,156	12,205	5.87	890,117	41,241	4.86
1949-50 ..	689,347	19,386	2.90	228,152	7,996	3.63	917,499	27,382	3.08
1950-51 ..	726,051	36,704	5.33	242,867	14,715	6.45	968,918	51,419	5.60
1951-52 ..	741,971	15,920	2.19	235,546	-7,321	-3.02	977,517	8,599	0.89

NOTE.—Minus sign (—) indicates decrease.

(iii) *States* The following table shows, for the same years, (a) the average number of persons employed in manufacturing industries in each State; (b) for each State, the percentage of the total number employed in factories in Australia; and (c) the number so employed per ten thousand of the mean population in each State and Australia.

FACTORIES : EMPLOYMENT.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
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AVERAGE NUMBER EMPLOYED DURING FULL YEAR (52 WEEKS).

1938-39 ..	228,781	201,831	54,110	43,371	23,211	13,802	565,106
1945-46 ..	310,870	256,249	65,460	63,188	30,256	19,235	745,258
1948-49 ..	378,380	292,006	82,945	75,830	38,354	22,602	890,117
1949-50 ..	382,385	303,476	88,963	78,436	40,733	23,506	917,499
1950-51 ..	406,905	316,792	94,579	82,994	43,761	23,827	968,918
1951-52 ..	405,994	324,143	94,349	83,907	45,097	24,027	977,517

PERCENTAGE OF AUSTRALIAN TOTAL.

1938-39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100.00
1945-46 ..	41.72	34.38	8.78	8.48	4.06	2.58	100.00
1948-49 ..	42.51	32.80	9.32	8.52	4.31	2.54	100.00
1949-50 ..	41.68	33.08	9.70	8.55	4.44	2.56	100.00
1950-51 ..	42.00	32.60	9.76	8.57	4.52	2.46	100.00
1951-52 ..	41.53	33.16	9.65	8.58	4.62	2.46	100.00

FACTORIES: EMPLOYMENT—*continued*.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PER 10,000 OF POPULATION.							
1938-39 ..	836	1,078	537	729	497	581	815
1945-46 ..	1,060	1,272	604	1,002	617	769	1,003
1948-49 ..	1,235	1,382	731	1,140	734	843	1,141
1949-50 ..	1,206	1,398	765	1,129	746	847	1,140
1950-51 ..	1,243	1,416	793	1,167	766	829	1,166
1951-52 ..	1,208	1,409	773	1,150	763	801	1,145

2. Rates of Increase, 1938-39, 1945-46 and 1948-49 to 1951-52.—The percentage increase on the average number of persons employed in the preceding year is shown below for each State :—

FACTORIES: ANNUAL PERCENTAGE INCREASE OF PERSONS EMPLOYED.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1945-46 ..	-1.21	-0.54	2.07	-3.49	3.81	-1.41	-0.71
1948-49 ..	4.13	4.94	8.07	3.38	6.64	6.75	4.86
1949-50 ..	1.06	3.93	7.26	3.44	6.20	4.00	3.08
1950-51 ..	6.43	4.39	6.31	5.81	7.43	1.37	5.60
1951-52 ..	-0.24	2.32	-0.24	1.10	2.99	0.84	0.89

NOTE.—Minus sign (—) indicates decrease.

3. Persons Employed in Classes of Industry.—(i) *Australia*. The following table shows the average number of persons employed in factories in each industrial class in Australia for the years 1938-39, 1945-46 and 1948-49 to 1951-52 :—

FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51	1951-52.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	10,343	9,929	15,572	16,598	18,436	19,365
II. Bricks, Pottery, Glass, etc. ..	15,709	13,466	18,702	19,241	20,449	20,912
III. Chemicals. Dyes. Explosives, Paints, Oils and Grease ..	19,816	31,471	33,355	34,525	36,323	38,246
IV. Industrial Metals, Machines, Conveyances ..	177,677	292,477	333,313	344,313	373,798	389,252
V. Precious Metals, Jewellery and Plate ..	3,726	3,240	6,414	6,638	6,344	5,953
VI. Textiles and Textile Goods (not Dress)	46,082	55,008	64,855	65,528	68,280	63,548
VII. Skins and Leather (not Clothing or Footwear) ..	10,767	14,492	15,902	16,277	15,801	14,324
VIII. Clothing (except Knitted) ..	86,092	93,370	118,133	118,757	122,464	116,705
IX. Food, Drink and Tobacco ..	83,846	105,878	118,259	122,783	124,350	122,734
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	30,739	38,346	51,206	53,169	56,300	59,664
XI. Furniture of Wood, Bedding, etc. ..	15,287	13,107	20,024	21,021	22,818	22,156
XII. Paper, Stationery, Printing, Book-binding, etc. ..	39,913	39,905	50,571	53,002	55,328	56,455
XIII. Rubber ..	7,502	8,699	11,808	12,382	13,520	14,021
XIV. Musical Instruments ..	451	450	1,250	1,456	1,614	1,581
XV. Miscellaneous Products ..	7,727	14,838	18,123	18,561	19,401	18,176
Total, Classes I. to XV. ..	555,677	734,685	877,487	904,251	955,232	963,094
XVI. Heat, Light and Power ..	9,429	10,573	12,630	13,248	11,686	14,423
Grand Total ..	565,106	745,258	890,117	917,499	966,918	977,517

(ii) *States.* Particulars of the numbers employed in each industrial class are shown in the following table for each State :—

FACTORIES : PERSONS EMPLOYED IN INDUSTRIAL CLASSES, 1951-52.

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,864	5,718	1,656	1,632	1,787	708	19,365
II. Bricks, Pottery, Glass, etc. ..	11,114	5,165	1,131	1,901	1,237	364	20,912
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	17,408	14,144	1,424	3,096	1,840	336	38,248
IV. Industrial Metals, Machines, Conveyances ..	176,689	112,572	32,881	43,058	16,376	7,676	389,252
V. Precious Metals, Jewellery and Plate ..	1,953	3,090	316	349	228	17	5,953
VI. Textiles and Textile Goods (not Dress) ..	23,224	33,402	1,861	2,371	771	1,919	63,548
VII. Skins and Leather (not Clothing or Footwear) ..	5,502	5,329	1,221	1,302	708	262	14,324
VIII. Clothing (except Knitted) ..	46,975	47,536	9,596	6,678	4,986	934	116,705
IX. Food, Drink and Tobacco ..	39,941	39,506	21,594	10,783	6,096	4,814	122,734
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	20,973	14,862	11,091	4,102	5,420	3,216	59,664
XI. Furniture of Wood, Bedding, etc. ..	8,103	6,618	3,215	2,044	1,527	649	22,156
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	24,504	18,979	4,732	3,389	2,229	2,622	56,455
XIII. Rubber ..	6,600	4,822	1,534	773	158	134	14,021
XIV. Musical Instruments ..	1,271	212	38	40	20	..	1,581
XV. Miscellaneous Products ..	7,925	8,269	565	818	405	194	18,176
Total, Classes I. to XV.	400,046	320,224	92,855	82,336	43,788	23,845	963,094
XVI. Heat, Light and Power ..	5,948	3,919	1,494	1,571	1,309	182	14,423
Grand Total ..	405,994	324,143	94,349	83,907	45,097	24,027	977,517

4. *Persons Employed According to Occupational Status.*—(i) *General.* In the following table the average number of persons employed in each State during 1951-52 are classified according to their occupational status. As mentioned previously, persons employed in factories are now classified on a basis different from that adopted prior to 1945-46. The nature of this change is indicated in § 5, para. 1.

FACTORIES : PERSONS EMPLOYED—OCCUPATIONAL STATUS, 1951-52.

State.	Average Number of Persons Employed.						Total.
	Working Proprietors.	Managerial and Clerical Staff, etc.(a)	Chemists, Draftsmen, etc.	Foremen and Overseers.	Workers in Factory (Skilled and Unskilled).	Carters (excluding Delivery only) and Messengers, etc. (b)	
New South Wales ..	14,313	43,066	5,154	16,318	324,410	2,733	405,994
Victoria ..	12,851	32,846	4,019	13,866	258,251	2,310	324,143
Queensland ..	4,323	8,638	772	3,216	76,632	768	94,349
South Australia ..	2,331	9,088	1,142	3,434	67,496	416	83,907
Western Australia ..	2,410	3,423	327	1,660	37,147	130	45,097
Tasmania ..	955	2,249	318	1,022	19,348	135	24,027
Australia ..	37,183	99,310	11,732	39,516	783,284	6,492	977,517

(a) Includes salaried managers and working directors at home.

(b) Includes persons working regularly

(ii) *Outworkers.* The term "outworker" or "homeworker" has acquired a special meaning in connexion with manufacturing industries, and embraces only persons to whom work is given out by factories to be done at home. Owing to the amended employment groupings adopted in 1945-46 (see § 5. 1.) persons working regularly at home for factories are now included with carters, messengers and others and separate details are no longer available. The number of "outworkers" employed by factories in 1944-45 was 1,049.

5. *Monthly Employment, 1938-39, 1945-46 and 1949-50 to 1951-52.*—The following table shows the number of persons (excluding working proprietors) employed in factories on the pay-day nearest to the 15th of each month for years up to 1949-50 and on the last pay-day of the month thereafter.

FACTORIES : MONTHLY EMPLOYMENT, AUSTRALIA.
(EXCLUDING WORKING PROPRIETORS.)

Month.	1938-39.	1945-46.	1949-50.	1950-51.	1951-52.
MALES.					
July	387,693	518,734	584,186	682,797	710,373
August	389,979	519,122	622,085	685,454	711,656
September	391,576	511,909	646,928	685,873	712,284
October	393,977	505,753	652,463	687,498	714,424
November	395,192	503,296	655,097	692,615	716,300
December	394,438	489,040	655,306	690,565	708,848
January	385,742	513,396	658,082	692,678	710,357
February	392,056	533,761	664,547	694,602	709,453
March	395,146	543,347	669,336	696,262	707,701
April	391,005	547,253	669,389	700,154	702,571
May	393,609	553,980	674,263	702,628	696,475
June	390,973	558,428	677,513	704,515	694,871
FEMALES.					
July	147,282	204,705	195,016	229,987	243,646
August	149,294	204,150	211,519	232,090	244,629
September	151,159	199,331	219,867	233,914	244,712
October	152,473	193,587	222,680	236,282	245,285
November	152,806	191,689	225,063	238,740	242,831
December	151,165	183,899	223,894	237,141	237,174
January	141,853	184,810	223,213	236,018	231,186
February	151,883	188,632	228,232	242,902	229,047
March	154,854	192,699	231,238	243,181	225,487
April	152,614	192,084	230,354	243,011	216,845
May	150,693	192,215	231,345	243,768	212,036
June	148,601	192,137	231,206	244,268	207,163
PERSONS.					
July	534,975	723,439	779,202	912,784	954,019
August	539,273	723,272	833,604	917,544	956,285
September	542,735	711,240	866,795	919,787	956,996
October	546,450	699,340	875,143	923,780	959,709
November	547,998	694,985	880,160	931,353	959,131
December	545,603	672,939	879,200	927,706	946,022
January	527,595	698,206	881,295	928,696	941,543
February	543,939	722,393	892,779	937,504	938,500
March	550,000	736,046	900,574	939,443	933,188
April	543,619	739,337	899,743	943,165	919,416
May	544,302	746,195	905,608	946,396	908,511
June	539,574	750,565	908,719	948,783	902,034

6. Distribution of Employees According to Age.—The extension of statistics of employment in factories, decided upon at the Conference of Australian Statisticians held in 1945, permits of a distribution of employees (excluding working proprietors) into seven age-groups from 1945 to 1946 onwards, instead of three as in previous years. The particulars are collected as at June. The numbers employed in each age-group on the last-pay day in June, 1951 and 1952 are given below :—

FACTORIES : DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1951 AND 1952.

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1951.			June, 1952.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years	8,219	6,236	14,455	9,079	5,669	14,748
16 years	10,835	8,163	18,998	11,505	7,185	18,690
17 „	12,125	9,000	21,125	12,608	8,364	20,972
18 „	12,819	10,182	23,001	12,255	8,854	21,109
19 „	12,200	9,804	22,004	11,711	8,296	20,007
20 „	12,934	9,699	22,633	11,537	7,732	19,269
21 „ and over	635,383	191,184	826,567	626,176	161,063	787,239
Total	704,515	244,268	948,783	694,871	207,163	902,034

As comparative details based on the new age grouping are not available for the years prior to 1945-46, the following table shows the age distribution in sexes for Australia in June, 1939, 1946 and 1949 to 1952 on the old basis.

FACTORIES : DISTRIBUTION OF EMPLOYEES IN JUNE, ACCORDING TO AGE, AUSTRALIA.

(EXCLUDING WORKING PROPRIETORS.)

In June—	Under 16 Years.		16 and under 21 Years.		21 Years and Over.		Total.	
	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.	No.	Per Cent.
MALES.								
1939 ..	16,109	4.12	76,418	19.55	298,436	76.33	390,963	100.00
1946 ..	9,016	1.61	69,413	12.43	479,999	85.96	558,428	100.00
1949 ..	7,791	1.21	66,030	10.23	572,440	88.56	646,261	100.00
1950 ..	7,812	1.15	63,310	9.35	606,391	89.50	677,513	100.00
1951 ..	8,219	1.17	60,913	8.64	635,383	90.19	704,515	100.00
1952 ..	9,079	1.31	59,616	8.58	626,176	90.11	694,871	100.00
FEMALES.								
1939 ..	15,497	10.43	56,273	37.87	76,831	51.70	148,601	100.00
1946 ..	7,881	4.10	53,018	27.59	131,238	68.31	192,137	100.00
1949 ..	6,326	2.88	51,563	23.47	161,763	73.65	219,652	100.00
1950 ..	6,055	2.62	48,021	20.77	177,130	76.61	231,206	100.00
1951 ..	6,236	2.55	46,848	19.18	191,184	78.27	244,268	100.00
1952 ..	5,669	2.74	40,431	19.52	161,063	77.74	207,163	100.00
PERSONS.								
1939 ..	31,606	5.86	132,691	24.59	375,267	69.55	539,564	100.00
1946 ..	16,897	2.25	122,431	16.31	611,237	81.44	750,565	100.00
1949 ..	14,117	1.63	117,593	13.58	734,203	84.79	865,913	100.00
1950 ..	13,867	1.53	111,331	12.25	783,521	86.22	908,719	100.00
1951 ..	14,455	1.52	107,761	11.36	826,567	87.12	948,783	100.00
1952 ..	14,748	1.64	100,047	11.09	787,239	87.27	902,034	100.00

§ 6. Sex Distribution in Factories.

1. Distribution According to Sex of Persons Employed.—(i) *General.* In New South Wales the ratio of the number of females engaged in factories to the number of males during 1886 was about one to seven; in 1891 one to six; in 1903 it became about one to four; and in 1951-52 was one to three. In Victoria the ratio of females to males during the year 1886 was about one to five. Five years later (1891) it was somewhat less, but in 1896 had increased to about one to three, and in 1951-52 was about two to five. For Australia as a whole the ratio of females employed in factories was highest in 1943-44 at about two females to five males but by 1946-47 the ratio had declined to the level of one female to three males, where it has since remained.

(ii) *Average Number of Males and Females Employed.* The following table shows the average number of males and females employed in factories in each State for 1938-39, 1945-46 and 1948-49 to 1951-52 :—

FACTORIES : MALES AND FEMALES EMPLOYED.

State.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
MALES.						
New South Wales ..	167,172	227,454	282,312	284,055	301,307	304,808
Victoria ..	136,218	178,951	208,184	216,198	224,919	233,699
Queensland ..	43,941	53,587	68,385	72,948	77,182	77,673
South Australia ..	35,406	49,523	60,890	63,133	66,840	68,045
Western Australia ..	18,704	24,268	31,682	33,711	36,349	37,812
Tasmania ..	11,150	15,105	18,508	19,302	19,454	19,934
Australia ..	412,591	548,888	669,961	689,347	726,051	741,971
FEMALES.						
New South Wales ..	61,609	83,416	96,068	98,330	105,658	101,186
Victoria ..	65,013	77,298	83,822	87,778	91,873	90,444
Queensland ..	10,109	11,873	14,560	16,015	17,397	16,676
South Australia ..	7,965	13,065	14,940	15,303	16,154	15,862
Western Australia ..	4,507	5,988	6,672	7,022	7,412	7,285
Tasmania ..	2,652	4,130	4,094	4,204	4,373	4,093
Australia ..	152,515	196,370	220,156	228,152	242,867	235,546

2. Rate of Variation for each Sex.—The percentages of increase or decrease on the average numbers of males and females employed in the preceding year are shown below for the years 1938-39, 1945-46 and 1948-49 to 1951-52 :—

FACTORIES : ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
MALES.						
New South Wales ..	1.69	1.65	3.56	0.62	6.07	1.16
Victoria ..	0.04	2.60	4.61	3.85	4.03	3.90
Queensland ..	3.79	4.09	7.65	6.67	5.80	0.64
South Australia ..	-2.39	0.95	3.08	3.68	5.87	1.80
Western Australia ..	-0.30	8.32	7.33	6.40	7.83	4.02
Tasmania ..	4.40	2.37	7.55	4.29	0.79	2.47
Total ..	0.98	2.42	4.53	2.89	5.32	2.19
FEMALES.						
New South Wales ..	1.88	-8.24	5.84	2.35	7.45	-4.23
Victoria ..	-0.03	-7.11	5.75	4.12	5.26	-1.56
Queensland ..	3.96	-6.16	10.07	9.99	8.63	-4.14
South Australia ..	1.08	-16.76	4.66	2.43	5.56	-1.81
Western Australia ..	3.06	-11.18	3.44	5.25	5.55	-1.71
Tasmania ..	6.51	-13.14	3.25	2.69	4.02	-6.40
Total ..	1.30	-8.53	5.87	3.63	6.45	-3.01

NOTE.—Minus sign (—) indicates decrease.

3. **Masculinity of Persons Employed in Factories.**—The extent to which females are employed in the factories of Australia may perhaps be more clearly shown by giving the masculinity of persons employed in each State. The following table shows particulars for the years 1938-39, 1945-46 and 1948-49 to 1951-52 :—

FACTORIES : MASCUINITY(a) OF PERSONS EMPLOYED.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39	271	208	432	445	415	420	271
1945-46	273	232	451	362	405	366	280
1948-49	294	248	470	408	475	452	304
1949-50	289	248	455	413	480	459	302
1950-51	285	245	444	414	490	445	299
1951-52	301	258	466	429	519	487	315

(a) Number of males per 100 females.

For a number of years prior to 1926-27 there were on the average 300 males employed in factories for every 100 females, but by 1932-33, as a result of the particularly severe effect of the depression on the heavier industries where males predominate in number, there were only 239 males employed to every 100 females. With the subsequent recovery of employment in the heavier industries the proportion of males per 100 females increased to 271 in 1937-38 and 1938-39. The enlistment of men in the armed services and the expansion of industry and the consequential absorption of women brought about by the 1939-45 War caused a decrease in masculinity from 1938-39 to 1943-44. However, following the cessation of hostilities in 1945 and the return of servicemen to civilian life, the number of females employed in factories declined and masculinity increased, and in 1951-52 there were 315 males to every 100 females employed in factories.

4. **Employment of Females in Particular Industries.**—(i) *General.* The majority of females in manufacturing industries are employed in four classes, namely :—IV., Industrial Metals, Machines, etc.; VI., Textiles; VIII., Clothing; and IX., Food, Drink and Tobacco. In 1951-52 these industries accounted for 80.15 per cent. of all females in factories. In two classes only did the number of females exceed the number of males, namely, in Class VI., Textiles, where there were 126 females to every 100 males and in Class VIII., Clothing, with 242 females per 100 males. The following tables show the average number of males and females employed in each of these classes in 1951-52 :—

MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1951-52.

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
IV. Industrial Metals, etc. ..	157,235	100,148	31,018	38,708	15,680	7,346	350,135
VI. Textiles and Textile Goods (not Dress) ..	9,882	15,049	709	1,273	408	800	28,121
VIII. Clothing (except Knitted) ..	13,046	14,722	2,572	1,948	1,482	373	34,143
IX. Food, Drink and Tobacco ..	27,693	28,919	18,346	8,015	4,703	3,375	91,051
All Other Classes ..	96,952	74,861	25,028	18,101	15,539	8,040	238,521
Total ..	304,868	233,699	77,673	68,045	37,812	19,934	741,971
FEMALES.							
IV. Industrial Metals, etc. ..	19,454	12,424	1,863	4,350	696	330	39,117
VI. Textiles and Textile Goods (not Dress) ..	13,342	18,353	1,152	1,098	363	1,119	35,427
VIII. Clothing (except Knitted) ..	33,929	32,814	7,024	4,730	3,504	561	82,562
IX. Food, Drink and Tobacco ..	12,248	10,587	3,248	2,768	1,393	1,439	31,683
All Other Classes ..	22,213	16,266	3,389	2,916	1,329	644	46,757
Total ..	101,186	90,444	16,676	15,862	7,285	4,093	235,546

(ii) *Females Employed in Clothing Manufacture.* The employment of females in the several industries of Class VIII., Clothing—in which class the largest number of females is employed—and the relation of their number to that of the males so employed are shown in the following table.

FEMALES EMPLOYED IN CLOTHING INDUSTRIES, 1951-52.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Females.	Femininity. (a)	Males.	Females.	Femininity. (a)	Males.	Females.	Femininity. (a)
Tailoring and Ready-made Clothing	3,321	14,903	449	3,384	7,555	223	1,608	5,455	339
Waterproof and Oilskin Clothing	117	661	565	152	399	263	17	119	700
Dressmaking, Hemstitching	192	2,394	1,247	1,543	9,819	636	172	3,426	1,992
Millinery	229	1,412	617	221	903	409	46	555	1,207
Shirts, Collars and Under-clothing	523	4,404	842	621	4,602	741	194	2,296	1,184
Foundation Garments	135	1,432	1,061	174	1,109	637	22	210	955
Handkerchiefs, Ties and Scarves	174	936	538	90	383	426	2	8	400
Hats and Caps	627	702	112	365	288	80	25	131	524
Gloves	112	391	349	105	325	310	36	157	436
Boots and Shoes	3,799	3,797	100	5,448	5,410	99	2,337	1,920	82
Boot and Shoe Repairing	1,348	77	6	594	28	5	674	38	6
Boot and Shoe Accessories	205	222	108	404	236	58	39	3	8
Umbrellas and Walking Sticks	50	87	174	23	55	239	16	40	250
Dyeworks and Cleaning (including Renovating and Repairing)	2,168	2,226	103	1,527	1,478	97	1,187	1,461	123
Other	46	285	620	71	224	315	..	..	..
Total	13,046	33,929	260	14,722	32,814	223	6,375	15,819	248

(a) Number of females per 100 males.

§ 7. Child Labour in Factories.

1. Conditions of Child Labour.—The employment of young persons in factories in the States is regulated by Acts of Parliament, as is the case with the employment of female labour. The object of the restrictions imposed is to ensure, amongst other things, that a proper period shall be devoted to primary education, and that the early years of labour shall not exhaust the worker before the attainment of full growth.

2. Number of Children Employed, 1939, 1951 and 1952.—In the returns for the various States, the term "child" denotes any person under sixteen years of age. The decline in the number of children employed from the peak of 33,553 reached in June, 1940 to 14,748 in June, 1952 which is most marked in all States excepting Western Australia, was probably caused by several factors, including (i) the raising of the school leaving age in New South Wales and Tasmania, (ii) fewer children available for employment owing to the decline in the birth rate which occurred about 1929, and (iii) the high level of employment which enabled parents to keep their children at school beyond the statutory leaving age.

The following table shows the number of children of each sex employed in manufacturing industries in June of the years mentioned.

FACTORIES : CHILDREN(a) EMPLOYED, JUNE.

State.	1939.			1951.			1952.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New Sth. Wales	5,759	7,084	12,843	2,184	1,767	3,951	2,654	1,625	4,279
Victoria	6,167	5,005	11,172	2,790	2,139	4,929	2,981	1,911	4,892
Queensland	1,790	1,334	3,124	1,667	1,178	2,845	1,724	1,076	2,800
South Australia	1,296	1,053	2,349	721	733	1,454	804	696	1,500
Western Aust.	705	521	1,226	755	378	1,133	804	324	1,128
Tasmania	392	500	892	102	41	143	112	37	149
Australia	16,109	15,497	31,606	8,219	6,236	14,455	9,079	5,669	14,748

(a) Under sixteen years of age.

3. **Industries Employing Child Labour.**—The distribution of children employed in factories in June, 1952 and the proportion of children employed to total employees are given in the following table according to the class of industry:—

FACTORIES : CHILDREN EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1952.

Class of Industry.	Children Employed.		Total Employees. (a)		Proportion (per cent.) of Children Employed to Total Employees. (a)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Convey- ances	4,551	631	337,234	34,619	1.35	1.82
Textiles and Textile Goods (not Dress)	317	734	23,948	30,088	1.32	2.44
Clothing (except Knitted)	473	2,526	27,108	71,671	1.74	3.52
Food, Drink and Tobacco	1,065	778	85,633	28,642	1.24	2.72
Sawmills, Joinery, Boxes, etc. .. .	649	67	50,911	2,309	1.27	2.90
Furniture of Wood, Bedding, etc. ..	546	66	15,659	2,917	3.49	2.26
Paper, Stationery, Printing, Bookbind- ing	664	464	39,269	14,290	1.69	3.25
All other Industries	814	403	115,367	22,625	0.71	1.78
Total	9,079	5,669	695,129	207,161	1.31	2.74

(a) Excludes working proprietors.

4. **Apprenticeship.**—In all the States, Acts are in force for the regulation of the age at which children may be employed in gainful occupations. Legislative provision is also made for the regulation of apprenticeship under the various State Factories Acts or Arbitration Acts. These Acts, while laying down general principles, leave to the wages tribunals the actual determination of the conditions under which apprentices may be employed.

§ 8. Salaries and Wages Paid and Value of Production.

Note.—In all tables relating to salaries and wages paid in factories the amounts drawn by working proprietors are excluded.

1. **General.**—The importance of the manufacturing industries of Australia is indicated by the fact that the total value of the output for 1951–52 was £2,635 million, of which amount £1,513 million represented the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £97 million the value of the power, fuel and light used. The difference between the sum of the last two amounts and the value of the output, namely, £1,025 million, represents the value of production as defined by the Conference of Statisticians at Sydney in 1925, i.e., “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production.” The total amount of salaries and wages paid in factories in 1951–52 was £612 million. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £120 million or 24.4 per cent. on that for the previous year.

2. **Salaries and Wages Paid.**—(i) *In Classes of Industry, 1951–52.* The amounts of salaries and wages paid in the various classes of industry in each State are shown in the following table.

FACTORIES : SALARIES AND WAGES PAID, 1951-52.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	5,691	3,716	990	1,043	1,077	443	12,960
II. Bricks, Pottery, Glass, etc.	7,902	3,469	657	1,268	806	258	14,360
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	12,226	9,817	850	1,998	1,384	263	26,538
IV. Industrial Metals, Machines, Conveyances	125,979	77,272	18,960	29,816	9,496	5,040	266,563
V. Precious Metals, Jewellery and Plate	1,095	1,900	137	186	121	10	3,449
VI. Textiles and Textile Goods (not Dress)	12,764	18,848	824	1,422	400	1,009	35,267
VII. Skins and Leather (not Clothing or Footwear)	3,526	3,392	723	859	419	165	9,084
VIII. Clothing (except Knitted)	21,471	23,007	3,759	2,846	1,930	401	53,414
IX. Food, Drink and Tobacco	24,103	24,775	12,896	6,347	3,612	2,789	74,522
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	12,361	8,603	5,853	2,426	2,893	1,812	33,946
XI. Furniture of Wood, Bedding, etc.	4,742	3,523	1,510	1,079	748	312	11,914
XII. Paper, Stationery, Printing, Bookbinding, etc.	16,081	12,524	2,604	2,049	1,232	1,887	36,380
XIII. Rubber	5,237	3,662	779	494	92	78	10,342
XIV. Musical Instruments	793	122	19	21	7	..	962
XV. Miscellaneous Products	4,893	4,806	272	459	178	93	10,701
Total. Classes I. to XV.	258,867	199,436	50,833	52,313	24,395	14,560	600,404
XVI. Heat, Light and Power	4,785	3,150	1,073	1,245	989	143	11,385
Grand Total	263,652	202,586	51,906	53,558	25,384	14,703	611,789

(ii) *Totals and Averages, 1938-39, 1945-46 and 1948-49 to 1951-52.* The following statement shows the total amount of salaries and wages paid, and the average amount paid per employee in each State, for each of the years indicated. The figures exclude working proprietors and the amounts drawn by them :—

FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES PAID.

Year.	N.S.W.	Vic.	Qld.	S. Aust.	W. Aust.	Tas.	Aust.
TOTAL AMOUNT PAID (£'000.)							
1938-39..	44,606	36,027	10,887	8,169	4,574	2,480	106,743
1945-46..	87,647	70,499	18,012	16,770	7,884	5,007	205,819
1948-49..	146,536	112,410	29,447	29,442	12,928	8,456	339,219
1949-50..	162,147	130,255	34,748	33,708	15,293	9,646	385,797
1950-51..	211,339	163,207	42,837	42,940	19,658	11,737	491,718
1951-52..	263,652	202,586	51,906	53,558	25,384	14,703	611,789
AVERAGE PER EMPLOYEE (£).							
1938-39..	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1945-46..	290.75	284.09	285.00	272.71	273.01	269.85	285.17
1948-49..	401.06	399.86	371.11	398.93	357.18	389.57	395.57
1949-50..	439.04	429.21	408.67	441.70	397.13	428.29	436.56
1950-51..	537.13	534.64	473.80	531.59	474.15	513.74	526.34
1951-52..	673.13	650.79	576.57	656.54	594.67	637.29	650.61

In comparing the figures in the preceding table, regard should be paid to the nature of certain industries which are carried on to a greater extent in some States than in others. In Victoria, for instance, there is a large number of hands employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1951-52 were paid in New South Wales, South Australia and Victoria, in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a record high level of £291 was attained as a result of war-time conditions. In 1944-45 the average dropped to £285 and remained at this level in 1945-46. From 1945-46 average earnings rose each year and in 1951-52 reached a new record level of over £650.

(iii) *Total and Average Earnings of Males and Females, 1938-39, 1945-46 and 1948-49 to 1951-52.* Particulars for these years are given in the table on the following page.

FACTORIES : TOTAL AND AVERAGE SALARIES AND WAGES—MALES AND FEMALES.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39..	38,272	29,006	9,920	7,488	4,129	2,234	91,049
1945-46..	73,380	56,773	16,178	14,654	7,038	4,353	172,376
1948-49..	123,263	90,765	26,331	26,672	11,555	7,503	285,489
1949-50..	135,875	105,135	30,948	29,809	13,692	8,538	323,997
1950-51..	176,031	130,923	37,870	37,786	17,620	10,336	410,566
1951-52..	220,885	163,688	46,087	47,194	22,870	13,056	513,780
AVERAGE PER EMPLOYEE (£).							
1938-39..	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1945-46..	335.34	330.86	314.56	305.70	306.74	301.35	326.99
1948-49..	455.88	457.85	405.20	441.83	390.29	425.40	446.17
1949-50..	499.33	510.86	446.87	487.39	433.41	465.46	492.20
1950-51..	609.05	610.44	516.83	583.37	515.67	558.67	591.41
1951-52..	756.84	736.68	625.91	716.25	643.68	687.09	725.57
FEMALES.							
TOTAL AMOUNT PAID (£'000).							
1938-39..	6,334	7,021	967	681	445	246	15,694
1945-46..	14,267	13,726	1,834	2,116	846	654	33,443
1948-49..	23,273	21,645	3,116	3,370	1,373	953	53,730
1949-50..	26,272	25,120	3,600	3,899	1,601	1,108	61,800
1950-51..	35,308	32,284	4,967	5,154	2,038	1,401	81,152
1951-52..	42,767	38,898	5,819	6,364	2,514	1,647	98,009
AVERAGE PER EMPLOYEE (£).							
1938-39..	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1945-46..	172.65	179.26	155.85	156.05	142.62	159.02	171.88
1948-49..	245.02	261.17	216.90	227.81	208.35	234.25	246.83
1949-50..	270.27	291.34	240.93	257.31	231.57	265.37	274.12
1950-51..	338.08	355.57	289.82	322.03	279.55	322.46	338.12
1951-52..	428.40	436.60	354.96	405.70	351.30	404.71	422.04

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1951-52 and shows the amounts paid to managerial and clerical staff including salaried managers and working directors, chemists, draftsmen and other laboratory and research staff, and those paid to other employees. As previously mentioned, amounts drawn by working proprietors are excluded in all cases:—

FACTORIES : SALARIES AND WAGES PAID TO MANAGERS, CLERICAL STAFF, ETC., AND OTHER EMPLOYEES, AUSTRALIA, 1951-52.

Class of Industry.	Managers, Clerical Staff, Chemists, Draftsmen, etc.		All Other Employees.	
	Males.	Females.	Males.	Females.
	£'000.	£'000.	£'000.	£'000.
I. Treatment of Non-metalliferous Mine and Quarry Products	1,452	206	11,216	86
II. Bricks, Pottery, Glass, etc.	1,077	276	12,605	402
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	4,801	1,163	17,771	2,803
IV. Industrial Metals, Machines, Conveyances	33,026	7,030	216,203	10,298
V. Precious Metals, Jewellery and Plate	374	124	2,613	337
VI. Textiles and Textile Goods (not Dress)	2,759	1,153	17,479	13,874
VII. Skins and Leather (not Clothing or Footwear)	987	186	6,751	1,161
VIII. Clothing (except Knitted)	2,983	1,492	17,133	31,805
IX. Food, Drink and Tobacco	8,858	2,420	52,590	10,654
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	2,970	596	30,050	332
XI. Furniture of Wood, Bedding, etc.	954	297	9,656	1,008
XII. Paper, Stationery, Printing, Bookbinding, etc.	4,070	1,477	25,958	4,876
XIII. Rubber	1,360	287	7,715	980
XIV. Musical Instruments	149	67	667	90
XV. Miscellaneous Products	1,283	435	6,938	2,045
Total, Classes I. to XV.	67,103	17,207	435,345	80,751
XVI. Heat, Light and Power	1,089	44	10,244	7
Grand Total	68,192	17,251	445,589	80,758
Average paid per employee	£. 944	£. 444	£. 701	£. 413

3. Power, Fuel and Light Used.—(i) *In Classes of Industry, 1951-52.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1951-52 it amounted to a new high level of £96,628,000, an increase of £24,946,000 as compared with the previous year and a little over six times the corresponding value in 1938-39. The following table shows the value of power, fuel and light, etc., used in the different classes of industry:—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED(a), 1951-52.

(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	1,316	1,010	313	388	344	175	3,546
II. Bricks, Pottery, Glass, etc. ..	3,255	1,560	195	395	346	144	5,895
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	2,679	1,654	126	562	260	61	5,342
IV. Industrial Metals, Machines, Conveyances	16,689	3,365	1,099	3,883	596	577	26,209
V. Precious Metals, Jewellery and Plate	69	71	6	20	6	..	172
VI. Textiles and Textile Goods (not Dress)	1,058	1,375	36	162	27	75	2,733
VII. Skins and Leather (not Clothing or Footwear) ..	327	376	45	110	45	15	918
VIII. Clothing (except Knitted) ..	641	581	104	88	61	20	1,495
IX. Food, Drink and Tobacco ..	4,493	4,072	1,828	1,159	774	320	12,646
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	940	447	329	92	195	148	2,151
XI. Furniture of Wood, Bedding, etc.	114	63	29	29	16	5	256
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	941	786	83	174	54	550	2,588
XIII. Rubber	693	666	88	54	12	11	1,524
XIV. Musical Instruments	35	6	..	..	..	..	41
XV. Miscellaneous Products ..	308	252	14	31	6	2	613
Total, Classes I. to XV.	33,558	16,284	4,295	7,147	2,742	2,103	66,129
XVI. Heat, Light and Power	15,106	5,706	3,991	3,262	2,431	4	30,500
Grand Total	48,664	21,990	8,286	10,409	5,173	2,107	96,629

(a) Includes value of lubricants and water.

(ii) *Values of Items, 1951-52.* The following table shows the values of the various items of power, fuel and light used in factories in each State, during the year:—

FACTORIES : VALUE OF ITEMS OF POWER, FUEL AND LIGHT USED(a), 1951-52.

(£'000.)

Particulars.	N.S.W.	Victoria	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal, Black	18,626	2,945	4,599	(b) 3,333	1,665	561	(b) 31,729
" Brown .. ..	..	3,875	..	..	..	..	3,875
Brown Coal Briquettes .. ..	..	1,586	..	..	..	..	1,586
Coke	8,888	912	258	2,175	133	141	12,507
Wood	407	783	376	359	658	194	2,777
Fuel Oil	5,658	4,448	899	1,731	1,216	394	14,346
Tar (Fuel)	419	250	5	76	17	18	785
Electricity	10,389	4,895	1,510	2,039	1,031	627	20,491
Gas	1,998	542	93	140	60	32	2,865
Other (Charcoal, etc.)	162	543	95	(c) 209	117	43	(c) 1,169
Water	1,297	700	199	179	127	43	2,545
Lubricating Oils	820	511	252	168	149	54	1,954
Total	48,664	21,990	8,286	10,409	5,173	2,107	96,629

(a) Includes value of lubricants and water. (b) Includes £892,000, the value of 359,000 tons of Leigh Creek coal. (c) Includes £18,000, the value of 13,000 tons of coke breeze.

(iii) *Quantities of Fuel Used, 1951-52.* The following table shows the quantities of fuel used in factories in each State during the year:—

FACTORIES : QUANTITIES OF FUEL USED, 1951-52.

Particulars.	Unit.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black	'ooo tons	4,914	535	1,265	(a) 808	453	157	(a)8,132
" Brown	"	"	6,436	"	"	"	"	6,436
Brown Coal Briquettes	"	"	494	"	"	"	"	494
Coke	"	1,706	136	35	275	26	15	2,193
Wood	"	196	506	231	162	474	119	1,688
Fuel Oil	'ooo gals.	74,410	58,510	9,404	23,069	13,627	4,420	183,440
Tar (Fuel)	"	20,620	4,342	168	1,504	890	509	28,033

(a) Includes 359,000 tons of Leigh Creek coal.

(iv) *Total Value, 1938-39, 1945-46 and 1948-49 to 1951-52.* The next table shows the amounts expended on power, fuel and light during these years:—

FACTORIES : VALUE OF POWER, FUEL AND LIGHT USED.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
1938-39	7,652	4,000	1,423	1,018	1,169	438	15,700
1945-46	12,207	6,941	2,298	2,851	1,836	904	27,037
1948-49	21,611	11,337	4,086	5,123	2,745	1,160	46,062
1949-50	25,536	13,695	5,119	5,942	3,184	1,354	54,830
1950-51	35,381	17,371	6,295	7,267	3,759	1,609	71,682
1951-52	48,664	21,990	8,286	10,409	5,173	2,107	96,629

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1951-52.* The value of materials used (which includes the value of containers, packing, etc., the cost of tools replaced and repairs to plant) in factories in Australia in 1951-52 reached £1,513,069,000, representing 57.5 per cent. of the value of the final output (see para. 5). The following table shows the value of the materials used in various classes of industry in each State:—

FACTORIES : VALUE OF MATERIALS USED, 1951-52.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliciferous Mine and Quarry Products	17,283	7,258	2,212	2,165	1,760	859	31,537
II. Bricks, Pottery, Glass, etc.	6,011	2,957	429	1,137	459	150	11,143
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease	60,241	35,582	4,278	7,871	7,077	940	115,989
IV. Industrial Metals, Machines, Conveyances	245,294	113,620	26,585	65,602	12,780	13,636	477,517
V. Precious Metals, Jewellery and Plate	1,111	2,104	74	130	68	2	3,489
VI. Textiles and Textile Goods (not Dress)	39,792	59,786	3,832	4,909	2,420	4,663	115,402
VII. Skins and Leather (not Clothing or Footwear)	12,714	11,863	2,168	6,888	1,113	978	35,724
VIII. Clothing (except Knitted)	35,653	38,434	5,681	3,125	2,428	314	85,635
IX. Food, Drink and Tobacco	116,420	117,932	81,422	30,211	21,493	11,444	378,922
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	32,370	18,685	10,801	7,745	4,198	3,296	77,095
XI. Furniture of Wood, Bedding, etc.	8,834	7,332	2,936	2,316	1,539	417	23,374
XII. Paper, Stationery, Printing, Bookbinding, etc.	38,189	31,120	4,864	3,937	2,032	2,901	83,043
XIII. Rubber	17,343	16,160	3,257	997	231	171	38,159
XIV. Musical Instruments	958	148	6	5	2	"	1,119
XV. Miscellaneous Products	7,368	9,271	463	866	151	60	18,179
Total, Classes I. to XV.	639,581	472,252	149,008	137,904	57,751	39,831	1,496,327
XVI. Heat, Light and Power	7,710	5,365	1,419	1,294	901	194	16,883
Grand Total	647,291	477,617	150,427	139,198	58,652	40,025	1,513,210

(ii) *Total Amount, 1938-39, 1945-46 and 1948-49 to 1951-52.* The following table shows the values of materials used in factories for these years :—

FACTORIES : VALUE OF MATERIALS USED.
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	120,502	82,971	42,596	20,309	9,604	5,321	281,303
1945-46 ..	201,706	159,798	58,633	37,770	18,361	12,019	488,287
1948-49 ..	336,914	252,741	97,045	75,227	29,199	19,422	810,548
1949-50 ..	384,467	293,528	108,682	83,277	34,750	24,390	929,094
1950-51 ..	522,422	382,002	134,457	117,547	46,452	32,401	1,235,281
1951-52 ..	647,291	477,617	150,427	139,198	58,652	40,025	1,513,210

5. *Value of Output.*—(i) *In Classes of Industry, 1951-52.* The value of the output of factories in the various classes in each State in 1951-52 is shown in the following table. It represents the selling value at the factory of goods made or processed during the year, including by-products. In addition, it includes the amount received for other work done such as repair work, assembling and making up for customers. The difference between the sum of the values of the materials and of the power, fuel and light used, and the value of output is the real value of factory production (*see para. 6*).

FACTORIES : VALUE OF OUTPUT, 1951-52.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	28,071	14,667	4,202	4,420	3,810	1,805	56,975
II. Bricks, Pottery, Glass, etc. ..	20,655	9,514	1,537	3,526	2,099	652	37,983
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	96,391	57,857	6,167	12,498	10,498	1,635	185,046
IV. Industrial Metals, Machines, Conveyances ..	452,180	232,711	64,503	113,461	27,455	26,466	916,776
V. Precious Metals, Jewellery and Plate ..	2,936	5,109	304	463	289	17	9,100
VI. Textiles and Textile Goods (not Dress) ..	62,268	90,461	5,755	7,164	3,223	6,448	174,719
VII. Skins and Leather (not Clothing or Footwear) ..	18,202	17,580	3,117	8,192	1,885	1,219	50,265
VIII. Clothing (except Knitted) ..	69,300	74,049	11,514	7,076	5,351	897	168,187
IX. Food, Drink and Tobacco ..	170,694	168,776	104,964	42,030	29,726	16,432	532,622
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	84,850	34,177	20,465	11,875	9,382	6,579	137,328
XI. Furniture of Wood, Bedding, etc. ..	16,195	13,587	5,411	4,043	2,812	902	42,950
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	69,320	55,201	9,158	8,199	4,503	7,484	153,865
XIII. Rubber ..	25,163	24,855	5,091	1,828	457	334	57,728
XIV. Musical Instruments ..	2,154	336	41	31	14	..	2,576
XV. Miscellaneous Products ..	15,434	17,381	909	1,647	421	181	35,973
Total, Classes I. to XV. ..	1,103,813	816,243	242,608	226,453	101,925	71,051	2,562,093
XVI. Heat, Light and Power ..	35,533	17,724	7,435	6,400	4,646	875	72,613
Grand Total ..	1,139,346	833,967	250,043	232,853	106,571	71,926	2,634,706

(ii) *Total, 1938-39, 1945-46 and 1948-49 to 1951-52.* The following table shows the value of output in each State during these years :—

FACTORIES : VALUE OF OUTPUT.
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	218,420	152,967	63,321	35,005	19,549	11,158	500,420
1945-46 ..	367,092	286,990	91,201	60,223	34,023	22,119	867,648
1948-49 ..	609,724	446,838	154,670	124,072	53,417	36,657	1,425,378
1949-50 ..	693,203	526,466	175,156	141,573	63,978	45,080	1,645,450
1950-51 ..	923,912	675,033	216,212	192,623	84,431	58,624	2,150,835
1951-52 ..	1,139,346	833,967	250,043	232,853	106,571	71,926	2,634,706

6. *Value of Production.*—(i) *In Classes of Industry, 1951-52.* The value of production for any industry was defined at the Conference of Statisticians at Sydney in 1925 as "the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production".

In accordance with this definition, it was agreed that a deduction consisting of the costs of raw material, containers, power, fuel, light, lubricants, water, tools replaced, repairs to plant and depreciation should be made from the "value of output". All these deductions with the exception of depreciation are included in the items "value of materials used" and "value of fuel used" as defined above. On account of the difficulty experienced in securing accurate figures for depreciation, it was agreed that no deduction should be made on this account for the present. The value of production as given in the following tables is obtained, therefore, by deducting "value of materials used" and "value of fuel used" from the "value of the output".

The figure thus calculated is, however, not the net value of production. The deduction for depreciation, particulars of which are shown in § 9, para. 4, was estimated at £34,113,000 for 1951-52. Many miscellaneous expenses, such as taxation, insurance, advertising and other sundry charges, have not been taken into account. Therefore, it must not be inferred that when wages and salaries are deducted from the value of production the whole of the "surplus" is available for interest and profit.

The value of factory production therefore approximates "net value added" in the manufacturing process. It amounted in 1951-52 to £1,025 million to which Class IV., Industrial Metals, etc., with £413 million or more than six times the value of production of this class in 1938-39, made the greatest contribution. This total value of production in 1951-52 represented an increase of £181.0 million over the figure for 1950-51 and £821.5 million (404 per cent.) over the value of production recorded in 1938-39.

The following table shows the value of production in 1951-52 in each State for the various classes of industry:—

FACTORIES: VALUE OF PRODUCTION, 1951-52.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	9,473	6,398	1,678	1,866	1,707	771	21,893
II. Bricks, Pottery, Glass, etc. ..	11,390	4,996	914	1,995	1,294	357	20,946
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	33,470	20,621	1,763	4,064	3,162	635	63,715
IV. Industrial Metals, Machines, Conveyances ..	190,198	115,726	36,821	43,975	14,078	12,253	413,051
V. Precious Metals, Jewellery and Plate ..	1,756	2,916	225	313	214	14	5,438
VI. Textiles and Textile Goods (not Dress) ..	21,418	29,301	1,287	2,093	774	1,711	56,584
VII. Skins and Leather (not Clothing or Footwear) ..	5,161	5,341	974	1,194	727	226	13,623
VIII. Clothing (except Knitted) ..	33,006	35,033	5,729	3,863	2,863	564	81,058
IX. Food, Drink and Tobacco ..	49,781	46,772	21,713	10,660	7,459	4,668	141,053
X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving ..	21,539	15,045	9,335	4,038	4,989	3,136	58,082
XI. Furniture of Wood, Bedding, etc. ..	7,247	6,192	2,445	1,698	1,258	480	19,320
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	30,190	23,297	4,210	4,087	2,417	4,033	68,234
XIII. Rubber ..	7,126	8,029	1,746	778	215	151	18,045
XIV. Musical Instruments ..	1,161	182	34	27	12	..	1,416
XV. Miscellaneous Products ..	7,758	7,857	431	751	264	118	17,179
Total, Classes I. to XV.	430,674	327,706	89,305	81,402	41,433	29,117	999,637
XVI. Heat, Light and Power ..	12,717	6,654	2,025	1,844	1,313	677	25,230
Grand Total ..	443,391	334,360	91,330	83,246	42,746	29,794	1,024,867

(ii) *Total and Averages, 1938-39, 1945-46 and 1948-49 to 1951-52.* The value of production and the amount per person employed and per head of population are shown in the following table. For Australia as a whole the value of production per head of population increased from £29.34 per head in 1938-39 to £120.02 per head in 1951-52. For value per person employed, the increase was not quite so pronounced (from £360 per head in 1938-39 to £1,048 in 1951-52) owing to the considerable increase in the numbers of persons employed in 1951-52 as compared with 1938-39.

FACTORIES : VALUE OF PRODUCTION.

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
VALUE. (£'000.)							
1938-39 ..	90,266	65,996	19,302	13,678	8,776	5,399	203,417
1945-46 ..	153,179	120,250	30,270	25,602	13,826	9,196	352,323
1948-49 ..	251,199	182,760	53,540	43,722	21,474	16,074	568,769
1949-50 ..	283,201	219,244	61,354	52,353	26,044	19,336	661,532
1950-51 ..	366,109	275,660	75,460	67,809	34,220	24,614	843,872
1951-52 ..	443,391	334,360	91,330	83,246	42,746	29,794	1,024,867

PER PERSON EMPLOYED. (£.)

1938-39 ..	395	327	357	315	378	391	360
1945-46 ..	493	469	462	405	457	478	473
1948-49 ..	664	626	645	577	560	711	639
1949-50 ..	741	722	690	667	639	823	721
1950-51 ..	900	870	798	817	782	1,033	871
1951-52 ..	1,092	1,032	968	992	947	1,240	1,048

PER HEAD OF POPULATION. (£.)

1938-39 ..	33.00	35.25	19.14	22.98	18.80	22.72	29.34
1945-46 ..	52.24	59.67	27.92	40.58	28.22	36.74	47.43
1948-49 ..	81.98	86.49	47.18	65.73	41.12	59.92	72.93
1949-50 ..	89.28	101.02	52.75	76.22	47.72	69.71	82.18
1950-51 ..	111.82	123.24	63.26	95.37	59.89	85.59	101.53
1951-52 ..	132.12	145.28	74.79	114.14	72.31	99.79	120.02

7. *Value of Output and Cost of Production.*—As the total value of the output for Australia for 1951-52 was estimated at £2,634,706,000, there remained, after payment of £1,513,210,000 for the value of the materials used, £611,789,000 for salaries and wages and £96,629,000 for power, fuel and light, a balance of £413,078,000 to provide for all other costs and overhead expenses such as rent, interest, insurance, pay-roll tax, income tax, depreciation, etc., as well as drawings by working proprietors and profit. The following table gives corresponding particulars for each State expressed absolutely and as percentages of the total value of the output for the year 1951-52 :—

FACTORIES : VALUE OF OUTPUT AND COST OF PRODUCTION, 1951-52.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance. (Output less Materials, Fuel and Wages.) (c)	Total Value of Output.
VALUE AND COST, ETC. (£'000.)					
New South Wales ..	647,291	48,664	263,652	179,739	1,139,346
Victoria ..	477,617	21,990	202,586	131,774	833,967
Queensland ..	150,427	8,286	51,906	39,424	250,043
South Australia ..	139,198	10,409	53,558	29,688	232,853
Western Australia ..	58,652	5,173	25,384	17,362	106,571
Tasmania ..	40,025	2,107	14,703	15,091	71,926
Australia ..	1,513,210	96,629	611,789	413,078	2,634,706

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
(b) Includes lubricants and water. (c) See paragraph preceding this table.

FACTORIES: VALUE OF OUTPUT AND COST OF PRODUCTION, 1951-52—
continued.

State.	Materials Used. (a)	Power, Fuel and Light. (b)	Salaries and Wages.	Balance, (Output less Materials, Fuel and Wages.)(c)	Total Value of Output.
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PROPORTION OF COSTS, ETC., TO TOTAL VALUE OF OUTPUT.
(Per Cent.)

New South Wales	..	56.81	4.27	23.14	15.78	100.00
Victoria..	..	57.27	2.64	24.29	15.80	100.00
Queensland	..	60.16	3.31	20.76	15.77	100.00
South Australia	..	59.78	4.47	23.00	12.75	100.00
Western Australia	..	55.04	4.85	23.82	16.29	100.00
Tasmania	..	55.65	2.93	20.44	20.98	100.00
Australia ..	..	57.43	3.67	23.22	15.68	100.00

(a) Includes the value of containers, packing, etc., also the cost of tools replaced and repairs to plant.
(b) Includes lubricants and water. (c) See paragraph preceding this table.

§ 9. Value of Land, Buildings, Plant and Machinery.

1. **General.**—The following statement shows the value of land and buildings and of plant and machinery used in connexion with manufacturing industries during the year 1951-52 :—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1951-52.
(£'000.)

Value of—	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
Land and buildings	153,662	119,465	28,610	28,507	16,747	12,499	359,490
Plant and machinery	166,437	128,934	41,290	32,177	20,716	20,590	410,144
Total ..	320,099	248,399	69,900	60,684	37,463	33,089	769,634

(a) Includes estimated value of rented premises and plant.

The values recorded in this section are generally the values apportioned in the books of the individual firms after allowance has been made for depreciation, but they include estimates of the capital value of premises and plant rented. The totals shown in the table consequently do not represent the actual amount of capital invested in the items specified.

2. **Value of Land and Buildings.**—(i) *Total for Australia.* The following table shows for Australia as a whole the approximate value of land and buildings occupied in connexion with manufacturing industries for 1938-39, 1945-46 and 1948-49 to 1951-52.

FACTORIES : VALUE OF LAND AND BUILDINGS(a), AUSTRALIA.
(£'000.)

Class of Industry.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,779	3,020	4,331	4,851	6,281	6,905
II. Bricks, Pottery, Glass, etc. ..	2,953	3,331	4,246	4,719	5,883	6,761
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	7,377	18,461	20,254	22,076	20,920	25,262
IV. Industrial Metals, Machines, Conveyances ..	34,841	59,530	73,247	81,682	97,021	117,513
V. Precious Metals, Jewellery and Plate ..	633	752	1,515	1,614	1,688	2,037
VI. Textiles and Textile Goods (not Dress) ..	6,000	9,112	11,905	14,838	18,004	20,845
VII. Skins and Leather (not Clothing or Footwear) ..	2,096	2,966	3,777	4,158	4,764	5,382
VIII. Clothing (except Knitted) ..	10,624	13,994	18,440	19,763	22,128	24,768
IX. Food, Drink and Tobacco ..	33,273	40,129	48,075	52,197	60,217	68,916
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	4,107	5,441	8,072	9,442	11,680	14,505
XI. Furniture of Wood, Bedding, etc. ..	2,533	2,829	4,235	4,828	5,776	6,812
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	10,639	11,605	14,517	16,234	20,207	24,691
XIII. Rubber ..	1,676	1,865	2,476	3,038	3,792	4,620
XIV. Musical Instruments ..	105	133	268	325	387	380
XV. Miscellaneous Products ..	1,433	2,965	3,929	4,360	5,035	6,266
Total, Classes I. to XV. ..	121,069	176,133	219,287	244,125	283,783	355,663
XVI. Heat, Light and Power ..	9,851	10,806	13,453	15,424	19,002	23,827
Grand Total ..	130,920	186,939	232,740	259,549	302,785	359,490

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1951-52.* The following table gives particulars of the various classes of industry in each State.

FACTORIES : VALUE OF LAND AND BUILDINGS(a), 1951-52.
(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	3,051	2,003	448	457	404	542	6,905
II. Bricks, Pottery, Glass, etc. ..	3,778	1,651	316	507	374	135	6,761
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	11,422	9,435	595	1,961	1,428	421	25,262
IV. Industrial Metals, Machines, Conveyances ..	55,859	36,148	7,889	10,072	4,546	2,999	117,513
V. Precious Metals, Jewellery and Plate ..	642	1,080	80	123	98	14	2,037
VI. Textiles and Textile Goods (not Dress) ..	8,022	11,284	452	503	291	293	20,845
VII. Skins and Leather (not Clothing or Footwear) ..	1,873	2,223	307	552	192	235	5,382
VIII. Clothing (except Knitted) ..	11,100	9,393	1,635	1,373	1,078	189	24,768
IX. Food, Drink and Tobacco ..	23,718	22,204	10,256	5,868	3,968	2,902	68,916
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	5,861	4,056	1,498	1,194	1,159	737	14,505
XI. Furniture of Wood, Bedding, etc. ..	2,525	2,353	850	472	451	161	6,812
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,919	9,040	1,468	1,184	701	2,379	24,691
XIII. Rubber ..	1,730	2,037	445	244	86	78	4,620
XIV. Musical Instruments ..	272	86	3	12	7	..	380
XV. Miscellaneous Products ..	2,704	2,967	151	250	139	55	6,266
Total, Classes I. to XV. ..	142,476	115,960	26,393	24,772	14,922	11,140	335,663
XVI. Heat, Light and Power ..	11,186	3,505	2,217	3,735	1,825	1,359	23,827
Grand Total ..	153,662	119,465	28,610	28,507	16,747	12,499	359,490

(a) Includes estimated value of rented premises.

(iii) *Totals in each State.* The following table shows the value of land and buildings in each State for the years 1938-39, 1945-46 and 1948-49 to 1951-52 :—

FACTORIES : VALUE OF LAND AND BUILDINGS.(a)
(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39..	57,353	42,026	12,299	8,711	6,814	3,717	130,920
1945-46..	80,308	60,265	14,332	18,447	8,283	5,304	186,939
1948-49..	101,241	73,384	18,508	22,218	10,054	7,335	232,740
1949-50..	110,597	84,124	20,806	24,317	11,055	8,650	259,549
1950-51..	130,468	101,326	23,958	23,303	13,380	10,350	302,785
1951-52..	153,662	119,465	28,610	28,507	16,747	12,499	359,490

(a) Includes estimated value of rented premises.

Prior to 1929-30 the increase in the value of land and buildings was uninterrupted, rising from £23 million in 1903 to £118 million in 1929-30, a growth of £95 million in 27 years. During the three years ended 1932-33, there was a decline of £12 million to £105.8 million, but since that year the value has risen annually and stood at £359.5 million in 1951-52.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39, 1945-46 and 1948-49 to 1951-52.* The following table shows for Australia the approximate value of plant and machinery used in factories.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), AUSTRALIA.
(£'000.)

Class of Industry.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
I. Treatment of Non-metalliferous Mine and Quarry Products..	7,028	4,916	7,342	8,055	9,239	11,911
II. Bricks, Pottery, Glass, etc..	3,145	2,968	4,333	4,991	6,057	7,461
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	6,754	17,792	19,255	23,518	26,247	30,559
IV. Industrial Metals, Machines, Conveyances ..	33,038	53,902	70,155	77,597	90,801	112,940
V. Precious Metals, Jewellery and Plate ..	197	253	721	770	808	955
VI. Textiles and Textile Goods (not Dress) ..	6,657	7,737	12,797	17,485	21,218	23,973
VII. Skins and Leather (not Clothing or Footwear) ..	973	1,584	2,063	2,535	2,994	3,642
VIII. Clothing (except Knitted) ..	2,557	4,135	6,923	7,792	9,294	10,403
IX. Food, Drink and Tobacco ..	32,101	33,234	42,796	48,318	56,489	66,712
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	3,908	5,023	8,481	10,377	12,614	15,869
XI. Furniture of Wood, Bedding, etc. ..	728	741	1,427	1,679	2,035	2,483
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,188	8,556	15,027	19,193	25,301	33,613
XIII. Rubber ..	1,368	1,219	2,244	2,754	3,456	4,171
XIV. Musical Instruments ..	12	23	134	154	227	302
XV. Miscellaneous Products ..	758	1,856	2,806	3,275	4,008	4,674
Total, Classes I. to XV. ..	108,412	143,939	196,504	228,493	270,788	329,668
XVI. Heat, Light and Power ..	35,250	41,606	49,990	57,109	65,827	80,476
Grand Total ..	143,662	185,545	246,494	285,602	336,615	410,144

(a) Includes estimated value of rented plant and machinery.

Except for the years 1930-31 to 1933-34, when decreases were recorded, there has been a continuous increase in the value of plant and machinery in Australia. The increase in 1951-52 of £73.6 million over 1950-51 extended over all industrial classes. The greatest increase occurred in Class IV., Industrial Metals, Machines, Implements and Conveyances.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1938-39, 1945-46 and 1948-49 to 1951-52. During 1951-52 increases occurred in all States, New South Wales showing the largest increase, £29.9 million.

FACTORIES : VALUE OF PLANT AND MACHINERY.(a)

(£'000.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39..	62,693	38,627	18,095	9,750	8,095	6,402	143,662
1945-46..	72,561	58,537	18,690	19,018	8,508	8,231	185,545
1948-49..	99,812	76,080	25,757	22,792	9,800	12,253	246,494
1949-50..	113,864	92,748	28,904	24,901	11,457	13,728	285,602
1950-51..	136,491	107,261	34,235	26,759	14,713	17,156	336,615
1951-52..	166,437	128,934	41,290	32,177	20,716	20,590	410,144

(a) Includes estimated value of rented plant and machinery.

(iii) *Value according to Class of Industry, 1951-52.* The following table shows the value of plant and machinery used in factories in each State during 1951-52 according to class of industry.

FACTORIES : VALUE OF PLANT AND MACHINERY(a), 1951-52.

(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	5,892	2,721	836	1,506	620	336	11,911
II. Bricks, Pottery, Glass, etc. ..	3,981	1,928	426	491	419	216	7,461
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	13,474	11,074	615	2,907	1,958	531	30,559
IV. Industrial Metals, Machines, Conveyances ..	60,414	30,802	6,444	10,386	3,078	1,816	112,940
V. Precious Metals, Jewellery and Plate ..	304	546	27	41	32	5	955
VI. Textiles and Textile Goods (not Dress) ..	9,038	13,108	811	327	210	479	23,973
VII. Skins and Leather (not Clothing or Footwear) ..	1,326	1,260	387	328	200	141	3,642
VIII. Clothing (except Knitted) ..	4,285	4,304	742	544	429	99	10,403
IX. Food, Drink and Tobacco ..	20,061	18,370	17,380	5,148	3,575	2,178	66,712
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	5,634	3,859	2,664	763	1,533	1,416	15,869
XI. Furniture of Wood, Bedding, etc. ..	902	748	328	231	212	62	2,483
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,502	14,183	1,786	1,325	873	5,944	33,613
XIII. Rubber ..	1,569	1,830	508	177	44	43	4,171
XIV. Musical Instruments ..	248	49	3	1	1		302
XV. Miscellaneous Products ..	1,911	2,388	77	218	52	28	4,674
Total, Classes I. to XV.	138,541	107,170	33,034	24,393	13,236	13,294	329,668
XVI. Heat, Light and Power ..	27,896	21,764	8,256	7,784	7,480	7,296	80,476
Grand Total ..	166,437	128,934	41,290	32,177	20,716	20,590	410,144

(a) Includes estimated value of rented plant and machinery.

4. *Depreciation of Land and Buildings and Plant and Machinery, 1951-52.*—The following table shows the allowance made for the depreciation of land and buildings and plant and machinery used in connexion with the manufacturing industries in each State as recorded by factory proprietors at the annual census of factory production.

**FACTORIES : ALLOWANCE FOR DEPRECIATION OF LAND AND BUILDINGS
AND PLANT AND MACHINERY, 1951-52.**

(£'000.)

Class of Industry.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	745	250	98	79	50	33	1,255
II. Bricks, Pottery, Glass, etc. ..	420	188	38	54	38	24	762
III. Chemicals, Dyes, Explosives, Paints, Oils and Grease ..	1,227	949	65	298	236	114	2,889
IV. Industrial Metals, Machines, Conveyances ..	5,178	2,827	720	1,209	335	640	10,909
V. Precious Metals, Jewellery and Plate ..	22	49	2	3	2	..	78
VI. Textiles and Textile Goods (not Dress) ..	816	1,422	60	69	21	54	2,442
VII. Skins and Leather (not Clothing or Footwear) ..	85	154	19	36	17	8	319
VIII. Clothing (except Knitted) ..	393	394	59	36	36	8	926
IX. Food, Drink and Tobacco ..	1,903	2,063	1,357	511	303	224	6,361
X. Sawmills, Joinery, Boxes, etc.; Wood Turning and Carving ..	540	431	251	93	145	150	1,610
XI. Furniture of Wood, Bedding, etc. ..	89	60	31	20	14	4	218
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,029	976	153	107	82	575	2,922
XIII. Rubber ..	323	373	138	25	5	6	870
XIV. Musical Instruments ..	36	5	..	..	..	..	41
XV. Miscellaneous Products ..	213	324	10	29	7	3	586
Total, Classes I. to XV.	13,019	10,465	3,001	2,569	1,291	1,843	32,188
XVI. Heat, Light and Power ..	702	197	390	219	325	92	1,925
Grand Total ..	13,721	10,662	3,391	2,788	1,616	1,935	34,113

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1938-39, 1945-46 and 1948-49 to 1951-52.—The following table summarizes the recorded totals for Australia, in this section, and also includes particulars of additions and replacements.

**FACTORIES : VALUE OF LAND AND BUILDINGS, PLANT AND MACHINERY,
AUSTRALIA.**

(£'000.)

Year.	Book Values as at 30th June.(a)		Additions and Replacements during year.		Depreciation allowed during year.	
	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.	Land and Buildings.	Plant and Machinery.
1938-39 ..	130,920	143,662	5,578	17,781	1,911	8,736
1945-46 ..	186,939	185,545	6,245	21,766	2,537	14,597
1948-49 ..	232,740	246,494	15,029	47,226	2,864	21,666
1949-50 ..	259,549	285,602	18,551	59,562	2,983	25,906
1950-51 ..	302,785	336,615	26,710	81,003	3,859	33,006
1951-52 ..	359,490	410,144	37,702	96,370	3,634	30,479

(a) Includes estimated value of rented premises, plant and machinery.

§ 10. Principal Factory Products.

The monthly factory production of certain commodities is shown in the monthly and quarterly publications of this Bureau and in the *Secondary Industries Bulletin*.

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1950 to 1952. A more complete list, together with values, where available, is published in the *Secondary Industries Bulletin*.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA.

Article.	Unit of Quantity.	1949-50.	1950-51.	1951-52.
Acid—				
Nitric	Ton	6,361	7,367	9,344
Sulphuric	"	612,245	639,856	650,239
Aerated and Carbonated Waters	'ooo gal.	50,190	55,000	57,092
Asbestos Cement Building Sheets	'ooo sq. yd.	18,345	21,247	23,321
Bacon and Ham	'ooo lb.	89,946	81,863	74,284
Bags—				
Leather, Fibre, etc.—				
Handbags—				
Leather	No.	1,060,057	903,333	820,879
Plastic	"	502,666	565,945	579,406
Other	"	88,462	128,498	156,841
Kitbags	"	109,246	(a)	(a)
School Bags	"	107,222	118,712	109,223
Suitcases	"	683,682	(b) 1,185,115	(b) 1,061,316
Trunks	"	4,690	4,032	4,976
All other	"	568,020	317,043	269,029
Textile, Hessian, etc.	Doz.	1,594,822	1,895,236	2,072,912
Baking Powder	lb.	929,326	951,839	638,253
Bath Heaters—				
Electric	No.	13,313	28,361	25,618
Gas	"	28,285	33,007	29,264
Solid Fuel and Oil	"	70,007	73,291	63,679
Bathing Suits	Doz.	97,731	125,334	115,726
Baths, C.I.P.E.	No.	59,364	87,600	76,848
Batteries, Wet Cell type	"	1,114,375	1,092,530	1,164,623
Beer (excluding Waste Beer)	'ooo gal.	154,189	170,635	182,506
Biscuits	'ooo lb.	117,904	130,116	149,947
Blankets	Pair	895,586	972,576	645,256
Boots, Shoes and Slippers—				
Boots	'ooo pairs	1,813	} 16,902	} 16,795
Shoes	"	13,597		
Sandals	"	1,789		
Slippers	"	8,582		
Bran (Wheat)	Ton (2,000 lb.)	273,336	302,222	318,108
Brassieres	Doz.	318,897	369,583	377,989
Bricks, Clay	'ooo	604,066	689,431	715,469
Brooms	Gross	19,079	21,757	20,379
Brushes	"	126,565	155,861	(c) 116,513
Butter	Ton	168,074	159,631	131,166
Candles	Cwt.	21,245	12,871	16,931
Cardigans, Sweaters, etc.	Doz.	604,632	719,141	684,673
Cement, Portland	Ton	1,167,189	1,234,626	1,237,461
Cheese	"	44,777	44,300	40,582
Cigarettes	'ooo lb.	10,341	10,679	11,749
Cleansing and Scouring Powders	Cwt.	62,380	75,132	83,426
Cloth—				
Cotton	'ooo sq. yd.	29,699	32,357	32,365
Woolen and Worsted(d)	"	38,028	38,454	29,790
Coke—				
Metallurgical	Ton	1,182,773	1,515,782	1,636,982
Other	"	1,094,982	1,111,854	1,203,602
Colours—				
Dry	Cwt.	57,776	81,413	64,301
Ground in Oil(e)	"	20,857	11,819	14,337
Confectionery—				
Chocolate	'ooo lb.	78,742	69,122	61,276
Other	"	70,744	73,429	78,735
Coppers—				
Electric	No.	29,995	47,759	41,045
Gas	"	36,861	43,394	37,889
Inserts (all types)	"	106,887	125,409	107,069
Cordials and Syrups	'ooo gal.	4,523	5,349	7,204
Corsets and Corsetslets	Doz.	109,814	122,248	131,305

(a) Included with Suitcases. (b) Includes Kitbags. (c) Excludes Industrial Metal and Bristle. (d) Includes Mixtures. (e) Excludes Zinc Oxide Paste.

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA—continued.

Article.	Unit of Quantity.	1949-50.	1950-51.	1951-52.
Cosmetic Creams and Lotions—				
Face Cream	Cwt.	4,136	5,166	3,934
Hand Lotion	"	2,251	1,884	2,089
Other Skin Creams	"	6,767	6,945	9,264
Custard Powder	'ooo lb.	7,135	6,673	5,598
Cycles, Assembled	No.	96,282	112,076	84,931
Dynamos—				
Alternators	"	273	334	508
Generators	"	9,461	14,134	16,256
Electricity	Mill. kwh	9,509	10,503	11,297
Enamels, Natural and Synthetic	'ooo gal.	2,236	1,889	2,093
Engines—				
Diesel, other than Marine	No.	4,598	4,200	4,225
Petrol, Marine	"	2,470	2,296	2,112
Other (a)	"	23,406	27,190	26,264
Essences, Flavouring—				
Domestic	Gal.	102,443	97,512	93,125
Industrial	"	179,802	278,807	258,651
Face Powder	Cwt.	2,723	3,268	2,848
Fans, Electric	No.	48,338	63,629	75,264
Fats, Edible—				
Dripping	Cwt.	295,744	369,069	280,799
Other	"	249,881	192,270	261,427
Fibrous Plaster Sheets	'ooo sq. yd.	13,258	15,184	16,470
Fish, Tinned	'ooo lb.	7,443	7,279	7,295
Floorboards—				
Australian Timber	'ooo super. ft.	71,613	66,997	76,147
Imported Timber	"	11,562	11,854	9,272
Flour, Wheaten (b)	Ton (2,000 lb.)	1,509,023	1,695,559	1,721,150
Flour, Self-raising	Cwt.	1,113,203	1,059,968	1,255,099
Fruit Juices	Gal.	1,573,689	1,846,047	1,134,466
Gas	Mill. cubic ft.	34,898	37,875	40,391
Gloves—				
Dress—				
Leather	Doz. pairs	35,684	28,855	15,393
Other	"	35,754	50,178	53,668
Work, All types	"	171,611	207,606	241,984
Golf Clubs	Doz.	15,378	14,041	11,371
Handkerchiefs—				
Men's	"	818,475	881,532	1,107,452
Women's	"	827,118	1,104,526	949,141
Hats and Caps	"	480,788	515,818	491,512
Hose, Rubber	'ooo lin. ft.	17,499	18,167	20,336
Ice	Ton	1,061,862	1,083,472	1,032,823
Ice Cream	'ooo gal.	15,786	17,385	17,306
Iron and Steel—				
Pig Iron	Ton	1,097,635	1,313,332	1,430,027
Ingot Steel	"	1,217,971	1,443,831	1,521,386
Blooms and Billets	"	1,103,784	1,297,260	1,361,342
Irons, Electric	No.	178,283	232,206	226,207
Jams and Preserves—				
Jams	'ooo lb.	134,577	125,288	108,173
Fruit, Preserved (c)	"	211,428	233,538	256,133
Vegetables, Preserved	"	73,534	79,510	100,446
Jelly Crystals	"	14,002	13,999	11,927
Kalsomine	"	9,334	8,860	7,363
Lacquer, Clear and Colours	Gal.	944,725	1,158,465	1,190,663
Lard	'ooo lb.	5,466	5,108	3,961
Lawn Mowers—				
Electric	No.	23,461	29,877	28,717
Petrol	"	1,070	696	818
Hand	"	88,425	118,437	97,142
Leather—				
Sole and Belting	'ooo lb.	38,650	38,107	38,636
Harness, Skirt, etc.	"	1,966	1,724	1,881
Upholstery	'ooo sq. ft.	10,318	10,980	10,095
Dressed from Hides	"	43,110	43,860	44,753
Dressed from Skins	"	29,319	26,675	25,279

(a) Excludes Motor Car, Motor Cycle, Tractor and Aero Engines.
Baking.

(c) Includes Canned Apple, all types.

(b) Includes Wheatmeal for

QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA—continued.

Article.	Unit of Quantity.	1949-50.	1950-51.	1951-52.
Lime—Quick	ton	103,889	115,857	123,876
Hydrated	"	26,871	36,908	37,422
Agricultural	"	70,415	75,315	87,942
Linseed Oil	'ooo gal.	3,658	4,456	4,516
Lubricating Oil	"	9,765	19,849	15,880
Malt, Barley	'ooo bus.	5,438	5,550	6,073
Margarine—				
Table	'ooo lb.	14,044	8,542	15,952
Other	"	54,261	49,653	56,168
Mattresses—Wire	No.	219,923	250,070	221,880
Inner Spring	"	206,850	289,856	280,084
Soft Filled, etc.	"	501,409	506,265	399,348
Meat, Tinned	'ooo lb.	127,684	130,015	161,868
Milk—				
Condensed	'ooo lb.	111,477	113,135	117,527
Concentrated (Whole)	"	38,685	41,106	37,503
Powdered (Whole) (a)	"	74,497	66,514	66,899
Mops, Floor	Gross	9,760	9,836	9,396
Motor Bodies	No.	67,196	92,718	98,470
Motor Spirit (Including Benzol)	'ooo gal.	81,329	92,544	96,108
Motors, Electric	No.	397,338	523,585	610,363
Nails	Ton	18,434	24,752	24,751
Neckties	Doz.	430,758	521,065	412,755
Newsprint	Ton	30,472	30,967	32,648
Oatmeal	Cwt.	432,667	419,677	363,398
Paint—Water	'ooo lb.	16,209	19,506	22,543
Oil	'ooo gal.	3,960	5,590	5,513
Peanut Butter	'ooo lb.	3,737	3,574	3,209
Perambulators	No.	107,420	118,824	111,357
Pickles	'ooo pints	9,427	10,864	9,748
Plywood, $\frac{1}{2}$ inch basis	'ooo sq. ft.	157,033	153,498	159,153
Pollard	Ton (2,000 lb.)	316,795	339,074	358,883
Pyjamas—				
Men's (Suits only)	Doz.	218,103	200,501	226,963
Women's (including Nightdresses)	"	275,617	320,784	300,401
Refrigerators—Commercial	No.	5,295	3,901	1,925
Domestic	"	162,341	203,928	192,812
Rice (Dressed)	Cwt.	707,652	773,068	457,682
Ropes and Cables (excluding Wire)	"	114,854	133,438	141,420
Sauce	'ooo pints	32,279	30,402	30,643
Sausage Casings	Cwt.	88,901	89,443	78,294
Semolina	"	275,013	131,865	217,709
Shirts	Doz.	904,787	1,074,294	1,161,548
Sink Heaters	No.	22,434	32,854	33,001
Soap—				
Household	Cwt.	599,422	686,958	641,274
Flakes and Chips (b)	"	60,250	86,616	67,666
Industrial	"	79,927	118,078	88,676
Sand	"	44,981	40,713	41,006
Toilet and Hand	"	267,793	292,546	316,050
Shaving, including Sticks and Creams	"	8,995	8,845	7,039
Soft	"	19,561	23,061	18,858
Liquid	"	84,503	100,860	116,608
Shampoo	"	9,173	7,992	7,810
Soap Extracts and Powders	"	697,848	754,758	929,310
Socks and Stockings—				
Men's	Doz. pr.	1,192,065	1,536,318	1,461,517
Women's	"	1,708,647	1,850,594	1,867,261
Children's	"	656,936	563,093	461,505
Soup (Tinned)	'ooo pints	32,611	33,841	38,877
Spades and Shovels	Doz.	33,394	35,701	31,257
Starch—Edible	Cwt.	279,350	306,211	329,947
Indible	"	87,752	91,416	137,565
Steel, Structural, Fabricated	Ton	74,909	98,211	119,205
Stoves, Ovens and Ranges—				
Domestic Cooking—				
Solid Fuel	No.	61,857	75,010	71,695
Gas	"	46,709	55,357	51,007
Electric(c)	"	103,048	116,654	101,769
Sugar—Raw	Ton	937,119	921,102	745,401
Refined	"	422,675	451,170	493,486
Sulphate of Ammonia	"	48,736	57,893	63,815
Superphosphate	"	1,483,458	1,547,823	1,597,080

(a) Includes Malted Milk and Infants' and Invalids' Foods. (b) Includes industrial flakes and chips. (c) Includes Stovettes, Cookers, etc.

**QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES:
AUSTRALIA—continued.**

Article.	Unit of Quantity.	1949-50.	1950-51.	1951-52.
Talcum Powder	Cwt.	25,112	23,425	20,944
Tallow—	"			
Inedible	"	(b) 742,425	(b) 673,181	833,236
Edible	"	(c) 575,236	(c) 483,258	232,024
Tennis Racquet Frames	Doz.	19,576	22,727	14,948
Tiles, Roofing—				
Cement	'ooo	40,638	50,764	66,483
Terracotta	"	45,415	47,012	48,859
Timber—				
From Native Logs—				
Hardwood	'ooo super. ft.	965,142	1,068,096	1,166,114
Softwood	"	257,918	193,244	226,052
From Imported Logs—				
Hardwood	"	} 20,449	18,920	13,466
Softwood	"			
Toasters, Electric (Domestic)	No.	175,054	154,574	198,599
Tobacco	'ooo lb.	20,168	20,967	21,615
Tomato Juice	Gal.	741,995	368,181	1,003,304
Towels	Doz.	418,283	516,493	506,965
Transformers and Converters—				
Above 20 k.v.a.	No.	2,560	1,940	3,039
Below 20 k.v.a.	"	226,984	289,353	235,612
Twine (all types)	Cwt.	85,570	98,578	110,557
Tyres, Pneumatic—				
Motor Car and Motor Cycle	No.	1,339,072	1,587,201	1,874,857
Truck and Omnibus	"	535,262	557,408	587,806
All Other (excl. Bicycle)	"	110,579	123,264	127,461
Umbrellas	"	262,655	362,820	367,306
Underwear	'ooo doz.	3,531	3,847	3,681
Vacuum Cleaners (Domestic)	No.	70,604	70,096	64,065
Varnishes	'ooo gal.	3,266	3,634	3,575
Washing Machines, Household, Electric	No.	31,638	72,627	99,429
Weatherboards—				
Australian Timber	'ooo super. ft.	21,135	20,283	20,921
Imported Timber	"	2,847	6,600	4,680
Wheatmeal (a)	Ton (2,000 lb.)	55,825	62,018	90,255
Wheelbarrows (Metal)	No.	71,603	71,996	67,573
Wireless—				
Cabinets—				
Wood	No.	75,895	86,352	78,186
Other	"	260,719	349,914	288,296
Receiving Sets	"	343,323	459,436	358,379
Wool Scoured—				
For Sale	'ooo lb.	50,559	46,673	38,843
For use in own works	"	40,443	36,259	30,116
On Commission	"	81,977	69,451	51,839
Wool Tops	"	31,475	29,786	24,815
Yarn (d)				
Cotton	"	30,233	35,261	34,461
Woollen	"	22,858	21,726	17,002
Worsted	"	26,129	24,839	19,500
Zinc Oxide	Cwt.	239,462	238,690	223,448
Zinc Oxide Paste	"	19,101	22,081	7,225

(a) Excludes Wheatmeal for Baking Included with Flour. (b) Described as "Raw" Tallow.
(c) Described as "Refined" Tallow. (d) Including mixtures predominantly of the fibre mentioned.

§ 11. Individual Industries.

1. **General.**—Particulars in pages 858-84, §§ 2-9 afford a general view of the magnitude of industries in the sixteen groups adopted by the Conference of Statisticians in 1930. While it is not possible, within the limits of this work, to give a detailed account of each industry, particular industries dealt with hereunder are of special importance because of the employment which they provide for labour and capital or for other features of special interest. Where there are only one or two establishments in a particular industry in the State or the Commonwealth, details of activities are not published, but are combined with some other factory group so that operations of individual concerns will not be disclosed.

The statistics in the following tables should be read in the light of the following definitions.

Factory. A factory is taken to be a manufacturing establishment in which four or more persons are employed or in which power, other than manual, is used.

Average Number of Persons Employed. All persons employed in the manufacturing activities of a factory are counted as factory employees, including working proprietors and "out-workers". The average number of persons employed means, in general, the average number over the whole year and not the average over the period worked.

Value of Materials Used. This item includes the value, in the usual sense, of the materials used, stores used, containers, tools replaced, and materials used in repairs to plant.

Value of Fuel, etc., Used. This item includes also the cost of power and light used, of lubricants and of water.

Value of Output. The amounts given under this heading represent the selling value at the factory of goods made or processed during the year, including by-products, also the value of other work done.

Value of Production. The value of production is obtained by deducting "Value of materials used" and "Value of fuel used", as defined above, from the "Value of output". This method of valuing factory production has been adopted by the Statistical offices throughout Australia.

Rated Horse-power of Engines Used. Statistics of power used in factories other than Central Electric Stations relate to the "rated horse-power" of engines ordinarily in use.

For more detailed definitions see § 1, par. 6 of this chapter, page 855.

Details of some of the principal articles produced in factories in Australia during the years 1949-50 to 1951-52 are shown in the table in the preceding pages (§ 10).

2. **Portland Cement and Cement Goods.**—The manufacture of Portland Cement and Cement Goods is an important industry included in Class I. Particulars for the three industries under this general heading are shown for 1951-52 and for a selected number of years in the following table.

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS.

AUSTRALIA, 1951-52.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories	11	14	534	559
Number of persons employed	2,432	2,289	5,130	9,851
Salaries and wages paid	£ 1,662,476	1,677,254	3,129,637	6,469,367
Value of power, fuel, etc., used	£ 2,186,434	105,897	125,977	2,418,308
Value of materials used	£ 3,273,027	3,463,500	5,961,533	12,698,060
Value of production	£ 3,059,958	2,611,308	5,497,330	11,168,596
Total value of output	£ 8,519,419	6,180,705	11,584,840	26,284,964
Value of land and buildings	£ 1,293,486	784,996	1,387,605	3,466,087
Value of plant and machinery	£ 3,859,406	903,324	1,691,904	6,454,634
Horse-power of engines ordinarily in use h.p.	59,983	8,335	13,373	81,691

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	132	152	381	450	526	559
Number of persons employed	3,932	4,582	7,301	8,033	9,192	9,851
Salaries and wages paid	£'000 897	1,334	3,036	3,673	4,860	6,469
Value of power, fuel, etc., used	£'000 562	593	1,192	1,444	1,794	2,418
Value of materials used	£'000 1,542	2,498	5,372	6,671	9,025	12,698
Value of production	£'000 2,385	2,577	5,394	6,540	8,635	11,169
Total value of output	£'000 4,489	5,668	11,958	14,655	19,454	26,285
Value of land and buildings	£'000 1,350	1,464	2,087	2,283	3,250	3,466
Value of plant and machinery	£'000 2,516	2,005	3,689	3,970	4,691	6,455
Horse-power of engines ordinarily in use	h.p. 39,617	42,578	69,975	71,000	75,584	81,691

3. **Chemicals, Drugs and Medicines.**—In 1945-46 the classification of factories was amended to provide for the separate tabulation of factories engaged in the production of Industrial and Heavy Chemicals and Acids and those engaged in producing Pharmaceutical and Toilet Preparations, which previously had been combined. Details for each of these industries are given in the next two tables for 1951-52 with comparisons with previous years. However, it should be noted that in order to avoid the publication of confidential information, particulars relating to Industrial and Heavy Chemicals include details for the Explosives industry.

INDUSTRIAL AND HEAVY CHEMICALS AND ACIDS (INCLUDING EXPLOSIVES).

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	112	74	17	8	7	1	219
Number of persons employed ..	4,384	5,802	246	804	(a)	(a)	11,504
Salaries and wages paid .. £	3,529,840	4,119,656	165,357	536,142	(a)	(a)	8,539,038
Value of power, fuel, etc., used .. £	1,022,522	627,138	35,339	379,979	(a)	(a)	2,109,841
Value of materials used .. £	11,611,813	8,309,309	204,911	654,812	(a)	(a)	21,097,165
Value of production .. £	7,711,717	7,664,095	300,089	1,221,221	(a)	(a)	17,179,877
Total value of output .. £	20,346,052	16,600,542	540,339	2,256,012	(a)	(a)	40,886,883
Value of land and buildings .. £	3,299,833	4,611,287	84,008	703,318	(a)	(a)	8,828,354
Value of plant and machinery .. £	4,675,326	5,740,642	146,498	1,651,644	(a)	(a)	12,507,297
Horse-power of engines ordinarily in use .. h.p.	29,073	39,886	1,056	4,421	(a)	(a)	76,890

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	165	192	199	207	219
Number of persons employed ..	10,228	9,137	9,749	10,615	11,504
Salaries and wages paid .. £'000	3,450	4,143	4,890	6,243	8,539
Value of power, fuel, etc., used .. £'000	618	908	1,064	1,546	2,110
Value of materials used .. £'000	6,007	9,027	10,522	16,852	21,097
Value of production .. £'000	6,627	7,887	9,075	13,373	17,180
Total value of output .. £'000	13,252	17,822	20,661	31,776	40,887
Value of land and buildings .. £'000	11,697	10,199	10,696	7,770	8,828
Value of plant and machinery .. £'000	10,964	7,511	9,708	11,043	12,507
Horse-power of engines ordinarily in use h.p.	69,399	63,946	72,183	74,613	76,890

(a) Not available for publication ; included with total for Australia.

PHARMACEUTICAL AND TOILET PREPARATIONS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	127	56	4	12	5	3	208
Number of persons employed ..	3,107	2,282	(a)	541	109	(a)	6,149
Salaries and wages paid .. £	1,670,876	1,391,089	(a)	272,752	52,137	(a)	3,432,827
Value of power, fuel, etc., used .. £	50,868	73,644	(a)	21,962	2,885	(a)	150,568
Value of materials used .. £	5,330,342	3,419,518	(a)	902,755	107,196	(a)	9,876,947
Value of production .. £	6,782,466	2,871,485	(a)	368,624	137,748	(a)	10,313,647
Total value of output .. £	12,163,676	6,364,647	(a)	1,293,347	247,829	(a)	20,341,162
Value of land and buildings .. £	1,378,739	1,722,409	(a)	158,212	33,440	(a)	3,331,992
Value of plant and machinery .. £	523,628	677,312	(a)	63,355	13,312	(a)	1,285,637
Horse-power of engines ordinarily in use .. h.p.	3,845	5,195	(a)	1,326	162	(a)	10,618

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	215	216	205	201	208
Number of persons employed ..	5,514	5,474	5,157	5,538	6,149
Salaries and wages paid .. £'000	1,699	1,801	1,840	2,423	3,433
Value of power, fuel, etc., used .. £'000	57	69	73	91	150
Value of materials used .. £'000	5,402	6,414	6,371	8,291	9,877
Value of production .. £'000	4,790	5,851	6,566	8,985	10,314
Total value of output .. £'000	10,249	12,334	13,010	17,367	20,341
Value of land and buildings .. £'000	1,534	1,718	1,706	1,963	3,332
Value of plant and machinery .. £'000	598	755	767	823	1,286
Horse-power of engines ordinarily in use h.p.	6,324	7,660	7,816	8,357	10,618

(a) Not available for publication ; included with total for Australia.

4. White Lead, Paint and Varnish.—The following table shows particulars of this industry for each State during 1951-52 and for Australia for a series of years.

WHITE LEAD, PAINTS AND VARNISH.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	69	51	14	14	7	3	158
Number of persons employed	3,044	1,266	283	459	(a)	(a)	5,141
Salaries and wages paid	£ 2,030,103	835,844	168,460	290,632	(a)	(a)	3,377,600
Value of power, fuel, etc., used	£ 223,334	53,271	8,264	15,900	(a)	(a)	303,438
Value of materials used	£ 9,117,263	4,339,351	981,569	1,848,573	(a)	(a)	16,622,783
Value of production	£ 4,489,551	2,300,186	368,128	767,978	(a)	(a)	8,112,103
Total value of output	£ 13,830,148	6,692,808	1,357,961	2,632,453	(a)	(a)	25,038,324
Value of land and buildings	£ 1,710,802	856,835	84,589	484,579	(a)	(a)	3,212,761
Value of plant and machinery	£ 891,265	643,905	58,678	210,677	(a)	(a)	1,841,507
Horse-power of engines ordinarily in use	h.p. 13,500	5,419	553	1,458	(a)	(a)	21,412

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	102	122	152	149	154	158
Number of persons employed	2,271	3,197	4,240	4,526	4,985	5,141
Salaries and wages paid	£'000 535	1,005	1,797	2,097	2,784	3,378
Value of power, fuel, etc., used	£'000 45	81	127	171	229	303
Value of materials used	£'000 2,275	4,775	9,048	10,903	14,157	16,623
Value of production	£'000 1,585	2,448	4,376	5,296	7,010	8,112
Total value of output	£'000 3,905	7,304	13,551	16,370	21,396	24,038
Value of land and buildings	£'000 761	973	1,595	2,038	2,831	3,213
Value of plant and machinery	£'000 324	524	989	1,345	1,548	1,842
Horse-power of engines ordinarily in use	h.p. 7,696	12,252	15,829	17,681	19,875	21,412

(a) Not available for publication; figures are included in the total for Australia.

5. Soap and Candle Factories.—The following table shows particulars of factories in the Soap and Candle industry in each State for 1951-52 and for Australia for a series of years :—

SOAP AND CANDLES.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	49	18	10	5	3	3	88
Number of persons employed	2,042	785	334	189	(a)	(a)	3,440
Salaries and wages paid	£ 1,625,365	589,473	179,953	111,897	(a)	(a)	2,554,514
Value of power, fuel, etc., used	£ 190,920	226,591	16,320	13,082	(a)	(a)	452,831
Value of materials used	£ 4,673,181	2,781,813	510,052	224,727	(a)	(a)	8,383,547
Value of production	£ 2,978,084	1,141,474	297,552	121,639	(a)	(a)	4,638,544
Total value of output	£ 7,842,185	4,149,878	823,924	359,448	(a)	(a)	13,474,922
Value of land and buildings	£ 637,820	442,433	85,678	83,113	(a)	(a)	1,300,609
Value of plant and machinery	£ 737,473	773,832	80,106	77,181	(a)	(a)	1,593,400
Horse-power of engines ordinarily in use	h.p. 4,596	2,943	539	514	(a)	(a)	8,769

(a) Not available for publication; figures are included in total for Australia.

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	65	73	91	90	93	88
Number of persons employed	2,620	3,020	3,578	3,646	3,502	3,440
Salaries and wages paid	£'000 501	860	1,461	1,605	1,974	2,555
Value of power, fuel, etc., used	£'000 76	123	259	285	353	453
Value of materials used	£'000 1,568	3,051	5,277	5,499	6,330	8,384
Value of production	£'000 1,886	2,628	3,816	4,442	4,609	4,638
Total value of output	£'000 3,330	5,802	9,352	10,226	11,292	13,475
Value of land and buildings	£'000 666	676	715	1,115	1,200	1,301
Value of plant and machinery	£'000 577	373	518	1,201	1,341	1,693
Horse-power of engines ordinarily in use	h.p. 5,267	6,630	7,569	7,515	7,447	8,769
Materials used—						
Tallow	cwt. 535,511	834,057	972,474	1,008,257	1,123,895	1,134,235
Alkali for Soap (a)	cwt. 194,869	281,313	329,974	326,648	343,378	403,241
Coconut oil—refined and unrefined	cwt. 138,954	86,576	100,610	78,893	91,404	113,203
Articles produced—						
Soap (b)	cwt. 978,113	1,065,439	1,149,868	1,174,605	1,265,660	1,304,987
Soap Extracts and Powders	cwt. 191,232	469,865	609,631	697,848	754,758	929,310
Candles made	cwt. 28,649	23,844	15,692	21,245	12,871	16,931

(a) Includes Soda Ash and Candle factories.

(b) Soap made in all factories including those not classified as "Soap

6. Chemical Fertilizers.—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1951-52 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XX.—Agricultural Production.

CHEMICAL FERTILIZERS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories . . .	13	9	8	7	5	7	49
Number of persons employed . .	900	1,411	248	831	848	87	4,325
Salaries and wages paid . . . £	727,990	1,122,106	155,902	601,183	669,451	84,791	3,361,423
Value of power, fuel, etc., used . £	267,751	151,095	17,713	78,621	73,795	1,913	588,888
Value of materials used . . . £	2,830,675	7,096,202	1,566,243	3,055,074	5,170,537	578,028	20,296,759
Value of production £	1,194,839	2,072,587	335,444	1,019,579	1,222,419	153,565	5,998,433
Total value of output £	4,293,265	9,319,884	1,917,400	4,153,274	6,466,751	733,506	26,884,080
Value of land and buildings . . £	2,056,790	746,330	151,341	388,102	615,446	285,579	4,243,588
Value of plant and machinery . £	2,375,069	1,579,197	176,918	767,096	736,916	169,133	5,804,329
Horse-power of engines ordinarily in use . . . h.p.	12,119	12,887	1,826	6,513	17,085	549	50,979

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	36	38	50	51	49	49
Number of persons employed . .	2,340	3,127	3,894	3,889	4,012	4,325
Salaries and wages paid . . . £'000	601	1,091	1,847	2,051	2,540	3,361
Value of power, fuel, etc., used . £'000	114	181	372	407	440	589
Value of materials used . . . £'000	3,231	7,899	11,910	12,737	14,014	20,297
Value of production £'000	1,600	1,967	3,400	3,998	4,312	5,998
Total value of output £'000	4,945	10,047	15,682	17,142	18,766	26,884
Value of land and buildings . . £'000	1,449	1,572	3,511	3,633	3,900	4,244
Value of plant and machinery . £'000	2,353	2,409	4,782	4,849	5,418	5,804
Horse-power of engines ordinarily in use . . . h.p.	18,165	22,574	29,164	30,855	36,274	50,979

7. Iron and Steel Works and Engineering.—(i) *General.* In 1945-46 the classification of factories was amended to provide for the tabulation in four separate groups of those industries previously included under Iron and Steel and Engineering. The first group (Smelting, Converting, Refining and Rolling of Iron and Steel) covers blast furnaces, steel works and rolling mills. The second group, Foundries (Ferrous), covers those engaged in the founding of iron and steel. The third group (Plant, Equipment and Machinery including Machine Tools) covers those industries engaged in the production of boilers, engines, machines and machinery, machine tools, structural steel fabrications, steel furniture, etc. The fourth group (Other Engineering) includes jobbing and general engineers, not elsewhere included.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table particulars are shown for 1951-52 for each State and for Australia in selected years for the group Smelting, Converting, Refining and Rolling of Iron and Steel.

SMELTING, CONVERTING, REFINING AND ROLLING OF IRON AND STEEL.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	17	9	..	3	1	..	30
Number of persons employed . .	12,861	983	..	(a)	(a)	..	14,192
Salaries and wages paid . . . £	10,783,823	836,140	..	(a)	(a)	..	11,993,537
Value of power, fuel, etc., used . £	9,461,308	199,512	..	(a)	(a)	..	11,183,868
Value of materials used . . . £	52,206,139	609,440	..	(a)	(a)	..	53,347,321
Value of production £	18,438,726	1,209,576	..	(a)	(a)	..	20,317,181
Total value of output £	80,106,173	2,108,528	..	(a)	(a)	..	84,839,310
Value of land and buildings . . £	3,836,079	172,178	..	(a)	(a)	..	4,064,186
Value of plant and machinery . £	14,518,866	262,263	..	(a)	(a)	..	14,991,981
Horse-power of engines ordinarily in use . . . h.p.	209,392	6,932	..	(a)	(a)	..	218,857

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	27	32	30	30	30
Number of persons employed . .	10,413	12,335	11,509	13,419	14,192
Salaries and wages paid . . . £'000	4,164	6,583	6,972	9,245	11,904
Value of power, fuel, etc., used . £'000	2,777	4,568	5,516	7,860	11,186
Value of materials used . . . £'000	19,134	26,750	29,747	40,580	53,347
Value of production £'000	7,393	11,950	12,784	16,594	20,317
Total value of output £'000	29,304	43,268	48,047	65,070	84,839
Value of land and buildings . . £'000	2,197	2,697	2,812	3,259	4,064
Value of plant and machinery . £'000	5,669	6,375	7,185	9,101	14,992
Horse-power of engines ordinarily in use h.p.	198,317	202,332	213,529	216,617	218,857

(a) Not available for publication; figures are included in the total for Australia.

Particulars of the production of pig-iron and steel will be found in Chapter XVIII.—Mineral Industry.

(iii) *Foundries (Ferrous)*. Particulars covering those industries classified as founding of iron and steel are shown for each State for 1951-52 and for Australia in selected years in the following table :—

FOUNDRIES—FERROUS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	91	210	22	23	19	..	365
Number of persons employed ..	2,964	2,574	616	594	501	..	7,243
Salaries and wages paid .. £	2,299,068	1,813,212	386,936	422,595	330,319	..	5,252,130
Value of power, fuel, etc., used .. £	251,440	229,396	30,167	57,909	64,187	..	633,099
Value of materials used .. £	1,817,849	1,544,384	325,710	394,558	248,001	..	4,330,502
Value of production .. £	3,207,320	2,712,754	637,655	593,247	471,081	..	7,622,027
Total value of output .. £	5,276,609	4,486,504	993,532	1,045,714	783,269	..	12,585,628
Value of land and buildings .. £	5,679,089	745,941	130,268	102,621	78,290	..	1,736,209
Value of plant and machinery .. £	601,803	574,468	163,488	153,118	81,078	..	1,373,955
Horse-power of engines ordinarily in use .. h.p.	10,529	7,637	2,193	2,271	2,477	..	25,107

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	312	374	353	365
Number of persons employed	5,344	6,900	6,346	7,198
Salaries and wages paid .. £'000	..	1,612	2,986	2,985	4,134
Value of power, fuel, etc., used .. £'000	..	161	295	341	473
Value of materials used .. £'000	..	1,210	2,142	2,116	3,262
Value of production .. £'000	..	2,341	4,041	4,648	6,024
Total value of output .. £'000	..	3,712	6,478	7,105	9,761
Value of land and buildings .. £'000	..	988	1,237	1,207	1,570
Value of plant and machinery .. £'000	..	619	1,047	1,063	1,337
Horse-power of engines ordinarily in use .. h.p.	..	13,381	19,600	19,306	23,976

(iv) *Plant, Equipment and Machinery (including Machine Tools)*. The next table shows particulars for this group for each State during 1951-52 and for Australia for the years 1945-46 and 1948-49 to 1951-52 :—

PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	810	579	100	129	66	..	1,684
Number of persons employed ..	28,516	20,138	5,410	7,878	2,124	..	64,066
Salaries and wages paid .. £	21,226,545	14,200,350	3,243,590	5,471,627	1,291,740	..	45,433,852
Value of power, fuel, etc., used .. £	888,303	563,572	123,274	297,537	64,013	..	1,936,699
Value of materials used .. £	33,220,166	20,692,356	3,990,048	9,311,387	1,728,962	..	68,942,919
Value of production .. £	34,797,918	22,497,435	6,648,383	7,876,337	1,989,601	..	71,809,874
Total value of output .. £	68,006,387	43,753,368	8,761,705	17,485,461	3,782,576	..	142,689,492
Value of land and buildings .. £	8,898,141	6,934,872	912,896	1,820,550	816,549	..	19,383,008
Value of plant and machinery .. £	8,306,739	6,340,525	942,876	1,588,225	691,704	..	17,870,069
Horse-power of engines ordinarily in use .. h.p.	91,628	62,693	13,322	21,448	7,573	..	196,664

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	1,038	1,423	1,498	1,684
Number of persons employed	46,123	54,268	56,344	60,990
Salaries and wages paid .. £'000	..	14,259	23,096	20,495	35,215
Value of power, fuel, etc., used .. £'000	..	605	906	1,073	1,434
Value of materials used .. £'000	..	16,155	30,109	38,457	53,040
Value of production .. £'000	..	21,044	34,624	40,958	55,934
Total value of output .. £'000	..	38,104	65,639	80,490	110,403
Value of land and buildings .. £'000	..	7,227	10,428	12,680	15,904
Value of plant and machinery .. £'000	..	7,046	10,354	12,571	14,968
Horse-power of engines ordinarily in use .. h.p.	..	101,810	141,033	156,402	205,736

(v) *Other Engineering*. Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1951-52 and for selected years for Australia in the following table.

OTHER ENGINEERING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	713	697	105	133	122	83	1,853
Number of persons employed ..	6,001	8,166	1,345	2,766	785	1,335	20,398
Salaries and wages paid .. £	3,868,912	5,457,147	729,128	1,768,319	417,574	883,126	13,124,206
Value of power, fuel, etc., used .. £	135,382	149,778	19,554	60,354	22,787	25,537	413,392
Value of materials used .. £	3,922,838	6,445,952	877,234	1,581,695	535,838	904,314	14,267,871
Value of production .. £	6,384,053	8,828,743	1,048,119	2,430,700	688,644	1,300,846	20,681,105
Total value of output .. £	10,442,273	15,424,473	1,944,907	4,072,749	1,247,269	2,230,697	35,362,368
Value of land and buildings .. £	2,329,717	2,936,721	403,168	565,767	255,229	530,505	7,021,107
Value of plant and machinery .. £	1,531,054	2,524,592	282,675	591,286	164,907	339,738	5,434,252
Horse-power of engines ordinarily in use .. h.p.	17,173	23,500	3,146	6,735	2,083	3,760	56,397

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	963	1,358	1,495	1,627	1,853
Number of persons employed ..	13,112	14,844	16,798	18,487	20,398
Salaries and wages paid .. £'000	3,634	5,741	6,977	9,495	13,124
Value of power, fuel, etc., used .. £'000	162	193	241	291	413
Value of materials used .. £'000	3,599	5,217	6,637	9,855	14,268
Value of production .. £'000	5,432	8,950	11,086	15,323	20,681
Total value of output .. £'000	9,193	14,360	17,964	23,469	35,362
Value of land and buildings .. £'000	2,369	5,128	5,191	5,089	7,021
Value of plant and machinery .. £'000	2,091	3,128	3,515	4,098	5,434
Horse-power of engines ordinarily in use .. h.p.	26,095	41,577	41,668	47,396	56,397

8. Extracting and Refining of Non-ferrous Metals ; Alloys.—The following table shows particulars of establishments engaged in metal extraction and ore reduction including secondary recovery of metals, but excluding blast furnaces engaged in production of pig iron from iron ore, for each State during 1951-52 and for Australia for a series of years.

EXTRACTING AND REFINING OF NON-FERROUS METALS ; ALLOYS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Australia.
Number of factories ..	29	20	12	3	..	3	67
Number of persons employed ..	2,113	213	1,082	(b)	..	(b)	7,812
Salaries and wages paid .. £	2,011,569	164,876	774,470	(b)	..	(b)	6,515,468
Value of power, fuel, etc., used .. £	1,069,374	25,875	474,088	(b)	..	(b)	3,129,968
Value of materials used .. £	29,805,850	1,958,140	5,716,965	(b)	..	(b)	71,096,644
Value of production .. £	6,368,418	376,064	9,307,678	(b)	..	(b)	27,495,996
Total value of output .. £	37,243,642	2,360,079	15,498,731	(b)	..	(b)	101,722,608
Value of land and buildings .. £	613,909	103,931	432,389	(b)	..	(b)	2,075,048
Value of plant and machinery .. £	1,810,856	50,928	1,328,749	(b)	..	(b)	4,935,915
Horse-power of engines ordinarily in use .. h.p.	23,238	855	14,742	(b)	..	(b)	81,567

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	42	49	56	62	65	67
Number of persons employed ..	5,532	6,060	7,040	7,394	7,664	7,812
Salaries and wages paid .. £'000	1,613	2,280	3,919	4,324	5,268	6,515
Value of power, fuel, etc., used .. £'000	598	1,058	1,712	1,908	2,323	3,130
Value of materials used .. £'000	16,844	18,042	41,488	38,993	59,735	71,097
Value of production .. £'000	3,892	5,527	16,032	15,718	20,435	27,496
Total value of output .. £'000	21,334	24,627	59,232	56,619	82,493	101,723
Value of land and buildings .. £'000	1,177	1,385	1,649	1,861	2,017	2,075
Value of plant and machinery .. £'000	3,526	3,795	4,267	4,605	4,723	4,936
Horse-power of engines ordinarily in use .. h.p.	54,450	57,345	77,437	79,320	88,410	81,567

(a) In Western Australia the majority of the plants are worked at the mines and are therefore not included. (b) Not available for publication ; figures are included in the total for Australia.

9. Electrical Machinery, Cables and Apparatus.—The following table shows particulars of this industry for each State during 1951-52 and for Australia for a series of years.

ELECTRICAL MACHINERY, CABLES AND APPARATUS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	447	291	52	64	59	15	928
Number of persons employed ..	24,332	8,467	1,579	1,110	826	158	36,772
Salaries and wages paid .. £	16,513,544	5,449,264	951,190	807,957	461,281	93,485	24,276,721
Value of power, fuel, etc., used £	725,412	185,347	21,172	25,911	14,746	3,190	975,778
Value of materials used .. £	27,408,741	9,809,944	1,629,503	1,009,000	699,025	148,512	40,704,725
Value of production .. £	26,417,057	8,357,610	1,402,554	1,152,014	767,627	146,894	38,243,756
Total value of output .. £	54,551,210	18,352,901	3,053,229	2,186,925	1,481,398	298,596	79,924,259
Value of land and buildings .. £	6,190,052	2,487,929	317,422	313,601	230,130	92,153	9,631,287
Value of plant and machinery .. £	4,141,349	2,109,114	364,821	162,915	85,660	93,441	6,957,300
Horse-power of engines ordinarily in use .. h.p.	42,105	13,013	4,980	1,439	1,053	224	62,814

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	360	551	791	811	867	928
Number of persons employed ..	10,666	22,825	29,961	30,956	35,494	36,772
Salaries and wages paid .. £'000	2,031	6,301	11,703	13,563	18,816	24,277
Value of power, fuel, etc., used .. £'000	105	209	366	453	637	976
Value of materials used .. £'000	3,195	8,085	16,510	21,149	31,680	40,704
Value of production .. £'000	3,655	9,496	17,834	21,154	30,867	38,244
Total value of output .. £'000	6,955	17,790	34,710	42,756	63,184	79,924
Value of land and buildings .. £'000	1,627	3,507	5,382	6,293	8,224	9,631
Value of plant and machinery .. £'000	897	2,084	3,664	4,127	5,719	6,957
Horse-power of engines ordinarily in use .. h.p.	12,043	26,244	39,382	43,995	55,854	62,814

10. Railway and Tramway Workshops.—The railway and tramway workshops, which form an important item in Class IV., are chiefly owned by State Governments and Local Authorities. Workshops (thirteen in 1951-52) controlled by non-public bodies are not included in the figures below :—

TRAMCARS AND RAILWAY ROLLING STOCK.(a)

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	47	24	11	14	23	7	126
Number of persons employed ..	17,153	6,683	6,083	4,358	3,359	863	38,499
Salaries and wages paid .. £	12,556,567	4,404,563	3,735,575	3,142,677	1,916,004	525,518	26,280,904
Value of power, fuel, etc., used .. £	281,747	165,778	91,361	160,187	96,283	16,819	812,175
Value of materials used .. £	6,209,746	2,993,675	1,866,891	2,101,038	1,758,041	221,717	15,151,108
Value of production .. £	14,794,822	5,570,782	4,278,750	3,799,652	2,329,573	601,267	31,374,846
Total value of output .. £	21,286,315	8,730,235	6,237,002	6,060,877	4,183,897	839,803	47,338,129
Value of land and buildings .. £	4,798,542	1,487,262	565,639	1,196,291	231,261	507,123	8,786,118
Value of plant and machinery .. £	6,326,141	570,298	589,854	1,240,173	384,572	106,482	9,217,520
Horse-power of engines ordinarily in use .. h.p.	39,754	15,574	14,416	16,938	7,764	3,139	97,585

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	117	115	128	127	126	126
Number of persons employed ..	27,310	36,962	37,993	38,432	38,253	38,499
Salaries and wages paid .. £'000	6,721	11,657	16,357	18,057	20,914	26,281
Value of power, fuel, etc., used .. £'000	226	372	450	500	617	812
Value of materials used .. £'000	4,976	8,143	9,533	11,133	12,165	15,151
Value of production .. £'000	8,021	13,794	19,265	21,643	25,738	31,375
Total value of output .. £'000	13,223	22,309	29,248	33,276	38,520	47,338
Value of land and buildings .. £'000	6,737	6,960	7,773	8,051	7,983	8,786
Value of plant and machinery .. £'000	5,390	6,034	7,206	7,925	8,277	9,218
Horse-power of engines ordinarily in use .. h.p.	53,671	75,532	87,391	89,864	93,567	97,585

(a) Government and Local Authority only.

A railway workshop in the Northern Territory is chiefly engaged in making repairs to rolling stock, etc., no new goods being manufactured. Particulars of this establishment are not included in any of the tables in this chapter.

11. Motor Vehicles.—The industries catering for the motor trade are included in Class IV., Industrial Metals, Machines and Conveyances. In the table below a summary is given of the principal statistics for 1951-52 for each branch of industry associated with the motor trade of Australia.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.

1951-52.

Items.	Construction and Assembly.	Motor Bodies.	Repairs.	Motor Accessories.	Total.
Number of factories	81	736	5,618	152	6,587
Number of persons employed ..	14,819	19,074	42,098	6,132	82,123
Salaries and wages paid .. £	11,598,570	13,411,904	22,543,248	4,245,101	51,798,823
Value of power, fuel, etc., used ..	406,951	352,792	619,974	230,305	1,610,022
Value of materials used .. £	18,042,290	23,375,526	24,568,838	4,980,530	70,967,184
Value of production ..	18,677,152	18,960,957	34,449,661	6,719,883	78,807,653
Total value of output ..	37,126,393	42,689,275	59,638,473	11,930,718	151,384,859
Value of land and buildings .. £	4,986,082	4,847,984	19,181,948	1,783,159	30,799,173
Value of plant and machinery ..	2,939,923	3,114,013	6,592,869	2,335,669	14,982,474
Horse-power of engines ordinarily in use, h.p.	24,150	28,823	42,212	21,043	116,228

In the next table similar details are shown on a State basis for 1951-52 and for Australia for selected years for these branches combined.

MOTOR VEHICLES : CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas. (a)	Australia.
Number of factories ..	2,571	1,810	930	462	576	238	6,587
Number of persons employed ..	25,547	28,266	8,724	12,571	5,235	1,780	82,123
Salaries and wages paid .. £	15,611,708	19,103,860	4,372,660	8,792,584	2,962,555	955,456	51,798,823
Value of power, fuel, etc., used ..	500,280	572,760	136,446	276,522	108,139	15,875	1,610,022
Value of materials used .. £	20,650,551	25,367,642	4,338,681	15,149,363	4,536,863	924,084	70,967,184
Value of production ..	23,637,007	28,305,668	8,439,161	12,421,705	4,496,591	1,507,521	78,807,653
Total value of output ..	44,787,838	54,246,070	12,914,288	27,847,590	9,441,593	2,447,480	151,384,859
Value of land and buildings .. £	12,602,035	9,828,300	2,579,992	2,845,456	1,975,860	967,530	30,799,173
Value of plant and machinery ..	4,884,510	5,526,899	1,122,043	2,286,627	909,644	252,751	14,982,474
Horse-power of engines ordinarily in use .. h.p.	39,342	42,104	9,077	25,224	8,455	2,026	126,228

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	3,592	5,009	5,330	5,730	6,587
Number of persons employed ..	39,706	62,020	67,874	75,580	82,123
Salaries and wages paid .. £'000	10,582	23,883	28,855	38,789	51,799
Value of power, fuel, etc., used .. £'000	395	744	895	1,215	1,610
Value of materials used ..	12,143	23,672	32,427	48,542	70,967
Value of production ..	15,818	34,494	45,091	60,592	78,808
Total value of output ..	28,356	58,910	78,453	110,349	151,385
Value of land and buildings .. £'000	9,878	16,271	18,801	23,361	30,799
Value of plant and machinery ..	3,758	8,301	9,464	11,495	14,982
Horse-power of engines ordinarily in use .. h.p.	56,117	89,194	95,755	109,707	126,228

(a) Includes horse-drawn vehicles.

The table below shows the output of motor bodies and the imports of motor bodies and motor chassis for 1938-39, 1945-46 and 1948-49 to 1951-52 :—

PRODUCTION AND IMPORTS OF MOTOR BODIES(a) AND IMPORTS OF MOTOR CHASSIS : AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Motor Bodies—						
Number made ..	No. 79,436	19,473	68,230	67,097	92,621	98,361
Value ..	£'000 6,421	2,357	12,145	14,057	18,421	22,612
Number imported ..	No. 532	223	34,728	115,484	92,701	101,628
Value ..	£'000 64	34	5,568	17,994	14,275	16,657
Motor Chassis—						
Number imported ..	No. 76,094	10,113	101,664	187,363	185,751	173,419
Value ..	£'000 7,315	1,879	23,636	44,965	46,920	49,864

(a) Excludes sidecars.

12. Agricultural Machines and Implements.—Owing to the extensive agricultural activities conducted in Australia and the demand for modern mechanized farm equipment, the manufacture of agricultural implements constitutes an important branch of Australian industry. The articles manufactured include a wide range of implements for tillage, seeding, and planting and the harvesting of crops. Other farm machinery made includes windmills, chaff-cutters and machinery used in the dairying industry.

The following table shows details of agricultural implement works in each State for 1951-52 and for Australia for a series of years.

AGRICULTURAL MACHINES AND IMPLEMENTS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	95	75	32	33	22	..	257
Number of persons employed ..	2,349	6,879	1,517	1,448	288	..	12,481
Salaries and wages paid ..	£ 1,714,735	£ 5,256,412	£ 921,180	£ 961,433	£ 190,373	..	£ 9,044,133
Value of power, fuel, etc., used ..	£ 79,381	£ 350,774	£ 46,147	£ 72,898	£ 5,289	..	£ 554,489
Value of materials used ..	£ 2,445,030	£ 8,911,463	£ 1,034,316	£ 1,002,962	£ 127,388	..	£ 13,521,159
Value of production ..	£ 2,624,353	£ 7,313,245	£ 1,300,429	£ 1,524,950	£ 287,901	..	£ 13,050,878
Total value of output ..	£ 5,148,764	£ 16,575,482	£ 2,380,892	£ 2,600,810	£ 420,578	..	£ 27,126,546
Value of land and buildings ..	£ 907,002	£ 1,489,521	£ 376,563	£ 366,722	£ 179,727	..	£ 3,319,535
Value of plant and machinery ..	£ 647,989	£ 2,012,525	£ 333,340	£ 312,125	£ 58,769	..	£ 3,364,748
Horse-power of engines ordinarily in use ..	h.p. 6,687	18,444	4,106	4,814	547	..	34,598

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	161	172	196	208	225	257
Number of persons employed ..	6,563	9,510	9,629	10,454	11,651	12,481
Salaries and wages paid ..	£'000 1,373	2,894	4,199	5,012	6,894	9,044
Value of power, fuel, etc., used ..	£'000 82	186	233	292	433	555
Value of materials used ..	£'000 1,485	2,717	4,480	6,910	9,952	13,521
Value of production ..	£'000 1,836	3,798	5,671	6,983	9,854	13,051
Total value of output ..	£'000 3,403	6,701	10,384	14,185	20,239	27,127
Value of land and buildings ..	£'000 997	1,200	1,913	2,201	2,814	3,320
Value of plant and machinery ..	£'000 911	1,230	1,938	2,215	2,877	3,365
Horse-power of engines ordinarily in use ..	h.p. 13,346	21,225	26,445	28,139	33,464	34,598

13. **Wireless and Amplifying Apparatus.**—The introduction of wireless broadcasting in 1923 gave rise to a new industry in Australia. Early statistical details of the industry are not available as they were grouped together with other electrical apparatus. In 1930-31 a new classification of factories was adopted and "Wireless Apparatus" was shown as a separate industry. The industry is confined mainly to New South Wales and Victoria, but is becoming increasingly important in South Australia. The number of broadcast listeners' licences increased from a third of a million in 1930-31 to about two million at 31st March, 1954, and this increase reflects the advancement of the industry during that period. During the war years considerable expansion took place in the industry to meet the requirements of the fighting services and apart from a slight drop in output in 1945-46, this expansion has continued.

WIRELESS AND AMPLIFYING APPARATUS : AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	72	97	136	129	139	141
Number of persons employed ..	4,828	8,709	9,213	9,283	10,628	8,733
Salaries and wages paid ..	£'000 754	2,296	3,362	3,745	5,140	5,361
Value of power, fuel, etc., used ..	£'000 23	58	103	101	147	184
Value of materials used ..	£'000 1,356	3,446	5,197	6,409	9,229	8,487
Value of production ..	£'000 1,123	3,011	4,612	5,252	7,219	7,023
Total value of output ..	£'000 2,502	6,515	9,912	11,762	16,595	15,604
Value of land and buildings ..	£'000 558	969	1,106	1,205	1,339	1,586
Value of plant and machinery ..	£'000 305	712	688	770	946	980
Horse-power of engines ordinarily in use ..	h.p. 2,710	4,949	7,230	10,357	13,565	12,055
Domestic receiving sets made ..	No. 163,821	93,048	294,119	343,323	459,436	358,379

14. **Cotton.**—(i) *General.* Cotton has been grown in Australia since 1860, but never on a very large scale. The average annual quantity of unginned cotton produced during the five years ended 1938-39 was 18 million lb. and slightly under $1\frac{1}{2}$ million lb. in the five years ended 1952-53. Arising out of the development in the local manufacture of cotton materials and the further expansion following the outbreak of war in 1939, plans were completed for an extension of the area devoted to the cultivation of this crop, but the downward trend which commenced with the war in the Pacific has persisted. The growing of cotton, which is restricted to Queensland, is referred to in some detail in Chapter XX.—Agricultural Production.

(ii) *Ginning.* The ginning and marketing of cotton is controlled by the Queensland Cotton Board. The Board operates ginneries and processes by-products. The production of raw cotton is insufficient for local factory requirements and is supplemented by imports from overseas, chiefly (1951-52) from India, Pakistan, Brazil, Egypt and the United States of America.

(iii) *Spinning and Weaving.* The recent expansion in the spinning and weaving section of the cotton industry marks an important event in its development. New factories have been established and Australia is now producing an extensive range of cotton goods, including duck and canvas from cotton or flax, denims, drill, etc., tyre cord and tyre cord fabric. The number of establishments engaged in cotton spinning and weaving in Australia and other particulars of the industry are shown in the following table for the years 1938-39, 1945-46 and 1948-49 to 1951-52.

COTTON SPINNING AND WEAVING : AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	33	78	91	93	91	94
Number of persons employed ..	3,589	7,253	8,246	8,377	9,233	8,840
Salaries and wages paid .. £'000	493	1,715	2,939	3,306	4,473	5,297
Value of power, fuel, etc., used .. £'000	50	150	251	308	441	554
Value of materials used .. £'000	1,357	4,560	7,857	9,889	16,873	20,803
Value of production .. £'000	979	3,227	4,783	5,991	7,534	9,272
Total value of output .. £'000	2,386	7,937	12,896	16,188	24,848	30,629
Value of land and buildings .. £'000	704	1,529	2,078	2,844	3,215	3,695
Value of plant and machinery .. £'000	736	1,914	2,748	4,118	4,020	4,214
Horse-power of engines ordinarily in use .. h.p.	9,128	21,195	26,078	29,118	31,468	32,285

15. *Wool Carding, Spinning and Weaving.*—The importance of this industry is emphasised by the fact that Australia is the world's chief source of wool and the development of the woollen industry since its establishment at an early period in Australian history is of singular interest. The production consists chiefly of woollen cloth and tweed worsted cloth, rugs, blankets and yarn, all of which have acquired a reputation for purity and durability.

WOOL CARDING, SPINNING AND WEAVING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	64	102		3	3	5	181
Number of persons employed ..	7,198	10,797	742	539	310	1,652	21,244
Salaries and wages paid .. £	3,769,233	6,126,108	330,315	279,979	172,234	865,026	11,542,895
Value of power, fuel, etc., used .. £	353,487	572,926	23,132	33,385	17,061	56,691	1,057,584
Value of materials used .. £	12,594,432	23,792,703	1,250,924	986,104	1,305,234	4,074,482	44,063,879
Value of production .. £	5,175,298	8,376,516	452,054	501,672	315,732	1,450,265	10,271,757
Total value of output .. £	18,123,217	32,742,147	1,726,110	1,521,361	1,698,947	5,581,438	61,393,220
Value of land and buildings .. £	2,262,235	3,460,647	142,869	34,735	64,850	196,000	6,161,396
Value of plant and machinery .. £	2,517,067	4,596,608	294,193	64,438	107,362	300,763	7,880,931
Horse-power of engines ordinarily in use .. h.p.	21,547	38,022	2,407	1,889	898	4,469	69,232

AUSTRALIA.

Items.	1938-39. (a)	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	90	114	153	168	176	181
Number of persons employed ..	19,608	21,536	24,893	24,354	24,333	21,244
Salaries and wages paid .. £'000	2,888	5,324	8,684	9,404	11,349	11,543
Value of power, fuel, etc., used .. £'000	393	511	787	831	952	1,057
Value of materials used .. £'000	7,331	12,315	23,643	32,741	53,672	44,064
Value of production .. £'000	4,791	8,951	13,598	16,426	18,610	16,272
Total value of output .. £'000	12,515	21,777	38,028	49,998	73,434	61,393
Value of land and buildings .. £'000	2,380	3,028	3,654	4,347	5,369	6,161
Value of plant and machinery .. £'000	3,370	2,926	4,246	5,235	6,898	7,881
Horse-power of engines ordinarily in use .. h.p.	42,944	52,739	58,083	63,669	69,070	69,232
Articles produced—						
Woolen cloth and tweed (b)						
'000 sq. yds.	8,336	16,707	16,319	13,245	11,126	10,962
Worsted cloth ..	17,986	12,644	18,074	19,074	19,832	16,032
Serge (b) ..	792	1,022	1,373	817	1,043	(c)
Flannel—						
For outer clothing ..	2,144	2,193	2,937	1,856	2,614	(c)
For underwear (pure) ..	1,557	1,367	1,527	1,659	1,916	(c)
For underwear (mixtures) ..	814	656				
Blankets (b) ..	574	981	689	896	973	645
	'000 pr.					

(a) Includes Woolscouring Works in Victoria and Tasmania and Woolscouring Works and Feltmongeries in South Australia. (b) Includes production in other industries. (c) Included in Worsted cloth.

16. **Hosiery and Other Knitted Goods.**—Details for each State for 1951-52 and for Australia for a series of years are shown in the following table :—

HOSIERY AND OTHER KNITTED GOODS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	162	358	6	9	9	4	548
Number of persons employed ..	6,883	13,580	546	97	156	80	21,342
Salaries and wages paid £	3,616,752	7,196,210	230,720	40,192	64,334	30,649	11,178,857
Value of power, fuel, etc., used £	152,530	316,293	5,316	1,304	2,501	1,727	479,871
Value of materials used £	8,163,056	14,806,145	1,256,625	59,632	166,827	64,102	24,516,387
Value of production ..	6,198,329	11,160,588	451,408	57,057	117,504	43,376	18,028,262
Total value of output £	14,513,915	26,283,026	1,713,549	117,993	286,832	109,205	43,024,520
Value of land and buildings £	1,841,922	3,536,869	121,806	27,996	41,472	32,415	5,602,486
Value of plant and machinery £	1,526,437	4,131,019	171,498	19,803	29,497	15,451	5,893,705
Horse-power of engines ordinarily in use .. h.p.	7,570	11,464	372	45	152	74	19,677

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	313	376	465	496	510	548
Number of persons employed ..	18,159	17,091	21,116	21,577	22,268	21,342
Salaries and wages paid £'000	2,332	3,687	6,526	7,382	9,605	11,179
Value of power, fuel, etc., used £'000	133	185	272	315	386	480
Value of materials used .. £'000	4,284	7,203	14,137	16,637	22,834	24,517
Value of production .. £'000	3,809	5,865	10,542	12,399	16,257	18,028
Total value of output .. £'000	8,226	13,253	24,951	29,351	39,477	43,025
Value of land and buildings £'000	1,962	2,444	3,210	3,877	4,755	5,602
Value of plant and machinery £'000	1,931	1,358	2,763	3,815	4,905	5,894
Horse-power of engines ordinarily in use .. h.p.	8,684	11,465	13,011	14,625	16,925	19,677

(a) Includes 15,023 females.

The following quantities of yarn were used in these establishments during 1951-52. viz. :—Worsted, 7,314,252 lb. ; woollen, 109,385 lb. ; cotton, 6,785,772 lb. ; mercerised cotton, 615,564 lb. ; rayon, 7,504,073 lb. ; silk, 69,536 lb. ; nylon, 799,959 lb. ; other, including mixtures, 668,154 lb. Production of garments and stockings is shown in § 10.

17. **Tanning, Currying and Leather Dressing.**—(i) *Details of Industry.* In Class VII. the most import industry is tanning. Formerly the production of tanneries in Australia was confined to the coarser sorts of leathers, but there are now very few kinds which cannot be produced locally, and an export trade has been built up in some varieties.

TANNING, CURRYING AND LEATHER DRESSING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Number of factories ..	69	45	13	10	5	a	143
Number of persons employed ..	1,829	2,405	573	221	(a)	(a)	5,274
Salaries and wages paid £	1,470,113	1,752,944	364,251	144,996	(a)	(a)	3,889,210
Value of power, fuel, etc., used £	155,808	148,878	25,847	10,884	(a)	(a)	351,784
Value of materials used .. £	3,776,282	3,357,894	949,488	345,352	(a)	(a)	8,795,673
Value of production .. £	2,105,731	2,651,773	616,545	275,639	(a)	(a)	5,911,672
Total value of output .. £	6,037,821	6,158,545	1,591,880	631,875	(a)	(a)	15,060,029
Value of land and buildings £	690,468	952,635	88,758	77,877	(a)	(a)	1,856,615
Value of plant and machinery £	675,282	671,232	189,957	120,587	(a)	(a)	1,703,319
Horse-power of engines ordinarily in use .. h.p.	12,588	11,165	2,848	1,471	(a)	(a)	28,988

(a) Not available for publication ; figures are included in the total for Australia.

TANNING, CURRYING AND LEATHER DRESSING—continued.

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	132	152	144	145	143	143
Number of persons employed ..	4,375	5,022	5,421	5,473	5,362	5,274
Salaries and wages paid .. £'000	920	1,662	2,502	2,755	3,200	3,889
Value of power, fuel, etc., used .. £'000	88	128	189	243	275	352
Value of materials used .. £'000	2,983	5,238	6,466	6,846	8,221	8,796
Value of production .. £'000	1,522	2,690	3,871	4,330	4,950	5,912
Total value of output .. £'000	4,593	8,056	10,526	11,419	13,446	15,060
Value of land and buildings .. £'000	814	1,048	1,271	1,355	1,638	1,857
Value of plant and machinery .. £'000	524	705	980	1,171	1,425	1,703
Horse-power of engines ordinarily in use .. h.p.	12,345	17,850	24,032	25,792	27,684	28,980

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1951-52 are shown in the following table:—

TANNERIES : MATERIALS USED AND PRODUCTION, 1951-52.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Materials used—							
Hides .. no.	907,816	1,087,544	341,250	(a)	141,090	(a)	2,617,586
Skins—							
Calf .. "	612,678	557,546	195,208	(a)	(a)	(a)	1,380,261
Goat .. "	649,686	(a)	(a)	(a)	(a)	(a)	689,664
Sheep, including Pelts .. "	62,491,869	287,587	(a)	(a)(b)	(a)	(a)	63,469,333
Marsupial .. "	28,090	18,224	(a)	(a)	(a)	(a)	86,338
Bark used—							
Wattle .. tons	3,474	5,077	822	(b) 698	(a)	(a)	(b) 10,137
Mallet and Other .. "	(a)	911	(a)	(a)	(a)	(a)	1,279
Tanning extract used .. "	4,542	3,300	1,870	(a)(b)	1,051	(a)	(b) 11,093
Articles produced—							
Leather made—							
Sole and Belting lb.	12,264,101	14,862,616	6,304,328	(a)	3,486,802	(a)	38,636,238
Harness .. "	795,177	546,644	466,571	(a)	(a)	(a)	1,880,785
Upholstery .. sq. ft.	(a)	5,838,581	(a)	(a)	(a)	(a)	10,094,763
Dressed and Upper from Hides—							
Sold by Measure-ment—							
Patent .. sq. ft.	(a)	(a)	(a)	(a)	(a)	(a)	1,309,350
All Other .. "	15,398,208	17,880,224	5,036,320	3,220,462	(a)	(a)	43,444,095
Sold by Weight (all kinds) lb.	(a)	96,398	(a)	(a)	7,496	(a)	432,210
Dressed from skins—							
Calf .. sq. ft.	4,244,093	4,027,529	1,351,241	(a)	55,037	(a)	9,724,948
Goat .. "	2,691,251	(a)	(a)	(a)	(a)	(a)	2,814,586
Sheep .. "	8,367,376	761,877	(a)	(a)(b)	(a)	(a)	11,675,310
Marsupial .. "	113,442	86,019	(a)	(a)	(a)	(a)	381,613

(a) Not available for publication ; figures are included in the total for Australia. (b) Includes an amount produced or used in other works.

18. *Tailoring and Ready-made Clothing.*—Statistics showing the distribution of this industry between States in 1951-52 and for Australia for a series of years are shown in the following table:—

TAILORING AND READY-MADE CLOTHING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	915	642	154	128	140	19	1,998
Number of persons employed ..	18,224	10,939	3,055	2,363	1,313	332	36,226
Salaries and wages paid .. £	8,224,845	5,237,343	1,120,426	933,761	474,671	141,151	16,132,197
Value of power, fuel, etc., used .. £	170,567	104,585	20,970	21,703	8,909	2,220	328,954
Value of materials used .. £	15,405,942	10,599,925	2,098,458	1,107,120	733,954	132,892	30,078,291
Value of production .. £	11,905,639	8,059,712	1,697,534	1,183,131	705,759	167,205	23,718,980
Total value of output .. £	27,482,148	18,764,222	3,816,962	2,311,954	1,448,622	302,317	54,126,225
Value of land and buildings .. £	3,758,627	2,248,433	504,218	524,216	302,765	59,688	7,397,947
Value of plant and machinery .. £	1,313,886	831,367	116,849	116,108	42,260	10,550	2,431,020
Horse-power of engines ordinarily in use .. h.p.	7,026	2,829	505	494	181	58	11,093

TAILORING AND READY-MADE CLOTHING—continued.

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	1,177	1,420	1,874	1,902	1,890	1,998
Number of persons employed ..	26,499	30,047	37,958	37,250	38,535	36,226
Salaries and wages paid .. £'000	3,168	5,507	10,323	11,246	14,206	16,132
Value of power, fuel, etc., used .. £'000	72	116	187	204	249	329
Value of materials used .. £'000	4,947	9,617	19,344	20,187	27,539	30,078
Value of production .. £'000	4,812	8,881	15,668	17,085	21,349	23,719
Total value of output .. £'000	9,831	18,614	35,199	37,476	49,137	54,126
Value of land and buildings .. £'000	3,176	4,142	5,550	5,872	6,538	7,398
Value of plant and machinery .. £'000	356	829	1,461	1,666	2,030	2,431
Horse-power of engines ordinarily in use .. h.p.	2,607	5,148	7,375	8,895	10,137	11,093

19. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1938-39, 1945-46 and 1948-49 to 1951-52 are shown in the following table :—

DRESSMAKING AND MILLINERY : AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	869	998	1,270	1,313	1,328	1,423
Number of persons employed ..	16,398	18,051	21,934	22,384	22,557	20,912
Salaries and wages paid .. £'000	1,653	3,038	5,497	6,244	7,568	8,412
Value of power, fuel, etc., used .. £'000	33	57	95	112	130	149
Value of materials used .. £'000	2,610	5,281	10,104	8,996	11,567	12,123
Value of production .. £'000	2,592	5,170	8,787	9,812	11,868	12,700
Total value of output .. £'000	5,235	10,508	18,986	18,920	23,565	24,972
Value of land and buildings .. £'000	2,052	2,724	3,421	3,626	4,068	4,588
Value of plant and machinery .. £'000	189	362	601	713	903	1,032
Horse-power of engines ordinarily in use .. h.p.	1,732	3,142	3,898	4,361	4,671	4,899

20. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1951-52 and for Australia for a series of years :—

SHIRTS, COLLARS AND UNDERCLOTHING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	196	150	22	29	20	2	419
Number of persons employed ..	4,927	5,223	1,205	530	(a)	(a)	12,640
Salaries and wages paid .. £	2,081,433	2,326,340	481,008	196,641	(a)	(a)	5,360,799
Value of power, fuel, etc., used .. £	38,345	30,466	6,741	3,143	(a)	(a)	81,936
Value of materials used .. £	5,581,827	5,251,450	846,837	305,662	(a)	(a)	12,332,784
Value of production .. £	3,414,382	3,938,086	745,003	265,409	(a)	(a)	8,715,021
Total value of output .. £	9,034,554	9,220,002	1,598,581	574,214	(a)	(a)	21,129,741
Value of land and buildings .. £	889,439	893,408	156,410	65,971	(a)	(a)	2,090,503
Value of plant and machinery .. £	373,731	388,987	52,213	27,357	(a)	(a)	885,147
Horse-power of engines ordinarily in use .. h.p.	2,626	2,061	173	170	(a)	(a)	5,189

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	283	347	410	397	410	419
Number of persons employed ..	11,081	9,902	12,760	12,545	12,870	12,640
Salaries and wages paid .. £'000	1,143	1,729	3,299	3,515	4,452	5,361
Value of power, fuel, etc., used .. £'000	23	32	55	60	72	82
Value of materials used .. £'000	2,651	4,446	9,199	8,915	10,730	12,333
Value of production .. £'000	1,761	2,601	5,482	5,978	7,503	8,715
Total value of output .. £'000	4,435	7,079	14,736	14,953	18,305	21,130
Value of land and buildings .. £'000	946	1,311	1,790	1,833	2,155	2,091
Value of plant and machinery .. £'000	231	397	608	693	845	885
Horse-power of engines ordinarily in use .. h.p.	1,874	2,676	3,521	3,795	6,017	5,189

(a) Not available for separate publication ; figures are included in total for Australia.

21. Boots and Shoes.—(i) *Details of Industry.* The boot and shoe factories hold an important place both in regard to employment afforded and extent of output. The following tables refer to boot and shoe factories as distinct from those devoted to repairing. It has been necessary to include details of Boot and Shoe Repairing in Tasmania, in order to conceal confidential information for that State. Factories engaged in the manufacture of rubber boots and shoes are excluded, being classified under Rubber Goods, *see* para. 38.

BOOTS AND SHOES.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	200	257	33	20	12	18	540
Number of persons employed ..	7,596	10,858	1,784	1,451	898	188	22,775
Salaries and wages paid .. £	4,124,451	6,097,754	853,434	799,126	474,697	55,511	12,404,973
Value of power, fuel, etc., used£	68,854	76,154	8,881	10,433	7,096	578	171,996
Value of materials used .. £	5,410,839	9,745,947	1,232,681	972,338	614,691	81,835	18,058,331
Value of production .. £	5,897,177	8,437,401	1,141,627	980,068	629,668	75,401	17,161,342
Total value of output .. £	11,376,870	18,259,502	2,383,189	1,962,839	1,251,455	157,814	35,391,669
Value of land and buildings .. £	1,196,564	1,518,587	197,455	259,626	109,817	28,138	3,310,187
Value of plant and machinery .. £	658,189	1,205,865	204,209	184,542	127,046	21,871	2,401,722
Horse-power of engines ordinarily in use .. h.p.	7,520	8,696	882	792	575	108	18,573

AUSTRALIA.

Items.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	383	529	510	521	540
Number of persons employed ..	18,264	22,906	23,180	23,783	22,775
Salaries and wages paid .. £'000	4,408	7,611	8,410	10,215	12,405
Value of power, fuel, etc., used .. £'000	75	115	123	141	172
Value of materials used .. £'000	7,520	10,918	12,353	15,390	18,058
Value of production .. £'000	6,472	10,758	11,892	14,611	17,162
Total value of output .. £'000	14,067	21,791	24,368	30,142	35,392
Value of land and buildings .. £'000	1,518	2,087	2,328	2,822	3,310
Value of plant and machinery .. £'000	1,222	1,684	1,877	2,265	2,402
Horse-power of engines ordinarily in use .. h.p.	9,678	12,213	15,644	17,200	18,573

(a) Includes details of Boot and Shoe Repairing.

(ii) *Quantity and Value of Production.* The number and value of boots, shoes and slippers made in factories producing and repairing boots and shoes in each State are shown for 1951-52 in the following table. Particulars relating to the output of rubber boots and shoes are not included :—

BOOT AND SHOE FACTORIES : OUTPUT, 1951-52.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Quantity—							
Boots, shoes and sandals pairs ..	6,155,496	8,729,521	1,350,419	1,421,245	738,809	113,665	18,509,155
Slippers	2,465,485	3,713,352	743,902	73,176	581,958	..	7,577,873
Uppers(b)	37,696	8,233	(a)	(a)	(a)	..	64,636
Value—							
Boots, shoes and sandals .. £	9,925,613	14,903,902	1,837,391	1,914,815	945,957	157,060	29,684,738
Slippers	1,337,493	2,068,877	344,800	31,420	311,516	..	4,094,106
Uppers(b)	26,500	5,788	(a)	(a)	(a)	..	40,742

(a) Not available for publication; figures are included in total for Australia.

(b) Made for sale as such.

22. Flour-milling.—(i) *Details of Industry.* The following table shows the position of the grain-milling industry in each State for the year 1951-52 and for Australia for a series of years :—

FLOUR-MILLING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	55	38	10	28	20	11	162
Number of persons employed ..	1,651	1,351	(a)	525	559	(a)	4,681
Salaries and wages paid .. £	1,258,488	987,943	(a)	406,131	427,180	(a)	3,465,522
Value of power, fuel, etc., used£	272,218	181,646	(a)	99,513	118,603	(a)	729,674
Value of materials used .. £	15,890,997	13,859,480	(a)	5,586,814	6,036,877	(a)	45,576,423
Value of production .. £	2,869,763	2,123,311	(a)	709,450	848,931	(a)	7,312,800
Total value of output .. £	19,032,978	16,164,437	(a)	6,395,777	7,004,411	(a)	53,618,897
Value of land and buildings .. £	1,426,665	972,954	(a)	231,109	661,604	(a)	3,606,235
Value of plant and machinery .. £	1,866,178	955,855	(a)	427,923	610,071	(a)	4,105,618
Horse-power of engines ordinarily in use .. h.p.	16,061	13,189	(a)	4,250	4,866	(a)	41,824

(a) Not available for publication; figures are included in total for Australia.

FLOUR-MILLING—continued.

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	172	170	164	161	165	162
Number of persons employed ..	3,783	4,099	4,768	4,541	4,842	4,681
Salaries and wages paid .. £'000	896	1,376	2,272	2,349	2,933	3,466
Value of power, fuel, etc., used .. £'000	231	300	427	444	545	732
Value of materials used .. £'000	10,573	14,180	29,800	27,837	34,350	45,576
Value of production .. £'000	2,091	2,367	4,539	4,277	5,636	7,313
Total value of output .. £'000	12,895	16,847	34,766	32,558	40,531	53,619
Value of land and buildings .. £'000	2,091	2,244	2,456	2,557	3,177	3,606
Value of plant and machinery .. £'000	1,814	1,835	2,330	2,593	3,408	4,106
Horse-power of engines ordinarily in use .. h.p.	27,795	32,132	35,573	36,081	38,413	41,824

(ii) *Production of Flour and By-products.* The production of flour by the mills in each State (including other than flour mills) for the years 1938-39, 1945-46 and 1948-49 to 1951-52 was as follows:—

FLOUR-MILLING : PRODUCTION OF FLOUR.

(Tons of 2,000 lb.)

Year.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1945-46 ..	451,895	315,525	96,984	164,986	166,791	22,657	1,218,838
1948-49 (a)	667,645	479,288	110,843	211,787	183,143	26,484	1,679,190
1949-50 (a)	597,491	447,784	112,995	162,259	161,251	27,243	1,509,023
1950-51 (a)	694,036	448,881	116,503	189,962	218,841	27,336	1,695,559
1951-52 (a)	578,686	559,224	124,703	206,856	223,936	27,745	1,721,150

(a) Includes Wheatmeal for Baking.

In addition, 676,991 tons of bran and pollard were made. The quantity of wheat ground was 82,506,325 bushels.

23. *Bakeries.*—Information regarding establishments in which the manufacture of bread, cakes, etc., was carried on is given in the table below. It should be noted, however, that the details refer only to establishments coming within the definition of a factory as explained at the beginning of this section. For that reason the tables do not give complete details of the industry, as a large number of bakehouses not coming within the definition are excluded. This is true of all other industries covered by the statistics of manufacturing production, but, in view of the omission of such a large number of establishments in this instance, special mention is deemed necessary.

BAKERIES (INCLUDING CAKES AND PASTRY).

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Australia.
Number of factories ..	1,258	1,024	454	194	276	141	3,347
Number of persons employed ..	7,004	5,141	2,601	1,211	946	1,429	18,332
Salaries and wages paid .. £	3,412,785	2,318,607	1,046,916	634,892	377,158	780,302	8,570,666
Value of power, fuel, etc., used .. £	603,977	418,562	176,508	108,135	78,085	100,903	1,486,172
Value of materials used .. £	9,719,834	6,879,592	3,390,536	1,833,595	1,255,945	3,372,231	26,451,533
Value of production .. £	7,473,873	5,380,594	2,269,088	1,253,824	920,265	1,325,939	18,623,583
Total value of output .. £	17,797,484	12,678,748	5,836,132	3,195,554	2,254,295	4,799,075	46,562,288
Value of land and buildings .. £	4,398,554	3,098,524	990,559	716,170	508,514	1,076,780	10,789,101
Value of plant and machinery .. £	1,851,509	1,510,686	564,022	433,669	265,787	455,894	5,081,567
Horse-power of engines ordinarily in use .. h.p.	7,764	5,299	2,576	1,983	1,235	3,391	22,248

(a) Includes confectionery.

BAKERIES (INCLUDING CAKES AND PASTRY)—continued.
AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories	1,958	2,494	2,950	3,064	3,167	3,347
Number of persons employed	11,715	14,535	17,420	17,925	17,929	18,332
Salaries and wages paid £'000	1,993	3,314	5,182	5,891	6,942	8,571
Value of power, fuel, etc., used £'000	306	574	784	917	1,116	1,486
Value of materials used £'000	6,651	11,087	16,477	18,406	20,786	26,451
Value of production £'000	4,509	7,265	10,852	12,987	14,893	18,624
Total value of output £'000	11,466	18,926	28,113	32,310	36,795	46,561
Value of land and buildings £'000	4,960	6,222	7,973	8,817	9,199	10,789
Value of plant and machinery £'000	1,478	1,804	3,092	3,635	4,078	5,082
Horse-power of engines ordinarily in use h.p.	10,855	13,695	17,622	19,160	20,483	22,248

24. **Sugar-mills.**—(i) *General.* Sugar-cane is grown in New South Wales and Queensland and particulars of area, yield, etc., are given in extended detail in Chapter XX.—Agricultural Production.

The products of the sugar-mill are raw sugar and molasses, the former being sent to the refineries in different parts of Australia for further treatment. Particulars of cane crushed and sugar produced embodied in the following table refer to the quantities treated during the years ended 30th June, irrespective of the season in which the cane was grown; consequently the figures relating to cane crushed and sugar produced may differ slightly from those given in Chapter XX.—Agricultural Production, which relate to harvest years.

(ii) *Details for States.* The following table shows details of the operations of sugar mills in New South Wales and Queensland for the years 1938-39, 1945-46 and 1948-49 to 1951-52 :—

SUGAR-MILLS.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
NEW SOUTH WALES.						
Number of factories	3	3	3	3	3	3
Number of persons employed	212	283	223	227	282	176
Cane crushed tons	337,038	166,069	273,974	330,740	(a)	(a)
Raw sugar produced (94 net titre) tons	45,106	21,220	33,003	40,706	41,258	41,060
Molasses produced gals.	1,489,090	1,110,000	1,348,480	1,631,200	(a)	(a)
QUEENSLAND.						
Number of factories	33	32	32	32	32	31
Number of persons employed	4,419	4,665	5,531	5,898	6,394	5,612
Cane crushed tons	5,432,193	4,551,971	6,707,530	6,518,006	6,691,704	5,005,172
Raw sugar produced (94 net titre) tons	775,064	644,661	910,049	896,413	879,844	704,341
Molasses—						
Sold to distillers and others '000 gals.	8,276	9,381	18,233	17,596	15,234	12,557
Used as fodder " "	4,237	4,676	5,846	5,563	5,582	5,900
Used as manure " "	3,293	3,075	5,282	7,517	5,555	5,484
Run to waste " "	499	51	168	283	50	37
Burnt as fuel " "	3,749	1,748	1,677	1,490	2,371	1,005
Sold or used for other purposes '000 gals.	232	423	402	727	581	324
Total molasses disposed of '000 gals.	20,286	19,354	31,608	33,176	29,373	25,307

(a) Not available for publication.

25. **Sugar-refining.**—The establishment of the sugar-refining industry considerably antedates the establishment of the sugar-milling industry, the raw material operated on in the earlier years coming chiefly from Mauritius and the East. In 1951-52 there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The quantity of raw sugar treated amounted to 515,301 tons for a yield of 493,486 tons of refined sugar.

26. Confectionery.—The figures for 1951-52 for each State and for Australia for a series of years are shown hereunder :—

CONFECTIONERY.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories ..	92	104	21	25	8	(a)	250
Number of persons employed ..	3,035	3,216	374	385	351	(a)	7,361
Salaries and wages paid .. £	1,797,485	1,746,325	131,588	192,481	138,225	(a)	4,006,104
Value of power, fuel, etc., used .. £	179,773	144,088	12,604	19,137	15,332	(a)	370,934
Value of materials used .. £	6,174,491	5,433,980	446,715	409,790	431,656	(a)	11,996,632
Value of production .. £	3,690,140	3,378,225	224,228	257,341	251,688	(a)	7,801,622
Total value of output .. £	10,044,404	8,056,293	683,547	686,268	698,676	(a)	20,169,188
Value of land and buildings .. £	1,055,244	955,216	128,606	207,788	80,822	(a)	2,427,676
Value of plant and machinery .. £	1,219,873	1,224,046	81,612	97,529	80,575	(a)	2,703,635
Horse-power of engines ordinarily in use .. h.p.	12,661	11,598	879	1,283	466	(a)	26,887

AUSTRALIA.(b)

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	148	198	263	267	250	250
Number of persons employed ..	7,256	5,965	7,505	8,064	7,801	7,361
Salaries and wages paid .. £'000	1,041	1,389	2,396	2,974	3,431	4,006
Value of power, fuel, etc., used .. £'000	107	139	215	263	299	371
Value of materials used .. £'000	3,102	4,669	8,556	9,571	10,370	11,997
Value of production .. £'000	2,418	3,314	5,686	6,641	6,810	7,801
Total value of output .. £'000	5,627	8,122	14,457	16,475	17,479	20,169
Value of land and buildings .. £'000	1,423	1,556	1,906	2,071	2,319	2,428
Value of plant and machinery .. £'000	1,364	1,142	1,629	2,087	2,421	2,704
Horse-power of engines ordinarily in use .. h.p.	16,154	17,939	22,492	23,463	26,473	26,887

(a) Not available for publication.

(b) Excludes Tasmania.

27. Jam, Fruit and Vegetable Canning, Pickles, Sauces, Vinegar.—(i) *Details of Industry.* The following table shows particulars of factories included in this class for each State for 1951-52 and for Australia for a series of years :—

JAM, FRUIT AND VEGETABLE CANNING, PICKLES, ETC.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	64	62	20	21	11	23	201
Number of persons employed ..	3,411	5,360	1,042	1,436	179	1,724	13,152
Salaries and wages paid .. £	2,036,419	3,301,505	577,809	794,489	78,263	1,004,503	7,792,988
Value of power, fuel, etc., used .. £	194,653	311,220	41,077	57,857	7,089	59,830	671,726
Value of materials used .. £	7,433,414	13,295,889	2,227,500	2,309,697	265,698	2,754,413	28,286,611
Value of production .. £	3,476,112	6,312,553	1,018,737	1,182,828	148,547	1,484,365	13,623,142
Total value of output .. £	11,104,179	19,919,662	3,287,314	3,550,382	421,334	4,698,668	42,581,479
Value of land and buildings .. £	1,187,537	2,153,991	567,088	432,835	84,048	605,096	5,030,595
Value of plant and machinery .. £	1,090,992	1,920,384	344,585	352,106	50,180	667,415	4,424,762
Horse-power of engines ordinarily in use .. h.p.	8,516	14,021	1,883	1,696	389	3,287	29,792

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	123	157	182	197	200	201
Number of persons employed ..	6,476	11,403	11,447	12,200	13,124	13,152
Salaries and wages paid .. £'000	1,149	2,947	4,147	4,901	6,298	7,793
Value of power, fuel, etc., used .. £'000	97	260	325	415	521	672
Value of materials used .. £'000	4,800	12,326	14,762	17,481	21,234	28,286
Value of production .. £'000	2,334	5,079	7,048	8,374	10,685	13,623
Total value of output .. £'000	7,231	17,665	22,135	26,270	32,440	42,581
Value of land and buildings .. £'000	1,382	2,184	3,051	3,490	4,082	5,031
Value of plant and machinery .. £'000	721	1,630	2,628	3,118	3,720	4,425
Horse-power of engines ordinarily in use .. h.p.	7,873	18,234	23,172	25,314	26,718	29,792

(ii) *Production.* During the 1939-45 War, production of jams increased greatly and a high level of output of 171 million lb. was attained in 1943-44. Production afterwards decreased, but attained a new record of 198.5 million lb. in 1947-48. It dropped to 108.2 million lb. in 1951-52. The peak output of preserved fruit occurred in 1951-52 with 256.1 million lb., compared with the previous highest level of 233.5 million lb. attained in the previous year.

There has also been a marked development in the production of canned vegetables. In 1938-39 output totalled 10,255,000 lb. but, as a result of the war-time demand by the armed services, production reached the record level of 119,149,000 lb. in 1944-45. However, it has since declined and in 1951-52 amounted to 100,446,000 lb.

The following table shows the total quantity and value of jams, pickles, sauces and other items manufactured in each State in 1951-52 :—

JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES : OUTPUT, 1951-52.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Quantity—							
Jams .. '000 lb.	29,260	(a) 57,854	10,469	9,304	1,286	(b)	108,173
Fruit Pulp—							
Consumed in own works							
For sale or addition to	16,674	12,978	(c)	16,937	(c)	26,948	76,314
stock .. cwt.	45,832	35,480	5,073	16,880	18,202	96,908	218,375
Tomato Pulp—							
Consumed in own works							
For sale or addition to	43,507	118,034	(c)	10,727	9,999	(c)	184,749
stock .. cwt.	50,376	280,268		(c)	10,707	(c)	363,389
Fruit, preserved '000 lb.	48,106	134,258	21,586	27,294	473	24,416	256,133
Vegetables, preserved in							
liquid .. '000 lb.	37,823	40,817	1,862	5,435	1,356	13,153	100,446
Pickles .. '000 pints	4,285	2,661	(c)	2,263	(c)		9,748
Sauces .. "	11,071	14,245	1,351	2,174	(c)	(c)	30,643
Value—							
Jams .. £'000	1,599	(a) 3,226	684	534	75	(b)	6,118
Fruit, preserved .. £'000	3,269	6,872	1,606	1,575	34	1,379	14,735
Vegetables, preserved in							
liquid .. £'000	2,718	2,603	97	319	95	985	6,817
Pickles .. £'000	401	230	(c)	274	(c)		962
Sauces .. £'000	1,335	1,207	93	197	(c)	(c)	2,961

(a) Includes Tasmania.

(b) Included with Victoria.

(c) Not available for publication;

figures are included in total for Australia.

28. *Bacon-curing.*—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1951-52 and for Australia for a series of years :—

BACON-CURING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	33	15	9	12	4	10	83
Number of persons employed ..	692	703	809	309	253	72	2,838
Salaries and wages paid .. £	462,374	468,597	528,516	212,951	176,372	46,206	1,895,016
Value of power, fuel, etc., used .. £	61,787	53,726	53,366	50,719	27,482	4,044	251,134
Value of materials used .. £	4,124,422	3,807,470	4,252,723	1,719,924	1,916,175	447,924	16,268,644
Value of production .. £	810,206	1,035,640	1,314,037	355,357	280,793	110,871	3,906,904
Total value of output .. £	4,996,415	4,896,842	5,620,126	2,126,000	2,224,450	562,839	20,426,672
Value of land and buildings .. £	372,996	275,686	406,033	202,077	66,706	32,222	1,355,720
Value of plant and machinery .. £	168,962	143,109	225,353	134,636	37,940	13,936	723,936
Horse-power of engines ordinarily in use .. h.p.	2,012	2,361	3,502	1,581	908	336	10,700

BACON-CURING—continued.

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	76	87	87	86	84	83
Number of persons employed ..	2,047	2,879	2,872	4,907	2,961	2,838
Salaries and wages paid .. £'000	480	879	1,160	1,318	1,577	1,895
Value of power, fuel, etc., used .. £'000	77	126	170	204	251	251
Value of materials used .. £'000	3,768	9,410	11,146	12,518	14,076	16,269
Value of production .. £'000	865	1,628	1,932	2,283	2,930	3,907
Total value of output .. £'000	4,710	11,164	13,235	14,971	17,210	20,427
Value of land and buildings .. £'000	750	890	1,069	1,079	1,270	1,356
Value of plant and machinery .. £'000	357	395	531	537	610	724
Horse-power of engines ordinarily in use .. h.p.	9,389	10,116	10,522	10,093	10,472	10,700

(ii) *Quantity and Value of Production.* The number of pigs cured and the quantity of bacon and ham and lard produced in factories in each State for 1951-52 are shown in the following table:—

BACON-CURING FACTORIES: PIGS CURED AND PRODUCTION, 1951-52.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia
Pigs cured on own account— To finished Bacon ..	195,509	153,642	151,111	61,864	(a)	(a)	586,362
To green Bacon ..							
Pigs cured on commission ..	47,585	1,854	3,479	540	(a)	(a)	53,931
Total ..	243,094	157,496	172,211	62,404	83,255	21,833	740,293
Bacon and Ham produced (b) tons ..	10,940	7,792	7,369	2,786	3,680	727	33,294
Lard produced (b) ..	486	325	466	141	280	70	1,768

(a) Not available for publication; figures are included in total for Australia.

(b) Includes particulars of articles produced in other works.

Bacon and ham and other pig products are dealt with more fully in Chapter XXI.—Farmyard, Dairy and Bee Products.

29. *Butter, Cheese and Condensed and Dried Milk.*—(i) *Details of Industry.* The following table shows particulars of butter, cheese and condensed and dried milk factories in each State for 1951-52 and for Australia for a series of years.

BUTTER, CHEESE AND CONDENSED AND DRIED MILK.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	90	139	91	42	14	23	399
Number of persons employed ..	2,168	5,224	1,502	838	354	387	10,473
Salaries and wages paid .. £	1,443,716	3,809,599	921,443	542,789	231,361	236,828	7,185,736
Value of power, fuel, etc., used .. £	441,674	984,995	170,931	116,235	66,514	56,099	1,836,448
Value of materials used .. £	10,491,610	34,011,269	13,346,570	4,979,748	2,563,859	2,645,002	68,038,058
Value of production .. £	2,029,358	7,435,168	1,335,557	904,225	411,441	419,629	12,535,378
Total value of output .. £	12,962,642	42,431,432	14,853,058	6,000,208	3,041,814	3,120,730	82,409,884
Value of land and buildings .. £	1,627,284	3,147,769	1,057,460	397,849	134,338	219,826	6,584,526
Value of plant and machinery .. £	2,480,910	3,903,240	1,307,936	381,649	234,127	261,129	8,568,991
Horse-power of engines ordinarily in use .. h.p.	21,071	28,487	18,820	5,332	1,672	2,057	77,439

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	523	462	434	428	409	399
Number of persons employed ..	6,851	8,896	10,016	10,469	10,707	10,473
Salaries and wages paid .. £'000	1,570	2,737	4,237	4,941	6,020	7,186
Value of power, fuel, etc., used .. £'000	390	756	1,070	1,340	1,504	1,837
Value of materials used .. £'000	29,162	34,991	52,837	60,762	61,581	68,038
Value of production .. £'000	3,543	5,024	7,335	8,099	10,790	12,535
Total value of output .. £'000	33,095	40,771	61,242	70,201	73,875	82,410
Value of land and buildings .. £'000	2,880	3,506	4,236	4,562	5,400	6,585
Value of plant and machinery .. £'000	3,067	3,597	4,679	5,547	7,014	8,369
Horse-power of engines ordinarily in use .. h.p.	45,059	60,611	66,210	69,809	74,199	77,439

(ii) *Quantity and Value of Production.* The next table shows the quantities and values of butter, cheese and condensed milk produced and the quantities of milk used in their production during 1951-52. These details are restricted to factory production and therefore exclude farm output.

BUTTER, CHEESE AND CONDENSED MILK, ETC. FACTORIES: PRODUCTION, 1951-52.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
MILK USED ('000 GALLONS).							
For the manufacture of—							
Butter	108,939	272,755	127,103	33,343	29,498	32,669	604,307
Cheese	4,561	47,439	10,441	22,618	1,348	878	87,285
Condensed, Dried and other Milk Products (including Ice Cream)(b)	13,817	62,246	785	(a)	(a)	(a)	86,929

PRODUCTS.

Quantity—							
Butter tons	23,438	59,236	27,850	7,767	6,705	6,170	131,166
Cheese „	1,995	22,240	(c) 4,700	10,615	624	408	40,582
Condensed and concentrated milk tons	9,303	45,711	(a)	(a)	(a)	(a)	69,210
Powdered milk—							
Full cream „	2,457	11,957	(a)	(a)	..	(a)	15,121
Skim „	669	9,628	(a)	(a)	..	(a)	10,887
Value—							
Butter £'000	7,852	19,614	(c) 9,237	2,749	2,240	2,068	43,760
Cheese „	500	4,615	906	2,111	132	93	8,357
Condensed and concentrated milk £'000	1,138	5,815	(a)	(a)	(a)	(a)	8,863
Powdered milk—							
Full cream „	745	3,209	(a)	(a)	..	(a)	4,096
Skim „	49	951	(a)	(a)	..	(a)	1,055

(a) Not available for publication; figures are included in total for Australia. (b) Includes Whole Milk equivalent of cream and butter fat purchased as such. (c) Includes 164 tons of cheese valued at £31,482, made in establishments not classified as factories.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXI.—Farmyard, Dairy and Bee Products.

30. *Meat and Fish Preserving.*—The industries included in this group are engaged chiefly in the freezing and preserving of meat. Works have been established at the seaports for the purpose of handling beef, lamb and mutton for export, and insulated space for the carriage of chilled and frozen produce is provided by shipping companies trading between Australia and other parts of the world. The substitution of chilled for frozen meat exported has already been referred to in Chapter XIX.—Pastoral Production. In recent years there has been considerable expansion in the canning of meat and fish.

MEAT AND FISH PRESERVING.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories	12	17	20	20	14	4	87
Number of persons employed ..	777	1,109	4,590	287	508	115	7,386
Salaries and wages paid .. £	467,944	816,775	3,291,572	152,100	429,117	64,422	5,221,930
Value of power, fuel, etc., used .. £	57,222	108,675	489,524	15,915	65,235	5,164	741,735
Value of materials used .. £	2,504,295	4,634,462	23,174,890	814,175	2,510,543	189,126	33,827,491
Value of production £	857,538	1,818,774	4,685,363	256,683	1,041,769	91,181	8,751,308
Total value of output £	3,419,055	6,561,911	28,349,777	1,086,773	3,617,547	285,471	43,320,534
Value of land and buildings .. £	227,911	560,659	2,147,968	149,629	854,778	48,647	3,989,592
Value of plant and machinery & Horse-power of engines ordinarily in use h.p.	353,063	478,395	1,053,668	102,889	606,877	27,907	2,622,799
	2,841	5,162	19,816	844	5,476	371	34,510

MEAT AND FISH PRESERVING—continued.
AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	32	57	81	86	86	87
Number of persons employed ..	4,093	6,741	7,765	8,552	7,940	7,386
Salaries and wages paid .. £'000	1,180	2,297	3,343	4,165	4,752	5,222
Value of power, fuel, etc., used .. £'000	134	257	421	550	633	742
Value of materials used .. £'000	6,351	11,800	18,420	23,640	30,578	33,828
Value of production .. £'000	1,601	3,439	5,431	7,200	6,528	8,751
Total value of output .. £'000	8,086	15,496	24,272	31,390	37,739	43,321
Value of land and buildings .. £'000	1,966	2,412	2,977	3,015	3,223	3,990
Value of plant and machinery .. £'000	1,325	1,541	1,746	1,970	2,297	2,623
Horse-power of engines ordinarily in use .. h.p.	13,385	21,696	27,149	28,668	30,081	34,510

Particulars of the quantities and values of beef, mutton and lamb preserved by cold process exported from Australia over a series of years will be found in Chapter XIX.—Pastoral Production.

31. *Breweries.*—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1951-52 and for Australia for a series of years. It should be noted, however, that the data shown are not strictly comparable throughout, owing to the inability or failure of some breweries to furnish a separate return for each branch of activity. Consequently the figures for some States include details of employment, wages, output, etc., not connected with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

BREWERIES.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	8	7	6	4	4	2	31
Number of persons employed ..	1,658	2,102	695	686	(a)	(a)	5,914
Salaries and wages paid .. £	1,328,419	1,620,410	467,946	506,878	(a)	(a)	4,564,318
Value of power, fuel, etc., used .. £	447,687	318,365	113,241	97,178	(a)	(a)	1,144,861
Value of materials used .. £	3,976,611	3,583,844	982,034	1,298,510	(a)	(a)	11,739,499
Value of production .. £	3,614,123	2,899,997	1,182,360	904,936	(a)	(a)	10,297,613
Total value of output(b) .. £	8,038,421	6,802,206	2,277,635	2,300,624	(a)	(a)	23,181,973
Value of land and buildings .. £	1,502,984	2,266,339	983,745	341,707	(a)	(a)	5,714,816
Value of plant and machinery .. £	1,305,106	1,224,861	797,790	805,522	(a)	(a)	4,831,995
Horse-power of engines ordinarily in use .. h.p.	10,918	7,204	4,829	3,272	(a)	(a)	30,181

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	34	33	32	30	29	31
Number of persons employed ..	3,698	4,121	5,007	5,258	5,517	5,914
Salaries and wages paid .. £'000	1,215	1,586	2,489	2,866	3,666	4,564
Value of power, fuel, etc., used .. £'000	251	351	571	704	849	1,145
Value of materials used .. £'000	3,407	4,256	6,213	7,584	9,081	11,739
Value of production .. £'000	5,372	5,869	6,743	7,593	8,458	10,298
Total value of output(b) .. £'000	9,030	10,476	13,527	15,851	18,388	23,182
Value of land and buildings .. £'000	2,801	3,186	3,329	3,507	5,162	5,715
Value of plant and machinery .. £'000	2,737	2,484	3,204	3,623	4,489	4,832
Horse-power of engines ordinarily in use .. h.p.	23,231	25,927	25,514	26,512	28,765	30,181

(a) Not available for publication; figures are included in total for Australia.
Excise Duty.

(b) Excludes

(ii) *Production, Consumption, Materials Used.* The quantity of ale, stout and beer brewed fell from 73.7 million gallons in 1928-29 to 49.8 million gallons in 1931-32, but thereafter increased each year to 109.2 million gallons in 1941-42. Under the Control of Liquor Order which operated between March, 1942 and March, 1946, the production of beer was restricted and consequently output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter production increased, and in 1952-53 amounted to 109 million gallons.

The average annual consumption of ale, stout and beer prior to the economic depression of the early thirties exceeded 11 gallons per head of the population: it dropped to 7.32 gallons in 1931-32, increased to 13.76 gallons in 1941-42 and declined again to about 13 gallons during the period of control. The consumption per head had increased to 21.05 gallons by 1952-53.

The table below shows the quantities of raw materials used and the quantity and value of ale, stout and beer (excluding waste beer) brewed in each State during 1951-52 :—

BREWERIES : MATERIALS USED AND PRODUCTION, 1951-52.

Particulars.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
RAW MATERIALS USED.							
Total—							
Malt .. bus.	1,832,180	1,590,514	592,510	(a)	638,583	(a)	5,381,191
Hops .. lb.	1,734,282	1,121,538	402,042	(a)	396,729	(a)	4,257,358
Sugar .. cwt.	310,240	213,840	73,420	(a)	39,540	(a)	723,420
Per 1,000 gallons of Ale, Stout and Beer brewed—							
Malt .. bus.	27.43	28.31	31.12	(a)	36.63	(a)	29.45
Hops .. lb.	25.96	19.97	21.11	(a)	22.76	(a)	23.30
Sugar .. cwt.	4.64	3.81	3.86	(a)	2.27	(a)	3.96
ALE, STOUT AND BEER BREWED (EXCLUDING WASTE BEER).							
Quantity .. '000 gals.	66,799	56,174	18,815	(a)	17,433	(a)	182,506
Value(b) .. £'000	7,925	6,719	2,271	(a)	2,852	(a)	22,825

(a) Not available for publication; figures are included in total for Australia.

(b) Excludes Excise Duty.

32. Wineries and Distilleries.—The following table shows particulars of the operations of Wineries and Distilleries for each State during 1951-52 and for Australia for a series of years.

WINERIES AND DISTILLERIES.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	28	33	5	74	17	(a)	158
Number of persons employed ..	319	437	160	1,308	(a)	(a)	2,277
Salaries and wages paid .. £	221,856	264,265	103,239	803,556	(a)	(a)	1,416,340
Value of power, fuel, etc., used .. £	86,649	115,158	48,960	130,104	(a)	(a)	382,693
Value of materials used .. £	1,362,324	947,812	189,365	4,467,123	(a)	(a)	7,076,175
Value of production .. £	398,400	488,924	244,659	1,927,101	(a)	(a)	3,118,147
Total value of output .. £	1,847,373	1,551,894	482,984	6,524,328	(a)	(a)	10,577,015
Value of land and buildings .. £	527,811	245,556	76,762	1,025,700	(a)	(a)	1,919,575
Value of plant and machinery .. £	476,654	340,813	172,553	748,898	(a)	(a)	1,773,652
Horse-power of engines ordinarily in use .. h.p.	2,170	2,386	591	5,631	(a)	(a)	11,038

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	135	138	146	146	153	158
Number of persons employed ..	1,133	1,771	2,146	2,130	2,158	2,277
Salaries and wages paid .. £'000	246	519	870	976	1,122	1,416
Value of power, fuel, etc., used .. £'000	58	130	240	260	294	383
Value of materials used .. £'000	1,421	2,982	4,127	4,484	4,810	7,076
Value of production .. £'000	811	1,333	2,130	2,169	2,637	3,118
Total value of output .. £'000	2,290	4,445	6,497	6,913	7,741	10,577
Value of land and buildings .. £'000	1,002	1,065	1,358	1,500	1,795	1,920
Value of plant and machinery .. £'000	916	998	1,250	1,210	1,556	1,774
Horse-power of engines ordinarily in use .. h.p.	4,396	6,185	7,499	8,175	9,189	11,038

(a) Not available for publication; figures are included in total for Australia.

33. Tobacco, Cigars and Cigarettes.—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1951-52 are shown below for each State and for Australia for a series of years. There are no such factories in Tasmania.

TOBACCO, CIGARS AND CIGARETTES.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Australia
Number of factories ..	15	13	7	..	1	36
Number of persons employed ..	2,555	2,114	(a)	..	(a)	4,971
Salaries and wages paid .. £	1,540,243	1,221,895	(a)	..	(a)	2,931,655
Value of power, fuel, etc., used .. £	85,433	34,708	(a)	..	(a)	125,620
Value of materials used .. £	11,813,271	7,084,784	(a)	..	(a)	19,418,804
Value of production .. £	2,447,945	2,492,935	(a)	..	(a)	5,206,199
Total value of output .. £	14,346,649	9,611,527	(a)	..	(a)	24,750,623
Value of land and buildings .. £	721,640	754,413	(a)	..	(a)	1,597,643
Value of plant and machinery .. £	498,314	701,127	(a)	..	(a)	1,283,792
Horse-power of engines ordinarily in use .. h.p.	3,591	2,018	(a)	..	(a)	5,862

TOBACCO, CIGARS AND CIGARETTES—continued.

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	30	26	37	37	37	36
Number of persons employed ..	5,544	5,255	5,219	5,167	5,044	4,971
Salaries and wages paid .. £'000	1,096	1,300	1,828	1,992	2,380	2,932
Value of power, fuel, etc., used .. £'000	34	52	74	89	90	126
Value of materials used .. £'000	7,081	10,602	13,751	15,016	16,599	19,419
Value of production .. £'000	2,685	2,389	3,788	3,869	4,897	5,206
Total value of output .. £'000	9,800	13,043	17,613	18,974	21,586	24,751
Value of land and buildings .. £'000	1,042	959	1,175	1,276	1,485	1,598
Value of plant and machinery .. £'000	943	724	1,009	1,060	1,171	1,284
Horse-power of engines ordinarily in use .. h.p.	4,610	5,267	6,190	4,610	6,056	5,862
Leaf used—						
Australian (stemmed) .. '000 lb.	4,489	4,685	3,084	3,313	3,775	3,664
Imported (stemmed) .. '000 lb.	16,011	18,822	22,775	24,043	24,558	26,131
Tobacco made .. '000 lb.	16,305	17,901	19,256	20,168	20,967	21,615
Cigars made .. '000 lb.	238	125	169	169	179	175
Cigarettes made .. '000 lb.	6,731	8,482	9,701	10,341	10,679	11,749

(a) Not available for publication ; figures are included in total for Australia.

For many years the production of locally-grown leaf was comparatively small, and manufacturers were dependent on imported leaf for the supply of their raw material. Increased import duties stimulated local production, and the quantity of Australian leaf used by manufacturers rose from 1.2 million lb. in 1929-30 to over 3 million lb. in 1930-31. During the 1939-45 War about 4.7 million lb. of Australian-grown leaf was used annually, but in subsequent years the figure fell, and the 1951-52 usage was 3.7 million lb. In this connexion, see Chapter XX.—Agricultural Production.

Imports of tobacco during 1951-52 comprised—manufactured tobacco, 602,667 lb. ; cigars, 27,579 lb. ; cigarettes, 12,153,933 lb. ; unmanufactured tobacco, 27,025,742 lb.

34. Sawmills, etc.—The most important industry in Class X. is that of sawmilling. Because of difficulties associated with the classifying of sawmills into forest and town, they have been combined in the following table, together with plywood and bark mills.

SAWMILLS, PLYWOOD AND BARK MILLS.

1951-52.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	1,074	675	671	86	259	368	3,133
Number of persons employed ..	11,509	7,369	8,703	1,972	3,856	2,276	35,685
Salaries and wages paid .. £	6,587,571	4,305,774	4,663,508	1,210,249	2,066,030	1,266,650	20,099,782
Value of power, fuel, etc., used .. £	473,959	332,340	282,744	52,113	172,755	86,358	1,400,275
Value of materials used .. £	19,747,290	10,592,134	8,494,379	5,259,358	2,920,460	2,203,874	49,217,495
Value of production .. £	12,156,005	7,970,148	7,459,983	3,376,726	3,747,840	2,253,945	35,964,047
Total value of output .. £	32,377,254	18,894,628	16,237,106	7,688,197	6,841,055	4,544,177	86,582,417
Value of land and buildings .. £	2,447,332	1,764,108	1,116,937	780,913	759,134	279,327	7,147,751
Value of plant and machinery .. £	3,453,898	2,664,926	2,271,592	457,987	1,304,430	723,096	10,875,929
Horse-power of engines ordinarily in use .. h.p.	104,204	72,397	67,945	14,751	26,610	24,954	310,861

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	1,660	1,765	2,541	2,781	2,937	3,133
Number of persons employed ..	19,104	22,591	30,067	31,493	32,978	35,685
Salaries and wages paid .. £'000	3,635	5,842	10,402	12,031	14,999	20,100
Value of power, fuel, etc., used .. £'000	226	375	657	804	1,032	1,400
Value of materials used .. £'000	8,523	12,174	23,428	27,020	34,965	49,217
Value of production .. £'000	5,789	9,159	17,505	20,727	26,747	35,965
Total value of output .. £'000	14,538	21,708	41,590	48,551	62,744	86,582
Value of land and buildings .. £'000	2,055	2,523	3,825	4,477	5,819	7,148
Value of plant and machinery .. £'000	2,786	3,461	5,716	7,777	8,881	10,876
Horse-power of engines ordinarily in use .. h.p.	90,315	132,767	208,230	243,927	276,232	310,861

The sawmill output of native timber, which declined from 740 million super. feet in 1925-26 to the abnormally low figure of 237 million super. feet during the depth of the depression, recovered to 717 million super. feet in 1938-39 and by 1951-52 had risen to 1,392 million super. feet. Further reference is made to the sawmilling industry in Chapter XXII.—Forestry.

35. **Cabinet and Furniture Making and Upholstery.**—These industries constitute the principal manufactures in Class XI. The following table shows particulars for each State in 1951-52 :—

CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	463	545	217	117	143	71	1,556
Number of persons employed ..	5,467	5,033	2,632	1,605	1,263	574	16,574
Salaries and wages paid £	3,356,565	2,695,417	1,245,731	853,399	603,138	276,528	9,030,778
Value of power, fuel, etc., used £	83,798	48,856	24,427	23,266	13,587	3,649	197,613
Value of materials used £	5,461,040	4,231,414	2,054,809	1,483,985	1,001,479	279,096	14,511,823
Value of production ..	£ 4,931,291	£ 4,485,954	£ 1,934,516	£ 1,275,251	£ 994,809	£ 411,833	£ 14,033,654
Total value of output ..	£ 10,476,129	£ 8,766,224	£ 4,013,752	£ 2,782,532	£ 2,009,875	£ 694,578	£ 28,743,090
Value of land and buildings ..	£ 1,729,548	£ 1,677,787	£ 629,213	£ 370,669	£ 367,313	£ 136,088	£ 4,910,618
Value of plant and machinery ..	£ 563,817	£ 522,917	£ 254,502	£ 185,266	£ 164,023	£ 48,541	£ 1,739,066
Horse-power of engines ordinarily in use .. h.p.	14,974	14,776	6,320	4,987	3,369	1,476	45,902

36. **Printing Works.**—Printing and bookbinding rank high in importance among the industries of Australia, and in 1951-52 afforded employment for 35,502 employees, and paid £22,319,000 in salaries and wages, while the value of output amounted to £80,665,000. The first table below gives particulars of establishments engaged in general printing in each State for 1951-52. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works. Establishments producing newspapers and periodicals are shown separately in the second table to follow :—

GOVERNMENT AND GENERAL PRINTING WORKS, 1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	445	467	100	66	70	19	1,167
Number of persons employed ..	9,060	7,951	2,275	1,535	1,324	584	22,729
Salaries and wages paid £	5,724,503	4,816,801	1,168,059	860,648	676,195	333,869	13,580,075
Value of power, fuel, etc., used £	195,748	105,679	27,175	20,587	18,608	5,841	373,638
Value of materials used ..	£ 10,234,227	£ 7,847,829	£ 1,726,670	£ 1,059,624	£ 972,365	£ 388,563	£ 22,229,284
Value of production ..	£ 10,089,796	£ 8,176,543	£ 1,738,487	£ 1,418,020	£ 1,297,671	£ 522,664	£ 23,243,181
Total value of output ..	£ 20,519,771	£ 16,130,051	£ 3,492,338	£ 2,498,231	£ 2,288,644	£ 917,068	£ 45,846,103
Value of land and buildings ..	£ 3,021,293	£ 2,706,114	£ 535,481	£ 353,959	£ 348,894	£ 139,168	£ 7,104,909
Value of plant and machinery ..	£ 3,451,916	£ 3,097,585	£ 522,773	£ 606,907	£ 503,441	£ 186,744	£ 8,369,366
Horse-power of engines ordinarily in use .. h.p.	16,092	10,812	1,961	1,928	1,683	729	33,205

NEWSPAPERS AND PERIODICALS, 1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	183	111	57	33	30	7	421
Number of persons employed ..	5,851	3,228	1,787	928	617	362	12,773
Salaries and wages paid £	4,071,366	2,306,475	1,082,557	623,657	407,552	247,320	8,738,927
Value of power, fuel, etc., used £	168,311	73,156	44,583	22,039	26,254	5,671	340,014
Value of materials used ..	£ 8,667,875	£ 5,589,468	£ 1,911,953	£ 1,460,266	£ 796,081	£ 214,902	£ 18,640,545
Value of production ..	£ 7,689,236	£ 3,958,724	£ 1,726,721	£ 1,301,682	£ 845,633	£ 315,916	£ 15,837,912
Total value of output ..	£ 16,525,422	£ 9,621,348	£ 3,683,257	£ 2,783,987	£ 1,667,968	£ 536,489	£ 34,818,471
Value of land and buildings ..	£ 2,961,515	£ 942,685	£ 717,857	£ 524,590	£ 266,131	£ 114,397	£ 5,527,175
Value of plant and machinery ..	£ 2,962,485	£ 2,944,201	£ 1,004,279	£ 224,920	£ 307,232	£ 94,844	£ 7,537,961
Horse-power of engines ordinarily in use .. h.p.	16,331	9,762	4,379	2,602	1,970	558	35,602

37. **Paper Making.**—Although the paper manufacturing industry has been established in Australia for many years it was not until the manufacture of paper pulp from indigenous timber commenced in 1938-39 that any marked development occurred.

Plants producing pulp from eucalypt timber are operating in Victoria and Tasmania, whilst in South Australia pulp is being produced from locally-grown softwoods. The production of pulp rose from 6,000 tons in 1938-39 to 88,000 tons in 1946-47, and remained about this level until 1951-52, when production totalled 101,000 tons.

The number of factories operating in 1951-52 comprised two in New South Wales, eight in Victoria, one in Queensland, South Australia and Western Australia and three in Tasmania. In the latter State, newsprint, writing and printing papers are produced, and in the other States wrappings, other papers and boards. Particulars for this industry are shown in the following table.

PAPER MAKING, INCLUDING PULP MILLS : AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	7	12	14	14	14	16
Number of persons employed ..	1,961	4,705	5,991	6,160	6,336	7,237
Salaries and wages paid .. £'000	467	1,577	2,881	3,183	4,231	5,852
Value of power, fuel, etc., used .. £'000	201	599	941	998	1,181	1,610
Value of materials used .. £'000	1,096	3,802	5,768	6,154	7,487	14,558
Value of production .. £'000	1,005	3,017	5,649	6,581	9,165	12,623
Total value of output .. £'000	2,302	7,418	12,358	13,733	17,833	28,791
Value of land and buildings .. £'000	850	1,525	2,526	3,331	4,871	6,820
Value of plant and machinery .. £'000	1,713	2,509	4,641	5,754	9,814	12,961
Horse-power of engines ordinarily in use .. h.p.	31,548	68,215	79,223	95,999	103,098	112,469

38. Rubber Goods.—The following table shows particulars of this industry for each State during 1951-52 and excludes establishments engaged primarily in the retreading and repairing of tyres.

RUBBER GOODS, 1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	24	42	8	9	2	..	85
Number of persons employed ..	5,787	4,326	(a)	508	(a)	..	11,765
Salaries and wages paid .. £	4,766,985	3,360,078	(a)	333,052	(a)	..	9,033,464
Value of power, fuel, etc., used .. £	637,449	624,548	(a)	29,351	(a)	..	1,346,562
Value of materials used .. £	16,172,278	15,381,085	(a)	569,517	(a)	..	34,787,920
Value of production .. £	6,092,090	7,283,218	(a)	493,867	(a)	..	15,189,201
Total value of output .. £	22,901,817	23,288,851	(a)	1,092,735	(a)	..	51,323,683
Value of land and buildings .. £	1,223,590	1,643,900	(a)	80,671	(a)	..	3,207,341
Value of plant and machinery .. £	1,320,315	1,654,427	(a)	92,228	(a)	..	3,444,237
Horse-power of engines ordinarily in use .. h.p.	42,685	38,986	(a)	2,000	(a)	..	88,792

(a) Not available for separate publication ; figures included in total for Australia.

39. Electric Light and Power Works.—(i) *Details of Industry.* The increased demand for electrical energy has been responsible for considerable development in electric light and power works during recent years. For further information on this subject see Chapter XXV.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1951-52 and for Australia for a series of years are shown below :—

ELECTRIC LIGHT AND POWER WORKS.

1951-52.

Items.	N.S.W.	Victoria.	Q'land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	85	68	44	32	100	2	331
Number of persons employed ..	4,459	2,500	1,066	1,117	(a)	(a)	10,381
Salaries and wages paid .. £	3,561,194	1,979,255	784,296	913,001	(a)	(a)	8,178,246
Value of power, fuel, etc., used .. £	13,534,980	5,608,627	3,968,644	3,257,866	(a)	(a)	28,723,716
Value of materials used .. £	1,963,405	390,558	568,442	233,534	(a)	(a)	3,481,694
Value of production .. £	8,744,683	4,603,839	1,521,621	1,450,371	(a)	(a)	18,064,804
Total value of output .. £	24,243,068	10,603,024	6,058,707	4,941,771	(a)	(a)	50,270,214
Value of land and buildings .. £	10,004,918	2,955,591	1,972,638	3,703,393	(a)	(a)	21,640,748
Value of plant and machinery .. £	23,664,654	15,941,360	7,153,268	6,267,798	(a)	(a)	66,630,204

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	395	372	363	358	354	331
Number of persons employed ..	6,508	7,071	8,822	9,433	9,815	10,381
Salaries and wages paid .. £'000	1,977	2,588	4,751	5,368	6,541	8,178
Value of power, fuel, etc., used .. £'000	3,239	6,398	12,860	15,491	21,259	28,724
Value of materials used .. £'000	530	1,029	1,845	2,180	2,712	3,481
Value of production .. £'000	8,714	10,563	12,233	12,885	14,790	18,065
Total value of output .. £'000	12,483	17,990	26,938	30,556	38,761	50,270
Value of land and buildings .. £'000	8,388	9,235	11,640	13,486	16,932	21,641
Value of plant and machinery .. £'000	27,751	32,131	39,083	45,454	53,441	66,630

(a) Not available for separate publication ; figures included in total for Australia.

Particulars of the types of engines and generators installed in Electric Light and Power Works and their rated horse-power are given on page 863.

(ii) *Production.* The increase in the production of electric light and power in each of the States since 1938-39 is shown in the following table :—

ELECTRIC LIGHT AND POWER WORKS : ELECTRICITY PRODUCED.
(’000 kWh)

Year.	N.S.W.	Victoria.	Q’land.	S. Aust.	W. Aust.	Tasmania.	Australia.
1938-39 ..	1,948,490	1,222,505	387,368	256,283	307,002	566,691	4,688,339
1945-46 ..	2,831,801	1,904,403	612,672	402,134	338,799	819,958	6,909,767
1948-49 ..	3,717,030	2,503,981	890,258	566,606	398,594	976,474	9,052,943
1949-50 ..	3,758,004	2,706,081	971,630	593,808	417,499	1,061,639	9,508,661
1950-51 ..	4,251,442	2,875,866	1,115,348	713,034	469,914	1,077,723	10,503,327
1951-52 ..	4,628,095	2,964,155	1,242,086	787,780	529,702	1,145,500	11,297,318

40. *Gas-works.*—(i) *Details of Industry.* Gas-works are in operation in the majority of important towns in Australia. The following table shows particulars of gas-works in each State for the year 1951-52 and for Australia for a series of years :—

GAS-WORKS.

1951-52.

Items.	N.S.W.	Victoria.	Q’land.	S. Aust.	W. Aust.	Tas.	Australia.
Number of factories ..	39	36	16	3	4	2	100
Number of persons employed ..	1,489	1,419	428	454	(a)	(a)	4,042
Salaries and wages paid .. £	1,222,882	1,170,759	289,032	332,065	(a)	(a)	3,206,825
Value of power, fuel, etc., used .. £	1,571,205	96,943	22,426	4,055	(a)	(a)	1,776,884
Value of materials used ..	5,746,262	4,974,441	850,572	1,059,848	(a)	(a)	13,400,947
Value of production .. £	3,972,643	2,049,999	502,907	393,943	(a)	(a)	7,165,219
Total value of output .. £	11,290,110	7,121,383	1,375,905	1,457,846	(a)	(a)	22,343,050
Value of land and buildings .. £	1,180,920	549,175	244,340	31,050	(a)	(a)	2,185,900
Value of plant and machinery .. £	4,231,365	5,822,593	1,102,905	1,516,456	(a)	(a)	13,846,223
Horse-power of engines ordinarily in use .. h.p.	14,622	10,270	1,864	1,560	(a)	(a)	28,427

AUSTRALIA.

Items.	1938-39.	1945-46.	1948-49.	1949-50.	1950-51.	1951-52.
Number of factories ..	107	104	101	100	100	100
Number of persons employed ..	2,931	3,502	3,808	3,815	3,871	4,042
Salaries and wages paid .. £’000	785	1,194	1,837	2,027	2,401	3,207
Value of power, fuel, light, etc., used .. £’000	251	448	723	845	1,179	1,777
Value of materials used .. £’000	1,872	3,965	6,734	7,220	9,450	13,401
Value of production .. £’000	2,694	3,313	3,653	3,663	4,426	7,165
Total value of output .. £’000	4,817	7,726	11,110	11,728	15,055	22,343
Value of land and buildings .. £’000	1,463	1,571	1,813	1,939	2,071	2,186
Value of plant and machinery .. £’000	7,498	9,475	10,907	11,656	12,386	13,846
Horse-power of engines ordinarily in use .. h.p.	17,905	24,053	26,337	26,225	28,205	28,427

(a) Not available for publication ; figures are included in the total for Australia.

(ii) *Coal Used and Production.* The following table shows details for 1951-52 :—

GAS-WORKS : COAL USED AND PRODUCTION, 1951-52.

Particulars.	N.S.W.	Victoria.	Q’land.	S. Aust.	W. Aust.	Tas.	Australia.
Coal used .. tons	928,814	733,680	215,424	134,001	(a)	(a)	2,096,783
Gas produced ’000 cubic ft.	20,537,003	12,525,273	2,874,626	2,639,635	(a)	(a)	40,390,949
Gas sold .. tons	17,498,768	10,719,118	2,508,987	2,294,795	(a)	(a)	34,530,698
Coke produced (b) .. tons	633,172	399,247	56,792	78,856	(a)	(a)	1,203,602

(a) Not available for publication ; figures are included in total for Australia. (b) In addition, 1,636,982 tons of metallurgical coke were made in Coke Works in 1951-52.

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached 40 thousand million cubic feet in 1951-52.