

## CHAPTER VI.

### MANUFACTURING INDUSTRY.

#### § 1. General.

**1. Introduction.**—A complete statistical account of the growth of the manufacturing industry in Australia cannot be given, as the necessary statistics were not collected by the several States on a definite and uniform basis prior to 1906. A standard classification of manufacturing industries was formulated at a conference of Australian statisticians in 1902 and adopted by all States in 1906 and 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 engaged primarily in the production of goods for local use, mainly 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.

This expansion was checked by the world-wide economic depression of 1929–33, but in 1933 returning general prosperity and the opportunities opened to local manufacturers by import restrictions, together 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 their demands, as well as those arising locally because of interruption of overseas imports, 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 functions of the Division of Industrial Development 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, but was transferred to the Department of Trade in January, 1956.

**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 XIII.—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 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. For further information concerning the work of the Organization see Chapter XXX. of this Year Book.

(ii) *The Standards Association of Australia.* This Association, which is also discussed in more detail in Chapter XXX., 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 tabulations made by the Deputy Commonwealth Statisticians in the several States from returns supplied to them annually by manufacturers in accordance with the Statistical Acts of the States and the Commonwealth. 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, or most abattoirs. It should be noted that details relating to small establishments not classified for statistical purposes as factories are not included in the figures contained in this chapter.

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 and 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 the 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 respect of the placement and composition of sub-classes) in accordance with decisions of the 1945 Conference of Statisticians.

Owing to limitations of space, details published in general tables in this chapter are confined either to the sixteen classes of industry or to 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 Bulletin *Secondary Industries*, published annually.

The 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, Portland.  
Asbestos Cement Sheets and Mouldings.  
Other Cement Goods.  
Other.

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

Bricks and Tiles.  
Earthenware, China, Porcelain and Terracotta.  
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 (including Fireworks).  
White Lead, Paints and 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, Rolling of  
Iron and Steel.  
Foundries (Ferrous).  
Plant, Equipment and Machinery, etc.  
Other Engineering.  
Extracting and Refining of other Metals; Alloys.  
Electrical Machinery, Cables and Apparatus.  
Construction and Repair of Vehicles (10 groups).  
Ship and Boat Building and Repairing, Marine  
Engineering (Government and Other).  
Cutlery and Small Hand Tools.  
Agricultural Machines and Implements.  
Non-Ferrous Metals—  
Rolling and Extrusion.  
Founding, 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.  
Sewing Machines.

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

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, etc.).

#### 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.  
Textile Dyeing, Printing and Finishing  
Other.

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

Furriers and Fur-dressing.  
Woolscouring and Fellmongery.  
Tanning, Curryng and Leather-dressing.  
Saddlery, Harness and Whips.  
Machine Belting (Leather or other).  
Bags, Trunks, etc.

#### CLASS VIII.—CLOTHING (EXCEPT KNITTED).

Tailoring and Ready-made Clothing.  
Waterproof and Oilskin Clothing.  
Dressmaking, Hemstitching.  
Millinery.  
Shirts, Collars, Underclothing.  
Foundation Garments.  
Handkerchiefs, Ties and 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, etc.  
Other.

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

Flour-milling.  
Cereal Foods and Starch.  
Animal and Bird Foods.  
Chaffcutting and Corncrushing.  
Bakeries (including Cakes and Pastry).  
Biscuits.  
Sugar-mills.  
Sugar-refining.

## CLASS IX.—FOOD, DRINK AND TOBACCO—

*continued.*

Confectionery (including Chocolate and Icing Sugar).  
 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.  
 Ice and Refrigerating.  
 Salt.  
 Aerated Waters, Cordials, etc.  
 Breweries.  
 Distilleries.  
 Wine-making.  
 Cider and Perry.  
 Malting.  
 Bottling.  
 Tobacco, Cigars, Cigarettes, Snuff.  
 Dehydrated Fruit and Vegetables.  
 Ice Cream.  
 Sausage Casings.  
 Arrowroot.  
 Other.

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

Sawmills.  
 Plywood Mills (including Veneers).  
 Bark Mills.  
 Joinery.  
 Cooperage.  
 Boxes and Cases.  
 Woodturning, Woodcarving, etc.  
 Basketware and Wickerware (including Sea-grass and Bamboo Furniture).  
 Perambulators (including Pushers and Strollers).  
 Wall and Ceiling Boards (not Plaster or Cement).  
 Other.

CLASS XI.—FURNITURE OF WOOD, BEDDING, ETC.  
Cabinet and Furniture Making (including Billiard Tables and Upholstery).  
Bedding and Mattresses (not Wire).  
Furnishing Drapery.

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

*continued.*

Picture Frames.  
 Blinds.

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

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

## CLASS XIII.—RUBBER.

Rubber Goods (including Tyres Made).  
 Tyre Retreading and Repairing.

## CLASS XIV.—MUSICAL INSTRUMENTS.

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

## CLASS XV.—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 Material, (including Developing and Printing).  
 Toys, Games and Sports Requisites.  
 Artificial Flowers.  
 Other.

## CLASS XVI.—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.	Factories.	Employment.(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.	£'000.	£'000.	£'000.	£'000.
1901 ..	11,143	198	(d)	(d)	(d)	(d)	(d)	(d)
1911 ..	14,455	312	27,528	81,763	133,022	51,259	32,701	31,516
1920-21 ..	17,113	367	62,932	213,559	323,993	110,434	60,831	68,655
1930-31 ..	21,751	339	62,455	172,489	290,799	118,310	112,211	124,498
1940-41 ..	27,300	650	137,919	386,881	644,795	257,914	144,094	161,356
1950-51 ..	43,147	969	491,718	1,306,963	2,150,835	843,872	302,785	336,615
1954-55 ..	51,056	1,031	781,640	2,069,080	3,434,589	1,365,509	555,996	698,292
1955-56 ..	52,406	1,060	853,469	2,263,346	3,764,060	1,500,714	653,574	797,835
1956-57 ..	53,200	1,063	891,090	2,400,293	4,022,413	1,622,120	759,687	917,037
1957-58 ..	53,988	1,074	929,290	2,545,159	4,273,882	1,728,723	849,036	1,012,735
1958-59 ..	54,888	1,088	970,553	2,649,331	4,491,932	1,842,601	947,899	1,108,385

(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 and 1954–55 to 1958–59:—

FACTORIES: NUMBER.

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938–39 .. ..	9,464	9,250	3,087	2,067	2,129	944	26,941
1954–55 .. ..	20,837	15,861	5,284	3,750	3,727	1,597	51,056
1955–56 .. ..	21,602	16,053	5,378	3,908	3,871	1,594	52,406
1956–57 .. ..	21,838	16,232	5,537	4,063	3,935	1,595	53,200
1957–58 .. ..	22,270	16,426	5,528	4,168	3,941	1,655	53,988
1958–59 .. ..	22,684	16,527	5,651	4,235	4,125	1,666	54,888

2. Number of Factories in Industrial Classes.—(i) *Australia*. The next table shows the number of factories in Australia during 1938–39 and 1954–55 to 1958–59 classified to the industrial classes agreed upon by the Conference of Statisticians in 1930. Details of some of the principal industries included in the table will be found in § 11, page 196.

FACTORIES: NUMBER IN INDUSTRIAL CLASSES: AUSTRALIA.

Class of Industry.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	564	1,303	1,337	1,331	1,328	1,344
II. Bricks, Pottery, Glass, etc. .. ..	471	662	666	672	660	663
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	666	1,124	1,139	1,162	1,184	1,218
IV. Industrial Metals, Machines, Conveyances .. ..	7,255	17,842	18,860	19,766	20,518	21,254
V. Precious Metals, Jewellery, Plate .. ..	290	746	782	824	808	818
VI. Textiles and Textile Goods (not Dress) .. ..	611	1,356	1,362	1,364	1,364	1,373
VII. Skins and Leather (not Clothing or Footwear) .. ..	533	810	789	785	761	729
VIII. Clothing (except Knitted) .. ..	4,314	7,370	7,390	7,312	7,266	7,195
IX. Food, Drink and Tobacco .. ..	5,202	7,433	7,468	7,315	7,455	7,580
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. ..	2,822	5,845	5,895	5,872	5,764	5,676
XI. Furniture of Wood, Bedding, etc. .. ..	1,149	2,200	2,203	2,199	2,200	2,184
XII. Paper, Stationery, Printing, Book-binding, etc. .. ..	1,816	2,224	2,303	2,367	2,413	2,518
XIII. Rubber .. ..	299	495	513	536	565	606
XIV. Musical Instruments .. ..	34	79	84	88	88	86
XV. Miscellaneous Products .. ..	413	1,119	1,188	1,185	1,207	1,251
<i>Total, Classes I. to XV.</i> .. ..	26,439	50,608	51,979	52,778	53,581	54,495
XVI. Heat, Light and Power .. ..	502	448	427	422	407	393
<b>Grand Total</b> .. ..	<b>26,941</b>	<b>51,056</b>	<b>52,406</b>	<b>53,200</b>	<b>53,988</b>	<b>54,888</b>

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 1958–59. In the latter year, the number of factories in Australia reached the record total of 54,888 or more than twice the number in 1938–39.

(ii) *States, 1958-59.* The following table shows the number of factories in each State classified according to the nature of the industry:—

**FACTORIES: NUMBER IN INDUSTRIAL CLASSES, 1958-59.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	448	450	100	166	126	54	1,344
II. Bricks, Pottery, Glass, etc. ..	313	160	56	67	48	19	663
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	595	361	82	88	67	25	1,218
IV. Industrial Metals, Machines, Conveyances ..	8,886	6,018	2,164	1,883	1,754	549	21,254
V. Precious Metals, Jewellery, Plate ..	375	265	42	60	69	7	818
VI. Textiles and Textile Goods (not Dress) ..	480	754	28	51	42	18	1,373
VII. Skins and Leather (not Clothing or Footwear) ..	325	275	53	38	30	8	729
VIII. Clothing (except Knitted) ..	3,346	2,442	532	369	412	94	7,195
IX. Food, Drink and Tobacco ..	2,745	2,178	1,059	690	619	289	7,580
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	2,231	1,382	801	350	456	456	5,676
XI. Furniture of Wood, Bedding, etc. ..	830	665	288	167	172	62	2,184
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	1,107	892	206	152	124	37	2,518
XIII. Rubber ..	237	158	93	57	41	20	606
XIV. Musical Instruments ..	36	25	8	9	8	..	86
XV. Miscellaneous Products ..	629	431	60	50	66	15	1,251
<i>Total Classes I. to XV. ..</i>	<i>22,583</i>	<i>16,456</i>	<i>5,572</i>	<i>4,197</i>	<i>4,034</i>	<i>1,653</i>	<i>54,495</i>
XVI. Heat, Light and Power ..	101	71	79	38	91	13	393
<b>Grand Total ..</b>	<b>22,684</b>	<b>16,527</b>	<b>5,651</b>	<b>4,235</b>	<b>4,125</b>	<b>1,666</b>	<b>54,888</b>

**§ 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).

2. *States, 1958-59.*—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, 1958-59.**

Size of Factory (Persons employed).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>NUMBER OF FACTORIES.</b>							
Under 4 ..	9,364	6,062	1,955	1,443	2,148	736	21,708
4 ..	1,927	1,320	560	387	158	151	4,503
5 to 10 ..	5,305	3,876	1,534	1,147	931	400	13,193
11 to 20 ..	2,784	2,261	723	582	417	174	6,941
21 to 50 ..	1,945	1,725	531	390	307	126	5,024
51 to 100 ..	711	643	152	155	94	46	1,801
101 to 200 ..	342	371	112	67	46	15	953
201 to 300 ..	106	104	46	32	13	4	305
301 to 400 ..	65	42	13	9	4	5	138
401 to 500 ..	28	34	7	4	3	1	77
501 to 750 ..	49	56	12	7	2	4	130
751 to 1,000 ..	15	15	2	..	1	..	33
Over 1,000 ..	43	18	4	12	1	4	82
<b>Total ..</b>	<b>22,684</b>	<b>16,527</b>	<b>5,651</b>	<b>4,235</b>	<b>4,125</b>	<b>1,666</b>	<b>54,888</b>

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

**FACTORIES: AVERAGE NUMBER OF PERSONS EMPLOYED ACCORDING TO SIZE OF FACTORY, 1958-59.**

Size of Factory (Persons employed).	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
AVERAGE NUMBER EMPLOYED DURING PERIOD WORKED.							
Under 4 .. ..	17,475	12,314	4,056	2,968	4,187	1,447	42,447
4 .. ..	7,708	5,280	2,240	1,548	632	604	18,012
5 to 10 .. ..	36,759	27,604	10,562	7,917	5,997	2,755	91,594
11 to 20 .. ..	40,739	33,184	10,435	8,527	5,848	2,589	101,322
21 to 50 .. ..	60,595	54,311	16,628	12,316	9,407	3,869	157,126
51 to 100 .. ..	49,788	44,817	10,873	10,561	6,272	3,298	125,609
101 to 200 .. ..	47,733	51,670	15,819	9,057	6,348	2,149	132,776
201 to 300 .. ..	26,076	25,121	11,205	7,707	3,049	1,016	74,174
301 to 400 .. ..	22,558	14,339	4,338	3,295	1,315	1,702	47,547
401 to 500 .. ..	12,671	15,284	3,273	1,732	1,306	412	34,678
501 to 750 .. ..	30,670	33,579	7,251	4,382	1,167	2,703	79,752
751 to 1,000 .. ..	13,116	12,896	1,867	..	780	..	28,659
Over 1,000 .. ..	87,598	34,578	6,952	24,615	2,928	6,296	162,967
Total .. ..	453,486	364,977	105,499	94,625	49,236	28,840	1,096,663
Average per Factory ..	19.99	22.08	18.67	22.34	11.94	17.31	19.98

3. Australia, 1938-39 and 1954-55 to 1958-59.—In the following table, factories in Australia are classified in broad groups for a series of years according to the number of persons employed:—

**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 .. ..	per	establish- ment .. ..	21,982	129,505	4,013	170,971	946	272,022	26,941	572,498
Average .. ..	..	.. ..	..	5.89	..	42.60	..	287.55	..	21.25
1954-55—										
Number .. ..	per	establish- ment .. ..	42,835	241,233	6,603	273,257	1,618	524,307	51,056	1,038,797
Average .. ..	..	.. ..	..	5.63	..	41.38	..	324.00	..	20.35
1955-56—										
Number .. ..	per	establish- ment .. ..	44,012	246,087	6,736	279,991	1,658	542,428	52,406	1,068,506
Average .. ..	..	.. ..	..	5.59	..	41.57	..	327.16	..	20.39
1956-57—										
Number .. ..	per	establish- ment .. ..	44,790	249,069	6,730	279,974	1,680	541,872	53,200	1,070,915
Average .. ..	..	.. ..	..	5.56	..	41.60	..	322.54	..	20.13
1957-58—										
Number .. ..	per	establish- ment .. ..	45,569	250,748	6,730	279,750	1,689	550,777	53,988	1,081,275
Average .. ..	..	.. ..	..	5.50	..	41.57	..	326.10	..	20.03
1958-59—										
Number .. ..	per	establish- ment .. ..	46,345	253,375	6,825	282,735	1,718	560,553	54,888	1,096,663
Average .. ..	..	.. ..	..	5.47	..	41.43	..	326.28	..	19.98



## § 4. Power Equipment in Factories.

1. General.—Since 1936–37, statistics of power equipment in factories relate to the “rated horse-power” of engines ordinarily in use and 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 1958–59, 344 factories were recorded as using no power other than manual.

2. Rated Horse-power of Engines in Factories other than Central Electric Stations.—The following table shows the total number of factories and the total rated horse-power of engines and electric motors ordinarily in use and in reserve or idle during 1958–59:—

**FACTORIES(a): TOTAL RATED HORSE-POWER OF ENGINES AND ELECTRIC MOTORS, 1958-59.**

State.	Factories.(a)	Rated Horse-power of Engines and Motors.	
		Ordinarily In Use.(b)	In Reserve or Idle (omitting obsolete).
New South Wales .. .. .	22,620	2,188,405	389,148
Victoria .. .. .	16,483	1,388,498	194,929
Queensland .. .. .	5,588	525,703	80,742
South Australia .. .. .	4,200	385,032	47,958
Western Australia .. .. .	4,037	254,395	36,718
Tasmania .. .. .	1,655	253,433	35,371
<b>Australia .. .. .</b>	<b>54,583</b>	<b>4,995,466</b>	<b>784,866</b>

(a) Includes Gas Works but excludes Central Electric Stations. (b) Excludes motors driven electricity generated in factories not classified as Central Electric Stations.

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, 1958-1959.**

State.	Steam.		Internal Combustion.			Water.	Motors driven by Electricity.		Total. (b)
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		Purchased.	Own Generation. (c)	
N.S.W. ..	75,620	146,189	861	41,526	16,774	150	1,907,285	89,997	2,188,405
Victoria ..	20,768	71,359	2,845	31,677	9,627	919	1,251,303	53,795	1,388,498
Queensland ..	74,819	63,832	2,638	16,215	11,078	..	357,121	97,941	525,703
S. Australia ..	7,414	9,550	981	7,867	9,346	10	349,864	23,930	385,032
W. Australia ..	10,912	11,640	3,495	15,736	9,203	..	203,409	5,282	254,395
Tasmania ..	1,372	24	1	9,895	475	192	241,474	36	253,433
<b>Australia ..</b>	<b>190,905</b>	<b>302,594</b>	<b>10,821</b>	<b>122,916</b>	<b>56,503</b>	<b>1,271</b>	<b>4,310,356</b>	<b>270,981</b>	<b>4,995,466</b>

(a) Includes Gas Works but 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, and 1954-55 to 1958-59:—

**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.	Petrol or Other 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
1954-55 ..	225,192	202,162	7,407	103,954	93,465	1,695	3,398,135	226,625	4,032,010
1955-56 ..	223,147	254,497	8,746	112,944	90,314	1,641	3,674,373	243,800	4,365,662
1956-57 ..	214,875	262,559	7,973	120,533	74,060	1,431	3,860,595	260,708	4,542,026
1957-58 ..	204,854	266,659	9,487	118,106	64,498	1,770	4,062,006	274,287	4,727,380
1958-59 ..	190,905	302,594	10,821	122,916	56,503	1,271	4,310,356	270,981	4,995,466

(a) Includes Gas Works but excludes Central Electric Stations.

(b) Excludes particulars in column (c).

(iii) *In Classes of Industry, 1958-59.* 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(b), 1958-59.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metallic ferous Mine and Quarry Products .. .. .	92,824	53,686	20,357	23,126	17,009	15,433	222,435
II. Bricks, Pottery, Glass, etc. ..	53,595	35,715	8,551	9,799	11,047	2,396	121,103
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	165,686	145,861	11,193	21,706	43,795	12,304	400,545
IV. Industrial Metals, Machines, Conveyances .. .. .	1,185,050	443,841	98,470	177,298	69,505	63,406	2,037,570
V. Precious Metals, Jewellery, Plate .. .. .	5,168	4,238	1,172	997	645	59	12,279
VI. Textiles and Textile Goods (not Dress) .. .. .	55,801	106,975	7,154	8,263	2,868	8,248	189,309
VII. Skins and Leather (not Cloth- ing or Footwear) .. .. .	18,759	18,577	5,500	6,185	3,087	519	52,627
VIII. Clothing (except Knitted) ..	24,097	30,070	4,633	3,606	2,576	981	65,963
IX. Food, Drink and Tobacco ..	208,963	208,344	218,102	57,625	40,308	20,619	753,961
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	180,359	125,017	106,807	40,525	50,328	42,115	545,151
XI. Furniture of Wood, Bedding, etc. .. .. .	18,954	16,141	7,993	6,697	4,344	1,406	55,535
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	72,425	92,687	21,976	14,365	5,757	84,941	292,151
XIII. Rubber .. .. .	57,847	63,272	10,104	4,993	981	446	137,643
XIV. Musical Instruments .. .. .	1,665	312	51	12	8	..	2,048
XV. Miscellaneous Products .. ..	28,572	27,405	766	2,293	933	434	60,403
<b>Total, Classes I. to XV. ..</b>	<b>2,169,765</b>	<b>1,372,141</b>	<b>522,829</b>	<b>377,490</b>	<b>253,191</b>	<b>253,307</b>	<b>4,948,723</b>
<b>XVI. Gas Works .. ..</b>	<b>18,640</b>	<b>16,357</b>	<b>2,874</b>	<b>7,542</b>	<b>1,204</b>	<b>126</b>	<b>46,743</b>
<b>Grand Total .. ..</b>	<b>2,188,405</b>	<b>1,388,498</b>	<b>525,703</b>	<b>385,032</b>	<b>254,395</b>	<b>253,433</b>	<b>4,995,466</b>

(a) Excludes Central Electric Stations.

(b) Excludes motors driven by electricity generated in factories not classified as 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 1958–59 are given in the following table:—

CENTRAL ELECTRIC STATIONS: POWER EQUIPMENT, AUSTRALIA, 1958-59.

Particulars.	Capacity of Engines and Generators.						Total.
	Steam.		Internal Combustion.			Water.	
	Reciprocating.	Turbine.	Gas.	Petrol or Other Light Oils.	Heavy Oils.		
Engines installed .. Rated H.P.	5,346	5,628,240	10,902	21,842	305,514	1,566,490	7,538,334
Generators installed—							
Kilowatt capacity—							
Total installed .. kW	3,984	4,168,297	7,398	14,227	211,445	1,125,770	5,531,121
Effective capacity .. „	3,824	3,882,332	5,760	12,817	192,771	1,084,916	5,182,420
Horse-power equivalent—							
Total installed .. H.P.	5,340	5,587,519	9,917	19,071	283,438	1,509,072	7,414,357
Effective capacity .. „	5,126	5,204,188	7,721	17,181	258,406	1,454,308	6,946,930

NOTE.—The number of establishments classified as Central Electric Stations in 1958–59 was 305.

(ii) *States.* Details of the capacity of engines and generators installed in Central Electric Stations in each State in 1958–59 are given in the next table:—

CENTRAL ELECTRIC STATIONS: NUMBER AND POWER EQUIPMENT, 1958-59.

Particulars.	N.S.W.	Vic.	Q'and.	S. Aust.	W. Aust.	Tas.	Aust.
Central Electric Stations No.	64	44	63	35	88	11	305
Engines installed .. Rated H.P.	3,089,985	1,786,817	955,894	552,175	452,673	700,790	7,538,334
Generators installed—							
Kilowatt capacity—							
Total installed .. kW	2,276,091	1,309,751	712,384	406,050	330,090	496,755	5,531,121
Effective capacity .. "	2,125,148	1,276,788	564,329	399,881	324,699	491,575	5,182,420
Horse-power equivalent—							
Total installed .. H.P.	3,051,054	1,755,695	954,937	544,302	442,479	665,890	7,414,357
Effective capacity .. "	2,848,718	1,711,509	756,472	536,032	435,253	658,946	6,946,930

## § 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 "out-workers" (see para. 4 (ii), p. 173), 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 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. 165), 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 the years 1938–39 and 1954–55 to 1958–59 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
1954–55 ..	788,691	30,183	3.98	242,391	11,357	4.92	1,031,082	41,540	4.20
1955–56 ..	811,847	23,156	2.94	248,651	6,260	2.58	1,060,498	29,416	2.85
1956–57 ..	813,551	1,704	0.21	249,847	1,196	0.48	1,063,398	2,900	0.27
1957–58 ..	822,515	8,964	1.10	251,292	1,445	0.58	1,073,807	10,409	0.98
1958–59 ..	834,940	12,425	1.51	253,316	2,024	0.81	1,088,256	14,449	1.35

(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 mean population in each State and Australia:—

#### FACTORIES: EMPLOYMENT.

Year.	N.S.W.	Vic.	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
1954–55 ..	419,810	346,648	100,293	89,565	49,314	25,452	1,031,082
1955–56 ..	433,081	355,185	102,473	92,589	50,108	27,062	1,060,498
1956–57 ..	436,369	355,204	103,426	91,981	48,748	27,670	1,063,398
1957–58 ..	445,802	357,143	101,844	92,472	48,462	28,084	1,073,807
1958–59 ..	449,518	362,979	104,753	94,165	48,417	28,424	1,088,256

#### PERCENTAGE OF AUSTRALIAN TOTAL.

1938–39 ..	40.48	35.72	9.58	7.67	4.11	2.44	100
1954–55 ..	40.71	33.62	9.73	8.69	4.78	2.47	100
1955–56 ..	40.84	33.49	9.66	8.73	4.73	2.55	100
1956–57 ..	41.04	33.40	9.73	8.65	4.58	2.60	100
1957–58 ..	41.51	33.26	9.48	8.61	4.52	2.62	100
1958–59 ..	41.31	33.35	9.63	8.65	4.45	2.61	100

FACTORIES: EMPLOYMENT—*continued.*

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
PER 1,000 OF POPULATION.							
1938-39 ..	84	108	54	73	50	58	82
1954-55 ..	121	139	76	111	75	81	113
1955-56 ..	123	139	76	111	75	85	114
1956-57 ..	122	135	75	107	71	85	112
1957-58 ..	122	132	73	104	69	84	111
1958-59 ..	121	131	73	104	68	83	110

2. Rates of Increase, 1938-39 and 1954-55 to 1958-59.—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.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	1.74	0.02	3.82	-1.62	0.34	4.80	1.06
1954-55 ..	4.28	4.64	2.22	4.75	3.91	3.51	4.20
1955-56 ..	3.16	2.46	2.17	3.38	1.61	6.33	2.85
1956-57 ..	0.75	0.00	0.93	-0.66	-2.71	2.25	0.27
1957-58 ..	2.18	0.55	-1.53	0.53	-0.59	1.50	0.98
1958-59 ..	0.83	1.63	2.86	1.83	-0.09	1.21	1.35

NOTE.—Minus sign (—) indicates decrease.

3. Persons Employed in Industrial Classes.—(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 and 1954-55 to 1958-59:—

## FACTORIES: PERSONS EMPLOYED IN INDUSTRIAL CLASSES, AUSTRALIA.

Class of Industry.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	10,343	20,560	20,893	20,318	20,883	21,093
II. Bricks, Pottery, Glass, etc. ..	15,709	22,549	22,914	22,162	22,448	23,093
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	19,816	41,324	44,718	45,753	46,986	47,876
IV. Industrial Metals, Machines, Conveyances ..	177,677	422,124	444,274	447,405	459,345	469,446
V. Precious Metals, Jewellery, Plate ..	3,726	6,029	5,894	6,053	5,905	5,483
VI. Textiles and Textile Goods (not Dress)	46,082	69,046	68,356	70,176	68,875	67,467
VII. Skins and Leather (not Clothing or Footwear) ..	10,767	14,502	13,810	13,454	13,171	12,935
VIII. Clothing (except Knitted) ..	86,092	112,802	110,820	109,266	106,947	106,098
IX. Food, Drink and Tobacco ..	83,846	125,934	126,493	124,723	123,471	125,408
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	30,739	61,153	61,914	60,008	59,238	60,101
XI. Furniture of Wood, Bedding, etc. ..	15,287	21,342	21,508	21,258	22,099	22,110
XII. Paper, Stationery, Printing, Book-binding, etc. ..	39,913	59,777	62,713	64,719	66,285	68,327
XIII. Rubber ..	7,502	16,325	17,287	17,844	18,105	18,467
XIV. Musical Instruments ..	451	1,623	1,739	1,902	1,101	1,025
XV. Miscellaneous Products ..	7,727	19,962	20,967	21,746	22,332	22,286
Total, Classes I. to XV. ..	555,677	1,015,052	1,044,300	1,046,787	1,057,191	1,071,215
XVI. Heat, Light and Power ..	9,429	16,030	16,198	16,611	16,616	17,041
Grand Total ..	565,106	1,031,082	1,060,498	1,063,398	1,073,807	1,088,256

(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, 1958-59.**

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metallic Mine and Quarry Products .. ..	8,330	6,522	1,931	2,037	1,497	776	21,093
II. Bricks, Pottery, Glass, etc. ..	11,984	5,846	1,324	2,167	1,415	357	23,093
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	21,995	17,392	1,835	3,182	2,668	804	47,876
IV. Industrial Metals, Machines, Conveyances .. ..	212,456	139,115	37,012	51,952	19,380	9,531	469,446
V. Precious Metals, Jewellery, Plate .. ..	2,348	2,150	297	443	224	21	5,483
VI. Textiles and Textile Goods (not Dress) .. ..	21,570	37,500	2,133	2,556	926	2,782	67,467
VII. Skins and Leather (not Clothing or Footwear) .. ..	5,365	4,559	1,147	1,201	593	70	12,935
VIII. Clothing (except Knitted) ..	43,393	45,783	7,757	4,994	3,317	854	106,098
IX. Food, Drink and Tobacco ..	38,468	37,383	27,414	10,828	6,704	4,611	125,408
X. Sawmills, Joinery, Boxes, etc. Wood Turning and Carving ..	20,073	15,092	10,624	5,041	5,722	3,549	60,101
XI. Furniture of Wood, Bedding, etc. .. ..	9,002	6,492	2,908	1,969	1,306	433	22,110
XII. Paper, Stationery, Printing, Bookbinding, etc. .. ..	28,844	22,846	5,958	4,103	2,609	3,967	68,327
XIII. Rubber .. ..	7,813	7,207	1,759	1,241	282	165	18,467
XIV. Musical Instruments .. ..	648	247	60	34	36	1	1,025
XV. Miscellaneous Products .. ..	10,350	9,863	599	829	450	195	22,286
<i>Total Classes I. to XV.</i> .. ..	<i>442,639</i>	<i>357,997</i>	<i>102,758</i>	<i>92,577</i>	<i>47,129</i>	<i>28,115</i>	<i>1,071,215</i>
XVI. Heat, Light and Power .. ..	6,879	4,982	1,995	1,588	1,288	309	17,041
<b>Grand Total .. ..</b>	<b>449,518</b>	<b>362,979</b>	<b>104,753</b>	<b>94,165</b>	<b>48,417</b>	<b>28,424</b>	<b>1,088,256</b>

4. *Persons Employed According to Occupational Grouping.*—(i) *General.* In the following table, the average number of persons employed in each State during 1958-59 is classified according to occupational grouping. 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 para. 1 of this section (*see p. 170*).

**FACTORIES: PERSONS EMPLOYED—OCCUPATIONAL GROUPING, 1958-59.**

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 ..	16,034	55,649	7,336	19,804	348,478	2,217	449,518
Victoria ..	13,704	42,960	6,152	17,208	280,828	2,127	362,979
Queensland ..	4,912	10,539	1,185	4,210	83,510	397	104,753
South Australia ..	2,986	11,513	1,806	4,527	72,976	357	94,165
Western Australia ..	2,732	4,268	470	2,171	38,682	94	48,417
Tasmania ..	1,033	2,937	598	1,371	22,354	131	28,424
<i>Total Males ..</i>	<i>35,720</i>	<i>78,631</i>	<i>15,903</i>	<i>45,688</i>	<i>654,599</i>	<i>4,399</i>	<i>834,940</i>
<i>Total Females ..</i>	<i>5,681</i>	<i>49,235</i>	<i>1,644</i>	<i>3,603</i>	<i>192,229</i>	<i>924</i>	<i>253,316</i>
<b>Total Persons ..</b>	<b>41,401</b>	<b>127,866</b>	<b>17,547</b>	<b>49,291</b>	<b>846,828</b>	<b>5,323</b>	<b>1,088,256</b>

(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, persons working regularly at home for factories are now included with carters, messengers and others and separate details are no longer available.

5. *Monthly Employment, 1938-39 and 1954-55 to 1958-59.*—(i) *Australia.* 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 the year 1938-39 and on the last pay-day of the month in the later years:—

### FACTORIES: MONTHLY EMPLOYMENT, AUSTRALIA.

(EXCLUDING WORKING PROPRIETORS.)

Month.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
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#### MALES.

July .. ..	387,693	739,450	768,382	775,580	781,156	794,374
August .. ..	389,979	741,435	770,312	774,506	780,630	794,537
September .. ..	391,576	743,638	771,715	774,119	782,988	795,464
October .. ..	393,977	746,139	774,071	774,455	785,289	796,964
November .. ..	395,192	750,285	777,304	777,127	785,825	799,368
December .. ..	394,438	747,230	772,509	772,479	781,054	792,351
January .. ..	385,742	750,823	774,077	773,419	786,520	794,996
February .. ..	392,056	755,456	778,552	779,646	790,835	800,208
March .. ..	395,146	757,956	779,527	780,973	793,327	802,408
April .. ..	391,005	760,139	780,418	777,262	791,617	804,259
May .. ..	393,609	761,555	780,252	779,757	791,403	804,691
June .. ..	390,963	763,488	777,968	780,156	791,098	805,641

#### FEMALES.

July .. ..	147,282	231,222	238,883	240,918	242,399	244,610
August .. ..	149,294	232,603	240,857	241,429	243,489	245,349
September .. ..	151,159	234,818	243,289	243,199	245,019	245,882
October .. ..	152,473	236,930	244,840	245,130	246,360	246,199
November .. ..	152,806	238,146	244,582	245,006	247,805	247,098
December .. ..	151,165	236,804	242,366	242,175	244,653	244,235
January .. ..	141,853	236,664	240,574	243,191	245,340	243,625
February .. ..	151,883	242,008	247,841	248,336	250,891	249,847
March .. ..	154,854	242,573	247,209	250,728	252,918	250,384
April .. ..	152,614	239,460	244,588	245,873	247,439	249,209
May .. ..	150,693	238,450	243,989	244,054	245,855	248,365
June .. ..	148,601	238,529	242,548	242,966	244,052	248,915

#### PERSONS.

July .. ..	534,975	970,672	1,007,265	1,016,498	1,023,555	1,038,984
August .. ..	539,273	974,038	1,011,169	1,015,935	1,024,119	1,039,886
September .. ..	542,735	978,456	1,015,004	1,017,318	1,028,007	1,041,346
October .. ..	546,450	983,069	1,018,911	1,019,585	1,031,649	1,043,163
November .. ..	547,998	988,431	1,021,886	1,022,133	1,033,630	1,046,466
December .. ..	545,603	984,034	1,014,875	1,014,654	1,025,707	1,036,586
January .. ..	527,595	987,487	1,014,651	1,016,610	1,031,860	1,038,621
February .. ..	543,939	997,464	1,026,393	1,027,982	1,041,726	1,050,055
March .. ..	550,000	1,000,529	1,026,736	1,031,701	1,046,245	1,052,792
April .. ..	543,619	999,599	1,025,006	1,023,135	1,039,056	1,053,468
May .. ..	544,302	1,000,005	1,024,241	1,023,811	1,037,258	1,053,056
June .. ..	539,564	1,002,017	1,020,516	1,023,122	1,035,150	1,054,556

(ii) *States.* Particulars of the numbers employed in each State on the last pay-day of each month in 1958-59 are shown in the following table:—

**FACTORIES: MONTHLY EMPLOYMENT, 1958-59.**

(EXCLUDING WORKING PROPRIETORS.)

Month.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MALES.							
July .. ..	326,309	248,758	84,310	73,776	39,216	22,005	794,374
August .. ..	326,008	248,665	84,985	73,750	39,171	21,958	794,537
September .. ..	325,989	249,519	84,850	73,856	39,296	21,954	795,464
October .. ..	326,292	250,322	84,988	74,010	39,287	22,065	796,964
November .. ..	327,488	251,345	84,862	74,203	39,361	22,109	799,368
December .. ..	326,274	251,174	78,565	74,165	39,428	22,745	792,351
January .. ..	326,351	252,506	79,102	74,833	39,196	23,008	794,996
February .. ..	327,525	254,291	81,422	75,043	39,379	22,548	800,208
March .. ..	328,011	254,914	81,611	75,556	39,744	22,572	802,408
April .. ..	328,723	254,527	82,911	75,692	39,731	22,675	804,259
May .. ..	329,466	254,049	83,598	75,466	39,492	22,620	804,691
June .. ..	329,822	254,083	84,396	75,758	39,136	22,446	805,641

FEMALES.							
July .. ..	106,023	95,022	16,439	16,051	6,203	4,872	244,610
August .. ..	106,583	94,894	17,053	16,064	6,220	4,535	245,349
September .. ..	106,864	95,284	16,921	16,185	6,303	4,325	245,882
October .. ..	106,730	96,000	16,713	16,182	6,343	4,231	246,199
November .. ..	106,708	96,769	16,709	16,160	6,338	4,414	247,098
December .. ..	105,052	95,541	16,386	16,044	6,321	4,891	244,235
January .. ..	103,683	95,018	16,884	16,757	6,223	5,060	243,625
February .. ..	105,662	99,057	17,716	16,390	6,307	4,715	249,847
March .. ..	106,245	99,163	17,027	16,659	6,425	4,865	250,384
April .. ..	106,147	98,614	16,431	16,209	6,461	5,347	249,209
May .. ..	106,506	97,441	16,467	16,195	6,407	5,349	248,365
June .. ..	107,136	97,522	16,547	16,376	6,212	5,122	248,915

PERSONS.							
July .. ..	432,332	343,780	100,749	89,827	45,419	26,877	1,038,984
August .. ..	432,591	343,559	102,038	89,814	45,391	26,493	1,039,886
September .. ..	432,853	344,803	101,771	90,041	45,599	26,279	1,041,346
October .. ..	433,022	346,322	101,701	90,192	45,630	26,296	1,043,163
November .. ..	434,196	348,114	101,571	90,363	45,699	26,523	1,046,466
December .. ..	431,326	346,715	94,951	90,209	45,749	27,636	1,036,586
January .. ..	430,034	347,524	95,986	91,590	45,419	28,068	1,038,621
February .. ..	433,187	353,348	99,138	91,433	45,686	27,263	1,050,055
March .. ..	434,256	354,077	98,638	92,215	46,169	27,437	1,052,792
April .. ..	434,870	353,141	99,342	91,901	46,192	28,022	1,053,468
May .. ..	435,972	351,490	100,065	91,661	45,899	27,969	1,053,056
June .. ..	436,958	351,605	100,943	92,134	45,348	27,568	1,054,556



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, provides for a distribution of employees (excluding working proprietors) into seven age-groups from 1945-46 onwards, instead of three as in previous years. The particulars are collected as at June. The number employed in each age-group on the last pay-day in June, 1958 and 1959, are given below:—

**FACTORIES: DISTRIBUTION OF EMPLOYEES ACCORDING TO AGE, JUNE, 1958 AND 1959.**

(EXCLUDING WORKING PROPRIETORS.)

Age Group.	June, 1958.			June, 1959.		
	Males.	Females.	Persons.	Males.	Females.	Persons.
Under 16 years ..	8,710	6,924	15,634	8,411	7,234	15,645
16 years .. ..	13,817	9,180	22,997	13,556	8,957	22,513
17 " .. ..	16,347	9,790	26,137	16,532	9,878	26,410
18 " .. ..	16,802	10,025	26,827	17,085	9,639	26,724
19 " .. ..	16,337	9,421	25,758	16,099	9,069	25,168
20 " .. ..	15,315	8,737	24,052	15,189	8,468	23,657
21 " and over ..	703,770	189,975	893,745	718,769	195,670	914,439
<b>Total .. ..</b>	<b>791,098</b>	<b>244,052</b>	<b>1,035,150</b>	<b>805,641</b>	<b>248,915</b>	<b>1,054,556</b>

The following table shows the age distribution in sexes for Australia in June, 1939, and 1955 to 1959:—

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

(EXCLUDING WORKING PROPRIETORS.)

In June.	Under 16 Years.	16 Years.	17 Years.	18 Years.	19 Years.	20 Years.	21 Years and Over.	Total.
<b>MALES.</b>								
1939(a) ..	16,109	76,418					298,436	390,963
1955 ..	9,093	13,137	14,694	15,341	13,772	12,838	684,613	763,488
1956 ..	9,061	13,025	14,985	15,348	14,884	13,635	697,030	777,968
1957 ..	9,158	13,310	15,289	16,104	15,219	14,162	696,914	780,156
1958 ..	8,710	13,817	16,347	16,802	16,337	15,315	703,770	791,098
1959 ..	8,411	13,556	16,532	17,085	16,099	15,189	718,769	805,641
<b>FEMALES.</b>								
1939(a) ..	15,497	56,273					76,831	148,601
1955 ..	6,605	8,547	9,902	9,994	8,600	7,710	187,171	238,529
1956 ..	6,557	8,163	9,390	10,102	9,072	7,801	191,463	242,548
1957 ..	6,828	8,292	9,276	9,715	8,986	7,959	191,910	242,966
1958 ..	6,924	9,180	9,790	10,025	9,421	8,737	189,975	244,052
1959 ..	7,234	8,957	9,878	9,639	9,069	8,468	195,670	248,915
<b>PERSONS.</b>								
1939(a) ..	31,606	132,691					375,267	539,564
1955 ..	15,698	21,684	24,596	25,335	22,372	20,548	871,784	1,002,017
1956 ..	15,618	21,188	24,375	25,450	23,956	21,436	888,493	1,020,516
1957 ..	15,986	21,602	24,565	25,819	24,205	22,121	888,824	1,023,122
1958 ..	15,634	22,997	26,137	26,827	25,758	24,052	893,745	1,035,150
1959 ..	15,645	22,513	26,410	26,724	25,168	23,657	914,439	1,054,556

(a) Details for individual ages 16-20 years not available separately.

## § 6. Sex Distribution in Factories.

1. 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 and 1954–55 to 1958–59:—

## FACTORIES: MALES AND FEMALES EMPLOYED.

State.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
MALES.						
New South Wales ..	167,172	316,673	327,106	329,386	337,211	340,757
Victoria ..	136,218	251,675	258,006	258,119	259,404	263,847
Queensland ..	43,941	83,290	85,123	85,899	84,871	87,454
South Australia ..	35,406	73,714	76,144	75,543	75,909	77,427
Western Australia ..	18,704	42,294	43,340	42,122	42,039	41,951
Tasmania ..	11,150	21,045	22,128	22,482	23,081	23,504
Australia ..	412,591	788,691	811,847	813,551	822,515	834,940

FEMALES.						
New South Wales ..	61,609	103,137	105,975	106,983	108,591	108,761
Victoria ..	65,613	94,973	97,179	97,085	97,739	99,132
Queensland ..	10,169	17,003	17,350	17,527	16,973	17,299
South Australia ..	7,965	15,851	16,445	16,438	16,563	16,738
Western Australia ..	4,507	7,020	6,768	6,626	6,423	6,466
Tasmania ..	2,652	4,407	4,934	5,188	5,003	4,920
Australia ..	152,515	242,391	248,651	249,847	251,292	253,316

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 and 1954–55 to 1958–59:—

## FACTORIES: ANNUAL PERCENTAGE INCREASES OF MALES AND FEMALES EMPLOYED.

State.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
MALES.						
New South Wales ..	1.69	3.81	3.29	0.70	2.38	1.05
Victoria ..	0.04	4.56	2.52	0.04	0.50	1.71
Queensland ..	3.79	2.29	2.20	0.91	–1.20	3.04
South Australia ..	–2.39	4.33	3.30	–0.79	0.48	2.00
Western Australia ..	–0.30	4.59	2.47	–2.81	–0.20	–0.21
Tasmania ..	4.40	3.93	5.15	1.60	2.66	1.83
Australia ..	0.98	3.98	2.94	0.21	1.10	1.51

FEMALES.						
New South Wales ..	1.88	5.72	2.75	0.95	1.50	0.16
Victoria ..	–0.03	4.85	2.32	–0.10	0.88	1.43
Queensland ..	3.96	1.85	2.04	1.02	–3.16	1.92
South Australia ..	1.98	6.77	3.75	–0.04	0.76	1.06
Western Australia ..	3.06	..	–3.59	–2.10	–3.06	0.67
Tasmania ..	6.51	1.54	11.96	5.15	–3.57	–1.66
Australia ..	1.30	4.92	2.58	0.50	0.58	0.81

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 the proportion of males to females employed in each State. The following table shows particulars for the years 1938–39 and 1954–55 to 1958–59:—

**FACTORIES: MASCULINITY(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
1954–55 .. ..	307	265	490	465	602	478	325
1955–56 .. ..	309	265	491	463	640	448	327
1956–57 .. ..	308	266	490	460	636	433	326
1957–58 .. ..	311	265	500	458	655	461	327
1958–59 .. ..	313	266	506	463	649	478	330

(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, 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. In 1958–59, there were 330 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 1958–59, these industries accounted for 78.32 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 132 females to every 100 males and in Class VIII., Clothing, with 236 females to every 100 males. The following table shows the average number of males and females employed in each of the four classes in 1958–59:—

**MALES AND FEMALES EMPLOYED IN PARTICULAR INDUSTRIES, 1958–59.**

Class.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>MALES.</b>							
IV. Industrial Metals, etc. ..	185,261	122,383	34,650	46,066	18,459	8,989	415,808
VI. Textiles and Textile Goods ..	9,064	16,186	751	1,280	528	1,309	29,118
(not Dress) .. ..	12,085	14,028	2,255	1,651	1,129	367	31,515
VIII. Clothing (except Knitted) ..	26,878	26,988	23,314	7,959	5,290	3,163	93,592
IX. Food, Drink and Tobacco ..	107,469	84,262	26,484	20,471	16,545	9,676	264,907
All Other Classes .. ..	340,757	263,847	87,454	77,427	41,951	23,504	834,940
<b>Total</b> .. ..							
<b>FEMALES.</b>							
IV. Industrial Metals, etc. ..	27,195	16,732	2,362	5,886	921	542	53,638
VI. Textiles and Textile Goods ..	12,506	21,314	1,382	1,276	398	1,473	38,349
(not Dress) .. ..	31,308	31,755	5,502	3,343	2,188	487	74,583
VIII. Clothing (except Knitted) ..	11,590	10,395	4,100	2,869	1,414	1,448	31,816
IX. Food, Drink and Tobacco ..	26,162	18,936	3,953	3,364	1,545	970	54,930
All Other Classes .. ..	108,761	99,132	17,299	16,738	6,466	4,920	253,316
<b>Total</b> .. ..							

(ii) *Females Employed in Clothing Manufacture.* The employment of females in the several industries of Class VIII., Clothing, the class in which 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.

## EMPLOYMENT IN CLOTHING INDUSTRIES, FEMININITY(a), 1958-59.

Industry.	New South Wales.			Victoria.			Other States.		
	Males.	Fe-males.	Femi-ninity. (a)	Males.	Fe-males.	Femi-ninity. (a)	Males.	Fe-males.	Femi-ninity. (a)
Tailoring and Ready-made Clothing	3,024	14,548	481	2,750	6,963	253	985	3,136	318
Waterproof and Oilskin Clothing	109	495	454	143	404	283	6	11	183
Dressmaking, Hemstitching	117	1,302	1,113	1,172	7,280	621	139	2,418	1,740
Millinery	226	1,184	524	157	632	403	39	382	979
Shirts, Collars, Underclothing	502	4,378	872	762	5,859	769	166	1,922	1,158
Foundation Garments	120	1,443	1,203	237	1,516	640	22	152	691
Handkerchiefs, Ties and Scarves	162	1,019	629	81	355	438	24	115	479
Hats and Caps	452	481	106	162	174	107	26	107	412
Gloves	115	351	305	44	166	377	50	127	254
Boots and Shoes (not Rubber)	3,171	3,198	101	5,462	5,769	106	1,581	1,186	75
Boot and Shoe Repairing	1,493	134	9	817	91	11	759	71	9
Boot and Shoe Accessories	203	102	50	351	214	61	36	7	19
Umbrellas and Walking Sticks	44	94	214	25	63	252	21	42	200
Dyeworks and Cleaning (including Renovating and Repairing)	2,302	2,238	97	1,772	1,970	111	1,548	1,844	119
Other	45	341	758	93	299	322	..	..	..
Total	12,085	31,308	259	14,028	31,755	226	5,402	11,520	213

(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, among 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, 1958 and 1959.**—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 15,645 in June, 1959, was probably caused largely by the raising of the school leaving age in New South Wales and Tasmania and the high level of employment which has 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.			1958.			1959.		
	Males.	Females.	Persons.	Males.	Females.	Persons.	Males.	Females.	Persons.
New South Wales	5,759	7,084	12,843	2,575	1,929	4,504	2,453	2,175	4,628
Victoria	6,167	5,005	11,172	2,805	2,608	5,413	2,595	2,535	5,130
Queensland	1,790	1,334	3,124	1,588	1,151	2,739	1,571	1,226	2,797
South Australia	1,296	1,053	2,349	873	796	1,669	860	829	1,689
Western Australia	705	521	1,226	769	327	1,096	822	331	1,153
Tasmania	392	500	892	100	113	213	110	138	248
Australia	16,109	15,497	31,606	8,710	6,924	15,634	8,411	7,234	15,645

(a) Under sixteen years of age.

3. Industries Employing Child Labour.—The distribution of children employed in factories in June, 1959, and the proportion of children employed to total employees are given in the following table according to the class of industry:—

FACTORIES: CHILDREN(a) EMPLOYED, BY CLASSES, AUSTRALIA, JUNE, 1959.

Class of Industry.	Children Employed.		Total Employees. (b)		Proportion (per cent.) of Children Employed to Total Employees. (b)	
	Males.	Females.	Males.	Females.	Males.	Females.
Industrial Metals, Machines, Conveyances .. .. .	3,757	825	407,077	54,107	0.92	1.52
Textiles and Textile Goods (not Dress)	496	1,389	28,618	38,814	1.73	3.58
Clothing (except Knitted) .. .. .	552	2,946	26,222	72,632	2.11	4.06
Food, Drink and Tobacco .. .. .	957	726	87,882	29,218	1.09	2.48
Sawmills, Joinery, Boxes, etc. .. ..	714	75	52,249	3,159	1.37	2.37
Furniture of Wood, Bedding, etc. ..	446	89	16,323	3,885	2.73	2.29
Paper, Stationery, Printing, Bookbinding, etc. .. .. .	703	645	49,781	17,679	1.41	3.65
All other Industries .. .. .	786	539	137,489	29,421	0.57	1.83
<b>Total .. .. .</b>	<b>8,411</b>	<b>7,234</b>	<b>805,641</b>	<b>248,915</b>	<b>1.04</b>	<b>2.91</b>

(a) Under sixteen years of age.

(b) 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. Value of Production, Materials Used, Salaries and Wages.

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

1. General.—The gross value of factory output for 1958–59 was £4,491,932,000, of which £2,485,079,000 was the value of the materials used, including containers, etc., tools replaced and repairs to plant and buildings, and £164,252,000 the value of the power, fuel and light used. The difference between the sum of the last two amounts and the gross value of output, namely, £1,842,601,000, represents the net value of factory production, defined as “the value of consumable commodities produced during the year, deducting, so far as possible, the value of goods consumed in process of production other than depreciation (see para. 6 of this section, p. 185). The gross value of factory output and the value of materials used each contain inherent elements of duplication, as the output of some factories becomes the materials used in other factories. They therefore have little statistical significance. The net value of factory production indicates the relative importance of manufacturing in the Australian economy in constant money terms. The total amount of salaries and wages paid in factories in 1958–59 was £970,553,000. This figure, which excludes amounts drawn by working proprietors, was the highest ever recorded and shows an increase of £41,263,000 or 4.44 per cent. on that for the previous year.

2. Salaries and Wages Paid.—(i) *In Classes of Industry, 1958–59.* 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, 1958–59.**

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	8,555	6,521	1,829	2,001	1,275	757	20,938
II. Bricks, Pottery, Glass, etc. .. .	11,795	5,696	1,148	2,055	1,230	344	22,268
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .	23,046	18,080	1,668	3,009	2,704	924	49,431
IV. Industrial Metals, Machines, Conveyances .. .	208,183	133,215	30,221	47,755	15,606	9,249	444,229
V. Precious Metals, Jewellery, Plate .. .	1,909	1,815	201	335	145	14	4,419
VI. Textiles and Textile Goods (not Dress) .. .	16,847	29,398	1,325	2,010	722	2,080	52,382
VII. Skins and Leather (not Clothing or Footwear) .. .	4,669	3,896	905	1,074	500	53	11,097
VIII. Clothing (except Knitted) .. .	27,465	30,655	4,128	3,036	1,689	503	67,476
IX. Food, Drink and Tobacco .. .	32,932	32,545	25,206	8,874	5,347	3,696	108,600
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .	17,091	12,944	8,107	4,277	4,458	2,905	49,782
XI. Furniture of Wood, Bedding, etc. .. .	7,626	5,225	1,966	1,456	889	288	17,450
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .	27,993	22,626	4,971	3,651	2,280	4,359	65,880
XIII. Rubber .. .	7,844	7,254	1,412	1,292	215	147	18,164
XIV. Musical Instruments .. .	622	220	39	21	25	..	927
XV. Miscellaneous Products .. .	9,128	8,599	410	635	287	142	19,201
<i>Total, Classes I. to XV.</i> .. .	<i>405,705</i>	<i>318,689</i>	<i>83,536</i>	<i>81,481</i>	<i>37,372</i>	<i>25,461</i>	<i>952,244</i>
XVI. Heat, Light and Power .. .	7,310	5,647	1,961	1,664	1,360	367	18,309
<b>Grand Total .. .</b>	<b>413,015</b>	<b>324,336</b>	<b>85,497</b>	<b>83,145</b>	<b>38,732</b>	<b>25,828</b>	<b>970,553</b>

(ii) *Totals and Averages, 1938–39 and 1954–55 to 1958–59.* The following table 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.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>TOTAL AMOUNT PAID (£'000).</b>							
1938–39 .. .. .	44,606	36,027	10,887	8,169	4,574	2,480	106,743
1954–55 .. .. .	326,615	262,750	68,300	70,373	34,738	18,864	781,640
1955–56 .. .. .	359,023	286,944	72,460	76,237	37,207	21,598	853,469
1956–57 .. .. .	378,332	296,608	77,780	77,818	36,916	23,636	891,090
1957–58 .. .. .	396,692	310,540	78,958	79,844	37,935	25,321	929,290
1958–59 .. .. .	413,015	324,336	85,497	83,145	38,732	25,828	970,553
<b>AVERAGE PER EMPLOYEE (£.)</b>							
1938–39 .. .. .	201.77	185.64	210.78	195.57	207.90	188.31	196.31
1954–55 .. .. .	804.43	790.00	714.83	810.32	744.17	771.27	789.35
1955–56 .. .. .	860.91	841.16	740.93	848.43	785.23	828.65	837.35
1956–57 .. .. .	900.06	869.21	789.63	872.87	801.95	886.68	871.98
1957–58 .. .. .	923.40	904.81	814.86	891.80	829.22	936.70	900.46
1958–59 .. .. .	952.82	928.60	856.33	911.89	847.81	942.94	927.13

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, a large number of hands are employed in Class VIII., Clothing, comprising a relatively high percentage of women and children. The highest average wages per employee in 1958-59 were paid in New South Wales, Tasmania and Victoria, in that order.

The average earnings per employee rose annually from 1938-39 to 1943-44 when a 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 1958-59 reached a record level of slightly over £927.

(iii) *Total and Average Earnings of Males and Females, 1938-39 and 1954-55 to 1958-59.* Particulars for these years are given in the following table:—

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

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
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**MALES.**

**TOTAL AMOUNT PAID (£'000).**

1938-39 .. ..	38,272	29,006	9,920	7,488	4,129	2,234	91,049
1954-55 .. ..	274,467	213,377	61,125	62,942	31,748	16,736	660,395
1955-56 .. ..	302,880	234,784	64,918	68,213	34,236	19,146	724,177
1956-57 .. ..	318,612	241,587	69,873	69,645	33,895	20,878	754,490
1957-58 .. ..	334,245	253,342	70,954	71,153	34,938	22,516	787,148
1958-59 .. ..	348,302	265,615	77,049	74,268	35,647	23,138	824,019

**AVERAGE PER MALE EMPLOYEE (£).**

1938-39 .. ..	239.24	224.47	238.59	220.95	235.49	212.09	231.84
1954-55 .. ..	906.61	891.40	773.47	883.13	797.80	833.05	877.84
1955-56 .. ..	967.45	955.00	802.89	925.47	839.62	904.78	933.92
1956-57 .. ..	1,010.17	981.79	857.48	953.42	856.63	970.11	970.91
1957-58 .. ..	1,034.19	1,023.48	881.32	970.33	884.66	1,018.45	1,001.28
1958-59 .. ..	1,065.21	1,052.69	926.77	992.28	905.12	1,026.66	1,031.05

**FEMALES.**

**TOTAL AMOUNT PAID (£'000).**

1938-39 .. ..	6,334	7,021	967	681	445	246	15,694
1954-55 .. ..	52,148	49,373	7,175	7,431	2,990	2,128	121,245
1955-56 .. ..	56,143	52,160	7,542	8,024	2,971	2,452	129,292
1956-57 .. ..	59,720	55,020	7,907	8,174	3,021	2,758	136,600
1957-58 .. ..	62,447	57,198	8,004	8,691	2,997	2,805	142,142
1958-59 .. ..	64,713	58,721	8,448	8,877	3,085	2,690	146,534

**AVERAGE PER FEMALE EMPLOYEE (£).**

1938-39 .. ..	103.66	108.25	96.00	86.44	99.58	93.19	103.92
1954-55 .. ..	514.94	529.63	431.68	477.12	434.21	487.12	509.56
1955-56 .. ..	540.06	547.42	445.22	496.84	449.61	500.06	530.23
1956-57 .. ..	569.11	578.14	464.68	507.53	467.32	537.11	557.95
1957-58 .. ..	586.89	597.81	487.69	536.42	479.14	569.66	578.10
1958-59 .. ..	607.71	605.66	505.75	543.49	489.60	554.24	591.74

(iv) *Managers, Clerical Staff and Other Employees.* A further analysis of salaries and wages paid is given in the following table for 1958-59 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, 1958-59.**

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 .. .. .	2,772	475	17,571	120
II. Bricks, Pottery, Glass, etc. .. .. .	2,012	447	19,085	725
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	11,358	2,444	31,519	4,110
IV. Industrial Metals, Machines, Conveyances .. .. .	66,346	13,936	345,547	18,399
V. Precious Metals, Jewellery, Plate .. .. .	535	170	3,270	445
VI. Textiles and Textile Goods (not Dress) .. .. .	5,178	2,184	24,514	20,506
VII. Skins and Leather (not Clothing or Footwear) .. .. .	1,327	264	7,932	1,575
VIII. Clothing (except Knitted) .. .. .	4,983	2,612	20,894	38,987
IX. Food, Drink and Tobacco .. .. .	14,793	4,092	76,037	13,677
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	5,229	1,128	42,799	624
XI. Furniture of Wood, Bedding, etc. .. .. .	1,816	590	13,375	1,669
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	8,779	2,848	46,714	7,539
XIII. Rubber .. .. .	2,691	606	13,209	1,658
XIV. Musical Instruments .. .. .	117	22	713	76
XV. Miscellaneous Products .. .. .	2,909	890	11,784	3,618
<i>Total, Classes I. to XV.</i> .. .. .	130,845	32,708	674,963	113,728
XVI. Heat, Light and Power .. .. .	1,808	72	16,403	26
<b>Grand Total .. .. .</b>	<b>132,653</b>	<b>32,780</b>	<b>691,366</b>	<b>113,754</b>
Average paid per employee .. .. .	£ 1,403.46	£ 644.31	£ 981.10	£ 578.56

3. **Power, Fuel and Light Used.**—(i) *In Classes of Industry, 1958-59.* The expenditure by factories on power, fuel and light, including the value of lubricants and water, is of considerable importance; in 1958-59 it amounted to a new high level of £164,252,000 an increase of £5,454,000 as compared with the previous year and nearly eleven 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), 1958-59.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. .. .	2,817	2,235	870	960	508	369	7,759
II. Bricks, Pottery, Glass, etc. .. .. .	3,972	2,043	465	623	513	165	7,781
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. .. .	6,446	6,384	367	826	2,047	410	16,480
IV. Industrial Metals, Machines, Conveyances .. .. .	31,611	7,742	2,148	5,585	1,102	2,030	50,218
V. Precious Metals, Jewellery, Plate .. .. .	146	143	12	40	11	1	353
VI. Textiles and Textile Goods (not Dress) .. .. .	1,494	2,424	72	220	59	241	4,510
VII. Skins and Leather (not Clothing or Footwear) .. .. .	414	495	73	147	73	5	1,207
VIII. Clothing (except Knitted) .. .. .	907	966	175	130	84	41	2,303
IX. Food, Drink and Tobacco .. .. .	6,094	5,951	3,012	1,359	1,016	501	17,933
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving .. .. .	1,525	782	597	271	341	316	3,832
XI. Furniture of Wood, Bedding, etc. .. .. .	196	133	49	42	23	6	449
XII. Paper, Stationery, Printing, Bookbinding, etc. .. .. .	1,429	1,928	268	315	100	1,331	5,371
XIII. Rubber .. .. .	1,063	1,166	178	145	28	21	2,601
XIV. Musical Instruments .. .. .	39	11	1	(b)	(b)	..	51
XV. Miscellaneous Products .. .. .	614	606	13	56	16	5	1,310
<i>Total, Classes I. to XV.</i> .. .. .	58,767	33,009	8,300	10,719	5,921	5,442	122,158
XVI. Heat, Light and Power .. .. .	17,508	10,368	6,664	3,871	3,666	17	42,094
<b>Grand Total .. .. .</b>	<b>76,275</b>	<b>43,377</b>	<b>14,964</b>	<b>14,590</b>	<b>9,587</b>	<b>5,459</b>	<b>164,252</b>

(a) Includes value of lubricants and water.

(b) Less than £500.



(ii) *Values of Items, 1958-59.* 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), 1958-59.**

(£'000.)

Particulars.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black .. ..	20,707	3,009	8,266	(b) 3,971	2,537	1,290	39,779
.. Brown .. ..	..	7,582	..	..	..	..	7,582
Brown Coal Briquettes .. ..	..	1,464	..	..	..	..	1,464
Coke .. ..	12,555	842	481	2,949	213	328	17,368
Wood .. ..	453	559	383	372	378	199	2,345
Fuel Oil .. ..	9,746	11,272	1,274	2,321	3,533	721	28,867
Tar (Fuel) .. ..	947	164	19	95	22	22	1,270
Electricity .. ..	21,856	13,910	3,419	3,713	2,053	2,563	47,514
Gas .. ..	3,730	1,120	187	227	87	41	5,391
Other (Charcoal, etc.) .. ..	2,195	1,061	150	308	275	113	4,102
Water .. ..	2,761	1,543	418	397	260	91	5,470
Lubricating Oils .. ..	1,325	851	367	237	229	91	3,100
<b>Total .. ..</b>	<b>76,275</b>	<b>43,377</b>	<b>14,964</b>	<b>14,590</b>	<b>9,587</b>	<b>5,459</b>	<b>164,252</b>

(a) Includes value of lubricants and water. (b) Includes £1,308,000 the value of 651,000 tons of Leigh Creek coal.

(iii) *Quantities of Fuel Used, 1958-59.* The following table shows the quantities of fuel used in factories in each State during the year:—

**FACTORIES: QUANTITIES OF FUEL USED, 1958-59.**

Particulars.	Unit.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal, Black .. ..	'000 tons	5,983	483	1,820	(a) 1,119	582	265	10,252
.. Brown .. ..	"	..	10,582	..	..	..	..	10,582
Brown Coal Briquettes .. ..	"	..	305	..	..	..	..	305
Coke .. ..	"	2,097	86	43	309	19	18	2,572
Wood .. ..	"	204	275	214	199	281	89	1,262
Fuel Oil .. ..	'000 gals.	169,497	204,971	14,051	39,953	64,861	9,537	502,870
Tar (Fuel) .. ..	"	31,908	3,018	273	2,247	609	353	38,408

(a) Includes 651,000 tons of Leigh Creek coal.

(iv) *Total Value, 1938-39 and 1954-55 to 1958-59.* 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
1954-55 .. ..	60,925	31,767	11,620	12,897	8,046	3,127	128,382
1955-56 .. ..	66,469	34,598	11,980	12,830	9,053	4,097	139,027
1956-57 .. ..	71,445	40,381	13,130	14,130	9,225	4,799	153,110
1957-58 .. ..	73,452	42,762	13,152	14,933	9,425	5,074	158,798
1958-59 .. ..	76,275	43,377	14,964	14,590	9,587	5,459	164,252

(a) Includes value of lubricants and water.

4. *Value of Materials Used.*—(i) *In Classes of Industry, 1958-59.* 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 1958-59 reached £2,485,079,000, representing

55.3 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, 1958-59.(a)**

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	30,561	13,801	4,339	4,617	2,605	1,276	57,199
II. Bricks, Pottery, Glass, etc. ..	10,892	5,254	1,002	2,381	774	232	20,535
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	127,282	100,165	9,266	12,654	34,501	2,400	286,268
IV. Industrial Metals, Machines, Conveyances ..	481,180	213,429	53,850	93,917	22,293	16,914	881,583
V. Precious Metals, Jewellery, Plate ..	1,859	1,984	95	223	75	9	4,245
VI. Textiles and Textile Goods (not Dress) ..	38,243	67,531	4,332	3,989	3,474	4,767	122,336
VII. Skins and Leather (not Clothing or Footwear) ..	12,877	10,649	2,713	4,099	974	224	31,536
VIII. Clothing (except Knitted) ..	46,899	49,765	4,962	3,531	2,009	440	107,606
IX. Food, Drink and Tobacco ..	170,412	182,920	164,182	38,417	26,827	16,499	599,257
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	39,146	27,430	16,841	10,435	7,409	6,431	107,692
XI. Furniture of Wood, Bedding, etc. ..	16,110	10,134	4,100	2,789	1,882	536	35,551
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	52,893	51,224	8,725	6,320	3,330	8,140	130,632
XIII. Rubber ..	18,055	17,876	3,531	1,864	366	205	41,897
XIV. Musical Instruments ..	945	226	29	9	13		1,222
XV. Miscellaneous Products ..	15,815	19,929	504	1,064	385	83	37,780
<i>Total, Classes I. to XV.</i> ..	<i>1,063,169</i>	<i>772,317</i>	<i>278,471</i>	<i>186,309</i>	<i>106,917</i>	<i>58,156</i>	<i>2,465,339</i>
XVI. Heat, Light and Power ..	7,693	6,399	2,286	2,049	936	377	19,740
<b>Grand Total ..</b> ..	<b>1,070,862</b>	<b>778,716</b>	<b>280,757</b>	<b>188,358</b>	<b>107,853</b>	<b>58,533</b>	<b>2,485,079</b>

(a) *See* para. 1 of this section, p. 179.

(ii) *Total Amount, 1938-39 and 1954-55 to 1958-59.* The following table shows the value of materials used in factories for these years:—

**FACTORIES: VALUE OF MATERIALS USED.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	120,502	82,971	42,596	20,309	9,604	5,321	281,303
1954-55 ..	802,617	616,666	224,336	169,136	80,583	47,360	1,940,698
1955-56 ..	884,582	674,846	231,584	183,196	96,360	53,751	2,124,319
1956-57 ..	948,393	707,729	244,974	184,209	104,969	56,909	2,247,183
1957-58 ..	1,016,928	768,459	248,647	183,880	111,525	56,922	2,386,361
1958-59 ..	1,070,862	778,716	280,757	188,358	107,853	58,533	2,485,079

(a) *See* para. 1 of this section, p. 179.

**5. Value of Output.**—(i) *In Classes of Industry, 1958-59.* The value of the output of factories in the various classes in each State in 1958-59 is shown in the following table. It represents the selling value at the factory (excluding delivery costs and charges) 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 net value of factory production (*see* paras. 1 and 6 of this section).

## FACTORIES: VALUE OF OUTPUT, 1958-59.(a)

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	50,900	29,341	9,218	10,288	6,154	3,030	108,931
II. Bricks, Pottery, Glass, etc. ..	34,819	16,946	3,718	6,862	3,436	964	66,765
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	209,516	161,713	14,668	22,251	50,058	5,738	463,944
IV. Industrial Metals, Machines, Conveyances ..	872,213	435,371	105,256	171,026	48,333	35,386	1,667,585
V. Precious Metals, Jewellery, Plate ..	5,276	5,290	428	785	365	36	12,180
VI. Textiles and Textile Goods (not Dress) ..	70,793	123,507	6,679	7,891	4,997	8,605	222,472
VII. Skins and Leather (not Clothing or Footwear) ..	20,594	17,345	4,480	5,979	1,859	307	50,564
VIII. Clothing (except Knitted) ..	93,549	100,812	11,674	8,406	4,866	1,346	220,653
IX. Food, Drink and Tobacco ..	258,603	259,774	214,036	55,789	39,191	24,359	851,752
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	72,237	50,860	31,154	17,763	15,442	12,212	199,668
XI. Furniture of Wood, Bedding, etc. ..	29,155	19,837	7,508	5,339	3,407	1,017	66,263
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	108,301	99,012	18,565	13,560	7,857	20,391	267,686
XIII. Rubber ..	30,497	34,582	6,735	4,165	816	508	77,303
XIV. Musical Instruments ..	2,578	596	84	42	50	..	3,350
XV. Miscellaneous Products ..	34,160	37,439	1,146	2,379	919	277	76,320
<i>Total, Classes I. to XV.</i>	<i>1,893,191</i>	<i>1,392,425</i>	<i>435,349</i>	<i>332,525</i>	<i>187,770</i>	<i>114,176</i>	<i>4,355,436</i>
XVI. Heat, Light and Power ..	59,261	38,616	15,837	10,233	8,432	4,117	136,496
<b>Grand Total ..</b>	<b>1,952,452</b>	<b>1,431,041</b>	<b>451,186</b>	<b>342,758</b>	<b>196,202</b>	<b>118,293</b>	<b>4,491,932</b>

(a) See para. 1 of this section, p. 179.

(ii) *Total, 1938-39 and 1954-55 to 1958-59.* The following table shows the value of output in each State during these years:—

## FACTORIES: VALUE OF OUTPUT.(a)

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	218,420	152,967	63,321	35,005	19,549	11,158	500,420
1954-55 ..	1,446,669	1,100,656	356,017	293,061	149,585	88,601	3,434,589
1955-56 ..	1,595,137	1,201,392	371,644	316,962	175,146	103,779	3,764,060
1956-57 ..	1,726,637	1,276,141	396,504	325,105	187,636	110,390	4,022,413
1957-58 ..	1,848,242	1,377,697	405,757	332,098	196,262	113,826	4,273,882
1958-59 ..	1,952,452	1,431,041	451,186	342,758	196,202	118,293	4,491,932

(a) See para. 1 of this section p. 179.

6. *Value of Production.*—(i) *In Classes of Industry, 1958-59.* 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. The net value of production as given in the following tables is obtained therefore, by deducting only "value of materials used" and "value of fuel used" from the "value of output".

Only certain selected items of costs are recorded in the annual census of production. It must not, therefore, 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, as many miscellaneous expenses such as taxation, insurance, advertising and other overhead charges, as well as depreciation, also have to be taken into account.

The value of factory production, therefore, approximates "net value added" in the manufacturing process. In 1958-59, it amounted to £1,843 million to which Class IV., Industrial Metals, etc., with £736 million made the greatest contribution. The net value of production in 1958-59 showed an increase of £114 million (6.60 per cent.) over the figure for 1957-58 and £1,639 million over the value of production recorded in 1938-39.

The following table shows the value of production in 1958-59 in each State for the various classes of industry:—

#### FACTORIES: VALUE OF PRODUCTION, 1958-59.(a)

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	17,522	13,305	4,009	4,711	3,041	1,385	43,973
II. Bricks, Pottery, Glass, etc. ..	19,955	9,649	2,251	3,858	2,169	567	38,449
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	75,788	55,164	5,035	8,771	13,510	2,928	161,196
IV. Industrial Metals, Machines, Conveyances ..	359,422	214,200	49,258	71,524	24,938	16,442	735,784
V. Precious Metals, Jewellery, Plate ..	3,271	3,163	321	522	279	26	7,582
VI. Textiles and Textile Goods (not Dress) ..	31,056	53,552	2,275	3,682	1,464	3,597	95,626
VII. Skins and Leather (not Clothing or Footwear) ..	7,303	6,201	1,694	1,733	812	78	17,821
VIII. Clothing (except Knitted) ..	45,743	50,081	6,537	4,745	2,773	865	110,744
IX. Food, Drink and Tobacco ..	82,097	70,903	46,842	16,013	11,348	7,359	234,562
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	31,566	22,648	13,716	7,057	7,692	5,465	88,144
XI. Furniture of Wood, Bedding, etc. ..	12,849	9,570	3,359	2,508	1,502	475	30,263
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	53,979	45,860	9,572	6,925	4,427	10,920	131,683
XIII. Rubber ..	11,379	15,540	3,026	2,156	422	282	32,805
XIV. Musical Instruments ..	1,594	359	54	33	37	..	2,077
XV. Miscellaneous Products ..	17,731	16,904	629	1,259	518	189	37,230
Total, Classes I. to XV.	771,255	587,099	148,578	135,497	74,932	50,578	1,767,939
XVI. Heat, Light and Power ..	34,060	21,849	6,887	4,313	3,830	3,723	74,662
Grand Total. ..	805,315	608,948	155,465	139,810	78,762	54,301	1,842,601

(a) See para. 1 of this section, p. 179.

(ii) *Total and Averages, 1938-39 and 1954-55 to 1958-59.* 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 in 1938-39 to £185.14 in 1958-59. For value per person employed, the increase was not quite so pronounced (from £360 per head in 1938-39 to £1,693 in 1958-59).

## FACTORIES: VALUE OF PRODUCTION.(a)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
VALUE. (£'000.)							
1938-39 .. ..	90,266	65,996	19,302	13,678	8,776	5,399	203,417
1953-54 .. ..	520,043	408,314	110,255	100,221	55,147	33,065	1,227,045
1954-55 .. ..	583,127	452,223	120,061	111,028	60,956	38,114	1,365,509
1955-56 .. ..	644,086	491,948	128,080	120,936	69,733	45,931	1,500,714
1956-57 .. ..	706,799	528,031	138,400	126,766	73,442	48,682	1,622,120
1957-58 .. ..	757,862	566,476	143,958	133,285	75,312	51,830	1,728,723
1958-59 .. ..	805,315	608,948	155,465	139,810	78,762	54,301	1,842,601

## PER PERSON EMPLOYED. (£.)

1938-39 .. ..	395	327	357	315	378	391	360
1953-54 .. ..	1,292	1,233	1,124	1,172	1,162	1,345	1,240
1954-55 .. ..	1,389	1,305	1,197	1,240	1,236	1,497	1,324
1955-56 .. ..	1,487	1,385	1,250	1,306	1,392	1,697	1,415
1956-57 .. ..	1,620	1,487	1,343	1,378	1,507	1,759	1,525
1957-58 .. ..	1,700	1,586	1,414	1,441	1,554	1,846	1,610
1958-59 .. ..	1,792	1,678	1,484	1,485	1,627	1,910	1,693

## PER HEAD OF POPULATION. (£.)

1938-39 .. ..	33.00	35.25	19.14	22.98	18.80	22.72	29.34
1953-54 .. ..	152.70	168.53	84.78	127.50	87.44	106.85	137.86
1954-55 .. ..	168.56	181.75	90.59	137.50	93.93	121.78	150.22
1955-56 .. ..	182.75	191.80	94.69	144.93	104.23	143.90	161.10
1956-57 .. ..	196.99	200.00	100.26	147.17	107.29	149.27	170.12
1957-58 .. ..	207.16	209.25	102.59	150.44	107.81	155.13	178.45
1958-59 .. ..	216.14	219.38	109.02	153.93	110.58	159.11	185.14

(a) See para. 1 of this section, p. 179.

## § 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 1958-59:—

FACTORIES: VALUE OF LAND, BUILDINGS, PLANT AND MACHINERY(a), 1958-59.  
(£'000.)

Value of—	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Land and buildings	400,273	309,833	68,995	66,278	40,690	61,830	947,899
Plant and machinery	459,678	337,107	112,528	84,749	66,097	48,226	1,108,385
Total ..	859,951	646,940	181,523	151,027	106,787	110,056	2,056,284

(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. Consequently, the totals shown in the table 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 and 1954-55 to 1958-59:—

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

Class of Industry.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	2,779	9,103	11,228	12,686	13,714	15,175
II. Bricks, Pottery, Glass, etc. ..	2,954	9,849	11,301	14,498	14,986	16,580
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	7,377	44,658	61,863	67,719	70,090	76,645
IV. Industrial Metals, Machines, Conveyances ..	34,841	184,934	218,667	252,837	300,343	336,282
V. Precious Metals, Jewellery, Plate ..	633	2,888	3,233	3,525	3,777	3,845
VI. Textiles and Textile Goods (not Dress) ..	6,000	29,651	31,931	37,010	40,199	46,671
VII. Skins and Leather (not Clothing or Footwear) ..	2,096	6,452	6,288	7,074	7,221	7,702
VIII. Clothing (except Knitted) ..	10,624	31,163	33,920	37,203	39,855	43,203
IX. Food, Drink and Tobacco ..	33,273	94,070	108,335	118,413	129,073	138,625
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	4,107	21,225	23,141	25,347	28,464	30,656
XI. Furniture of Wood, Bedding, etc. ..	2,533	8,981	9,915	11,223	12,992	14,677
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	10,639	34,156	40,256	44,912	52,854	61,059
XIII. Rubber ..	1,676	7,430	8,581	9,563	11,688	12,821
XIV. Musical Instruments ..	105	528	621	987	636	730
XV. Miscellaneous Products ..	1,433	8,299	9,946	11,491	12,922	14,688
<i>Total, Classes I. to XV. ..</i>	<i>121,070</i>	<i>493,387</i>	<i>579,226</i>	<i>654,488</i>	<i>738,814</i>	<i>819,359</i>
XVI. Heat, Light and Power ..	9,850	62,609	74,348	105,199	110,222	128,540
<b>Grand Total .. ..</b>	<b>130,920</b>	<b>555,996</b>	<b>653,574</b>	<b>759,687</b>	<b>849,036</b>	<b>947,899</b>

(a) Includes estimated value of rented premises.

(ii) *In Classes of Industry in States, 1958-59.* The following table gives particulars of the various classes of industry in each State:—

**FACTORIES: VALUE OF LAND AND BUILDINGS(a), 1958-59.**  
(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	5,214	5,212	1,102	1,450	1,492	705	15,175
II. Bricks, Pottery, Glass, etc. ..	9,024	4,051	913	1,057	1,251	284	16,580
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	36,452	29,873	1,506	2,893	4,835	1,086	76,645
IV. Industrial Metals, Machines, Conveyances ..	161,700	106,642	18,121	27,494	12,659	9,666	336,282
V. Precious Metals, Jewellery, Plate ..	1,600	1,582	128	332	175	28	3,845
VI. Textiles and Textile Goods (not Dress) ..	15,157	26,671	886	1,819	662	1,476	46,671
VII. Skins and Leather (not Clothing or Footwear) ..	3,286	3,001	360	648	296	111	7,702
VIII. Clothing (except Knitted) ..	17,620	18,609	2,501	2,027	1,699	747	43,203
IX. Food, Drink and Tobacco ..	44,774	46,878	22,665	10,793	8,123	5,392	138,625
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	12,132	8,379	2,936	3,841	1,826	1,542	30,656
XI. Furniture of Wood, Bedding, etc. ..	6,015	4,818	1,632	1,147	799	266	14,677
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	26,365	19,696	4,273	3,230	1,794	5,701	61,059
XIII. Rubber ..	4,872	4,979	1,383	980	386	221	12,821
XIV. Musical Instruments ..	406	228	27	37	32	..	730
XV. Miscellaneous Products ..	7,047	6,378	340	458	350	115	14,688
<i>Total, Classes I. to XV. ..</i>	<i>351,664</i>	<i>286,997</i>	<i>58,773</i>	<i>58,206</i>	<i>36,379</i>	<i>27,340</i>	<i>819,359</i>
XVI. Heat, Light and Power ..	48,609	22,836	10,222	8,072	4,311	34,490	128,540
<b>Grand Total .. ..</b>	<b>400,273</b>	<b>309,833</b>	<b>68,995</b>	<b>66,278</b>	<b>40,690</b>	<b>61,830</b>	<b>947,899</b>

(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 and 1954-55 to 1958-59:—

**FACTORIES: VALUE OF LAND AND BUILDINGS.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 .. ..	57,353	42,026	12,299	8,711	6,814	3,717	130,920
1954-55 .. ..	221,519	186,324	46,187	42,133	30,230	29,603	555,996
1955-56 .. ..	260,268	212,913	52,602	48,353	32,859	46,579	653,574
1956-57 .. ..	303,981	249,716	58,654	55,343	35,520	56,473	759,687
1957-58 .. ..	350,169	277,557	63,927	61,084	36,846	59,453	849,036
1958-59 .. ..	400,273	309,833	68,995	66,278	40,690	61,830	947,899

(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, an increase 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 it stood at £947.9 million in 1958-59.

3. *Value of Plant and Machinery.*—(i) *Total for Australia, 1938-39 and 1954-55 to 1958-59.* 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.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
I. Treatment of Non-metalliferous Mine and Quarry Products ..	7,028	20,625	23,512	27,351	30,623	35,099
II. Bricks, Pottery, Glass, etc. ..	3,145	11,000	12,319	13,138	13,443	14,564
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease ..	6,754	97,508	125,016	127,732	137,520	153,820
IV. Industrial Metals, Machines, Conveyances ..	33,038	168,651	202,286	251,161	289,969	319,665
V. Precious Metals, Jewellery, Plate ..	197	1,094	1,219	1,374	1,388	1,348
VI. Textiles and Textile Goods (not Dress) ..	6,658	29,658	31,155	32,570	36,400	41,380
VII. Skins and Leather (not Clothing or Footwear) ..	973	4,153	4,225	4,332	4,240	4,348
VIII. Clothing (except Knitted) ..	2,557	13,452	14,340	15,699	15,621	16,407
IX. Food, Drink and Tobacco ..	32,101	101,700	115,904	124,406	131,708	138,940
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	3,907	21,827	23,626	25,045	27,043	29,121
XI. Furniture of Wood, Bedding, etc. ..	728	3,186	3,388	3,632	3,802	4,130
XII. Paper, Stationery, Printing, Bookbinding, etc. ..	9,188	46,129	51,405	53,755	59,509	63,757
XIII. Rubber ..	1,368	6,843	8,971	8,626	10,234	10,333
XIV. Musical Instruments ..	12	444	509	682	429	426
XV. Miscellaneous Products ..	758	6,614	7,459	8,515	10,417	11,077
<i>Total, Classes I. to XV. ..</i>	<i>108,412</i>	<i>532,884</i>	<i>625,334</i>	<i>698,018</i>	<i>771,986</i>	<i>844,415</i>
XVI. Heat, Light and Power ..	35,250	165,408	172,502	219,019	240,749	263,970
<b>Grand Total .. ..</b>	<b>143,662</b>	<b>698,292</b>	<b>797,835</b>	<b>917,037</b>	<b>1,012,735</b>	<b>1,108,385</b>

(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 factories in Australia. The increase in 1958-59 of £95.7 million over 1957-58 extended over practically all industrial classes. The greatest increase occurred in Class IV., Industrial Metals, Machines, Conveyances.

(ii) *Totals in each State.* The following table shows the value of plant and machinery in each State during the years 1938–39 and 1954–55 to 1958–59. During 1958–59, increases occurred in all States, New South Wales showing the largest increase, £43.8 million.

**FACTORIES: VALUE OF PLANT AND MACHINERY.(a)**

(£'000.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938–39 .. ..	62,693	38,627	18,095	9,750	8,095	6,402	143,662
1954–55 .. ..	258,596	226,347	76,367	52,145	54,958	29,879	698,292
1955–56 .. ..	298,913	252,590	85,777	63,596	56,534	40,425	797,835
1956–57 .. ..	363,310	283,868	89,904	71,847	63,272	44,836	917,037
1957–58 .. ..	415,838	302,263	104,598	79,336	63,840	46,860	1,012,735
1958–59 .. ..	459,678	337,107	112,528	84,749	66,097	48,226	1,108,385

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

(iii) *Value according to Class of Industry, 1958–59.* The following table shows the value of plant and machinery used in factories in each State during 1958–59 according to class of industry:—

**FACTORIES: VALUE OF PLANT AND MACHINERY(a), 1958–59.**

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products .. ..	17,194	8,315	3,099	3,700	2,037	754	35,099
II. Bricks, Pottery, Glass, etc. ..	8,131	3,286	947	920	1,095	185	14,564
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease .. ..	61,686	58,002	2,492	5,611	23,646	2,383	153,820
IV. Industrial Metals, Machines, Conveyances .. ..	177,655	83,490	11,692	26,858	9,309	10,661	319,665
V. Precious Metals, Jewellery, Plate .. ..	586	540	40	128	46	8	1,348
VI. Textiles and Textile Goods (not Dress) .. ..	13,587	21,696	982	2,204	427	2,484	41,380
VII. Skins and Leather (not Clothing or Footwear) .. ..	1,748	1,489	376	507	199	29	4,348
VIII. Clothing (except Knitted) ..	5,899	7,501	1,177	988	597	245	16,407
IX. Food, Drink and Tobacco ..	38,643	39,848	39,428	9,671	6,241	5,109	138,940
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving ..	8,905	6,684	5,042	3,632	2,405	2,453	29,121
XI. Furniture of Wood, Bedding, etc. .. ..	1,591	1,270	496	442	263	68	4,130
XII. Paper, Stationery, Printing, Bookbinding, etc. .. ..	21,682	22,065	6,381	3,250	1,710	8,669	63,757
XIII. Rubber .. ..	4,007	4,529	843	578	249	127	10,333
XIV. Musical Instruments .. ..	340	72	5	6	3	..	426
XV. Miscellaneous Products .. ..	5,285	5,064	174	398	119	37	11,077
<i>Total, Classes I. to XV.</i> .. ..	366,939	263,851	73,174	58,893	48,346	33,212	844,415
XVI. Heat, Light and Power .. ..	92,739	73,256	39,354	25,856	17,751	15,014	263,970
<b>Grand Total .. ..</b>	<b>459,678</b>	<b>337,107</b>	<b>112,528</b>	<b>84,749</b>	<b>66,097</b>	<b>48,226</b>	<b>1,108,385</b>

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

**4. Depreciation of Land and Buildings and Plant and Machinery, 1958–59.**—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, 1958-59.**

(£'000.)

Class of Industry.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
I. Treatment of Non-metalliferous Mine and Quarry Products	2,023	912	375	440	199	88	4,037
II. Bricks, Pottery, Glass, etc.	1,050	504	127	148	127	28	1,984
III. Chemicals, Dyes, Explosives, Paints, Oils, Grease	6,464	5,979	292	731	2,291	566	16,323
IV. Industrial Metals, Machines, Conveyances	18,201	8,480	1,285	3,561	915	994	33,436
V. Precious Metals, Jewellery, Plate	58	51	5	13	5	1	133
VI. Textiles and Textile Goods (not Dress)	1,381	2,725	108	166	58	305	4,743
VII. Skins and Leather (not Clothing or Footwear)	166	136	36	28	27	3	396
VIII. Clothing (except Knitted)	670	624	116	92	62	29	1,593
IX. Food, Drink and Tobacco	4,180	4,819	3,925	1,091	704	569	15,288
X. Sawmills, Joinery, Boxes, etc., Wood Turning and Carving	898	720	559	328	249	286	3,040
XI. Furniture of Wood, Bedding, etc.	170	116	60	46	28	7	427
XII. Paper, Stationery, Printing, Bookbinding, etc.	2,367	3,056	803	369	221	886	7,702
XIII. Rubber	1,159	1,044	166	153	42	21	2,585
XIV. Musical Instruments	45	6	1	1	..	..	53
XV. Miscellaneous Products	659	812	20	46	16	6	1,559
<i>Total, Classes I. to XV.</i>	<i>39,491</i>	<i>29,984</i>	<i>7,878</i>	<i>7,213</i>	<i>4,944</i>	<i>3,789</i>	<i>93,299</i>
XVI. Heat, Light and Power	8,444	3,223	2,180	940	1,033	633	16,453
<b>Grand Total</b>	<b>47,935</b>	<b>33,207</b>	<b>10,058</b>	<b>8,153</b>	<b>5,977</b>	<b>4,422</b>	<b>109,752</b>

5. Land and Buildings, Plant and Machinery—Values, Additions and Replacements, Depreciation, 1938-39 and 1954-55 to 1958-59.—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.(a)		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
1954-55..	555,996	698,292	58,311	170,762	6,568	49,916
1955-56..	653,574	797,835	82,808	156,535	8,209	60,508
1956-57..	759,687	917,037	87,441	195,670	9,514	71,119
1957-58..	849,036	1,012,735	75,762	176,903	10,899	85,818
1958-59..	947,899	1,108,385	94,823	197,566	13,000	96,752

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

## § 10. Principal Factory Products.

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

The following table shows the total recorded production of some of the principal articles manufactured in Australia during the years ended 30th June, 1957 to 1959. A more complete list, together with values, where available, is published in the bulletin *Secondary Industries*.

## QUANTITY OF PRINCIPAL ARTICLES PRODUCED IN FACTORIES: AUSTRALIA.

Article.	Unit of Quantity.	1956-57.	1957-58.	1958-59.
Acid—				
Nitric .. .. .	Ton	15,520	14,837	15,331
Sulphuric .. .. .	"	878,763	991,624	986,193
Aerated and Carbonated Waters ..	'000 gals.	61,242	69,165	69,285
Asbestos Cement Building Sheets ..	'000 sq. yds.	25,444	26,026	26,846
Bacon and Ham .. .. .	'000 lb.	71,156	71,671	74,815
Bags, Leather, Fibre, etc.—				
Handbags—				
Leather .. .. .	No.	748,571	873,004	792,973
Plastic .. .. .	"	922,068	1,042,201	1,401,958
Other .. .. .	"	103,308	103,336	94,964
School Bags .. .. .	"	80,961	139,326	128,633
Suitcases (a) .. .. .	"	1,203,479	1,276,218	1,319,850
Trunks .. .. .	"	1,258	1,288	3,080
All other (b) .. .. .	"	326,685	693,011	1,068,481
Baking Powder .. .. .	lb.	650,272	585,096	585,156
Bath Heaters—				
Electric .. .. .	No.	14,698	12,415	12,533
Gas .. .. .	"	25,243	26,234	23,190
Solid Fuel .. .. .	"	33,691	31,581	30,185
Barbing Suits .. .. .	Doz.	165,758	180,941	156,082
Baths, C.I.P.E. .. .. .	No.	88,959	88,206	87,954
Batteries, Wet Cell Type—				
Auto (S.L.I.) 6 Volts .. .. .	No.	Not collected in this dissection	634,672	648,246
12 Volts .. .. .	"		618,139	664,172
Radio, etc. .. .. .	No. of 2 Volt Cells		235,701	233,560
Traction .. .. .	"		29,591	31,068
Other .. .. .	"		15,483	27,899
Beer (excluding Waste Beer) .. .. .	'000 gals.	220,728	226,449	223,597
Biscuits .. .. .	'000 lb.	162,536	165,529	172,340
Blankets .. .. .	'000	1,678	1,855	1,705
Bran (Wheaten) .. .. .	Ton (2,000 lb.)	287,653	230,416	228,461
Brassieres .. .. .	Doz.	423,441	477,600	494,541
Bricks, Clay .. .. .	'000	805,069	877,905	940,198
Brooms .. .. .	Gross	21,003	21,413	21,227
Brushes (c) .. .. .	"	78,753	99,565	106,777
Butter .. .. .	Ton	189,841	172,918	190,923
Candles .. .. .	Cwt.	10,354	7,444	8,588
Cardigans, Sweaters, etc. .. .. .	Doz.	1,149,192	1,256,668	1,175,782
Cement, Portland .. .. .	Ton	2,172,518	2,291,043	2,481,036
Cheese .. .. .	"	45,171	35,895	43,430
Cigarettes .. .. .	'000 lb.	30,513	32,748	35,255
Cleansing and Scouring Powders—				
Soap based (including Sand Soap) ..	Cwt.	78,168	72,586	64,466
Other .. .. .	"	101,184	127,127	136,241
Cloth—				
Cotton .. .. .	'000 sq. yds.	46,564	44,261	43,221
Woollen and Worsted (d) .. .. .	"	32,782	31,719	27,265
Coke—				
Metallurgical .. .. .	Ton	2,234,458	2,295,737	2,210,621
Other .. .. .	"	954,756	831,615	815,464
Confectionery—				
Chocolate .. .. .	'000 lb.	68,810	63,796	66,305
Other .. .. .	"	87,395	88,881	92,457
Coppers—				
Electric .. .. .	No.	21,890	20,943	20,717
Gas .. .. .	"	24,170	22,072	21,834
Inserts (all types) .. .. .	"	50,653	40,649	43,393
Cordials and Syrups .. .. .	'000 gals.	4,623	4,593	4,561
Corsets and Corselets .. .. .	Doz.	145,414	177,652	174,619
Cosmetic Creams and Lotions—				
Face Creams .. .. .	Cwt.	4,488	4,438	4,717
Hand Creams and Lotions .. .. .	"	8,939	8,473	9,164
Other Skin Creams and Lotions ..	"	6,865	6,817	7,389

(a) Includes kitbags, metal and bristle brushes.

(b) Excludes canvas waterbags.  
(d) Includes mixtures.

(c) Excludes tooth and industrial

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

Article.	Unit of Quantity.	1956-57.	1957-58.	1958-59.
Custard Powder .. .. .	'000 lb.	5,647	5,395	5,472
Cycles, Assembled .. .. .	No.	74,734	77,040	69,608
Dynamos—				
Alternators .. .. .	No.	389	443	330
Generators .. .. .	"	6,585	5,704	4,678
Electricity .. .. .	Mill. kWh	18,289	19,796	21,199
Engines—				
Diesel, other than Marine .. .. .	No.	2,642	2,556	1,670
Petrol—				
Marine .. .. .	"	1,780	3,130	4,388
Other (a) .. .. .	"	180,509	186,325	290,229
Essences, Flavouring—				
Culinary .. .. .	Gal.	120,714	119,264	120,686
Industrial .. .. .	"	345,999	335,055	347,452
Face Powder .. .. .	Cwt.	2,779	2,726	2,243
Fans, Electric .. .. .	No.	139,819	75,193	118,729
Fats, Edible—				
Dripping .. .. .	Cwt.	440,292	358,029	517,313
Other .. .. .	"	392,169	436,053	529,919
Fibrous Plaster Sheets .. .. .	'000 sq. yds.	16,257	17,496	18,341
Fish, Tinned (including Fish Loaf) .. .. .	'000 lb.	8,268	7,856	7,782
Floorboards—				
Australian Timber .. .. .	'000 super. ft.	124,656	129,737	139,163
Imported Timber .. .. .	"	2,657	3,441	2,691
Flour, Self-raising .. .. .	Cwt.	1,084,974	1,067,819	1,031,463
Flour, Wheaten (b) .. .. .	Ton (2,000 lb.)	1,662,977	1,373,457	1,363,868
Footwear (Not Rubber)—				
Boots, Shoes and Sandals .. .. .	'000 pairs	20,938	21,395	24,055
Slippers .. .. .	"	8,214	9,153	8,535
Fruit Juices, Natural .. .. .	'000 gals.	3,298	3,670	5,073
Gas .. .. .	Mill. cubic ft.	46,653	47,655	48,567
Gloves—				
Dress—				
Leather .. .. .	Doz. pairs.	4,111	3,020	1,692
Other .. .. .	"	70,654	77,104	52,816
Work, all types .. .. .	"	276,707	290,384	310,007
Golf Clubs .. .. .	Doz.	12,443	13,365	14,832
Handkerchiefs—				
Men's .. .. .	"	1,118,023	1,204,828	1,363,165
Women's .. .. .	"	1,489,780	1,569,810	1,634,059
Hats and Caps (excluding Berets)(c) .. .. .	"	485,935	510,057	522,086
Hose, Rubber, Garden .. .. .	'000 lin. ft.	3,755	2,736	2,514
Other .. .. .	"	9,654	10,007	10,680
Plastic, Garden .. .. .	"	27,585	32,565	24,125
Ice .. .. .	Ton	485,511	462,569	381,691
Ice Cream .. .. .	'000 gals.	15,647	16,519	16,002
Infants' and Invalid's Foods (d) .. .. .	'000 lb.	30,390	31,308	31,661
Iron and Steel—				
Pig Iron .. .. .	'000 tons.	2,098	2,284	2,294
Steel Ingots .. .. .	"	2,774	3,038	3,204
Blooms and Billets .. .. .	"	2,288	2,492	2,814
Irons, Electric (Hand, Domestic) .. .. .	No.	354,099	320,013	305,899
Jams .. .. .	'000 lb.	92,208	107,773	78,234
Jelly Crystals .. .. .	"	12,332	13,887	12,756
Lacquer, Clear and Colours .. .. .	Gal.	1,451,292	1,559,372	1,597,532
Lard .. .. .	Cwt.	42,762	51,795	39,122
Lawn Mowers—				
Electric .. .. .	No.	1,494	2,781	1,038
Petrol .. .. .	"	161,256	147,253	248,967
Hand .. .. .	"	48,713	31,300	22,015
Leather—				
Dressed from Hides, Sold by Measurement .. .. .	'000 sq. ft.	56,611	60,380	64,008
Sold by Weight .. .. .	'000 lb.	162	185	218
Dressed from Skins .. .. .	'000 sq. ft.	20,820	20,304	20,166
Harness, Skirt, Belting, etc. .. .. .	'000 lb.	2,553	2,205	1,979
Sole .. .. .	"	30,583	29,085	26,601
Upholstery .. .. .	'000 sq.ft.	1,434	900	960
Lime, Agricultural .. .. .	Ton	120,298	125,290	134,398
Hydrated .. .. .	"	52,843	53,025	55,419
Quick .. .. .	"	109,667	116,019	106,980

(a) Excludes motor car, motor cycle, tractor and aero engines.  
baking and sharps.

(c) Including hoods and capelines.

(b) Includes wheatmeal for  
(d) Includes malted milk and milk  
sugar (lactose).

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

Article.	Unit of Quantity.	1956-57.	1957-58.	1958-59.
Linseed Oil, extracted from Local Crushing from treatment of Unrefined	'000 gals.	1,645	889	859
Lubricating Oil .. .. .	Ton	2,326 49,755	2,635 66,669	2,471 74,046
Malt, Barley .. .. .	'000 bus.	7,895	8,197	8,108
Margarine—				
Table .. .. .	'000 lb.	38,632	36,033	36,000
Other .. .. .	"	44,576	47,017	53,034
Mattresses, Wire .. .. .	No.	298,212	330,538	350,900
Inner Spring .. .. .	"	507,844	568,900	581,002
Soft Filled, etc. .. .. .	"	337,017	300,717	290,615
Meat, Tinned .. .. .	'000 lb.	150,533	178,672	165,648
Milk—Condensed, Concentrated and				
Evaporated—				
Full Cream—Sweetened .. .. .	'000 lb.	89,554	83,681	70,843
Unsweetened .. .. .	"	64,810	63,429	66,856
Skim and/or Buttermilk .. .. .	"	10,598	16,294	11,072
Milk Powder—				
Full Cream .. .. .	Ton	17,864	18,073	19,183
Skim .. .. .	"	30,567	24,580	34,128
Buttermilk and Whey .. .. .	"	5,552	5,668	6,024
Mops, Floor .. .. .	Gross	11,929	12,558	12,580
Motor Bodies made .. .. .	No.	120,781	160,675	169,478
Motor Bodies Assembled .. .. .	"	77,548	81,630	77,835
Motor Spirit (including Benzol) .. .. .	'000 gals.	833,927	945,724	971,806
Motors, Electric .. .. .	No.	954,318	1,127,482	1,314,089
Nails .. .. .	Ton	26,340	24,191	23,815
Neckties .. .. .	Doz.	532,868	489,213	468,738
Newsprint .. .. .	Ton	79,600	81,085	83,071
Oatmeal (including Rolled Oats) .. .. .	Cwt.	402,782	275,268	289,026
Paint, Oil (including Enamels) .. .. .	'000 gals.	10,873	11,090	11,415
Water (including Kalsomine) .. .. .	'000 lb.	25,920	3,916 (a)	3,295 (a)
Peanut Butter and Paste .. .. .	"	4,346	5,433	5,461
Perambulators .. .. .	No.	149,596	156,657	149,923
Pickles .. .. .	'000 pints	6,469	5,503	5,210
Pigments, Tinting Colours ground in oil .. .. .	Gal.	(b)	27,118	30,188
Zinc Oxide .. .. .	Cwt.	162,953	158,409	128,714
White Lead .. .. .	"	393,215	376,585	895,589
Other, including Dry Colours .. .. .	"	194,365	212,637	236,204
Plywood, $\frac{1}{8}$ inch basis .. .. .	'000 sq. ft.	360,285	291,308	291,500
Pollard .. .. .	Ton (2,000 lb.)			
Preserves—				
Fruit Preserved (c) .. .. .	'000 lb.	289,510	349,411	312,563
Vegetables Preserved .. .. .	"	98,418	87,044	66,883
Pyjamas—				
Men's and Boys' (Suits only) .. .. .	Doz.	283,055	328,018	365,118
Women's and Girls' (inc. Nightdresses) .. .. .	"	399,995	460,441	492,289
Racquet Frames (all types) .. .. .		16,147	17,616	16,063
Refrigerators, Commercial .. .. .	No.	1,025	811	1,170
Domestic .. .. .	"	195,517	195,925	219,760
Rice (Cleaned) .. .. .	Cwt.	897,030	1,117,786	1,437,217
Ropes and Cables (excluding Wire) .. .. .	"	131,746	130,413	133,352
Rugs .. .. .	'000	163	177	133
Sauce .. .. .	'000 pints	33,122	29,016	30,695
Sausage Casings .. .. .	Cwt.	95,218	77,098	71,936
Semolina .. .. .	"	140,536	130,179	131,304
Shirts (Men's and Boys') .. .. .	Doz.	1,425,312	1,530,310	1,614,502
Sink Heaters .. .. .	No.	23,635	19,780	19,911
Soap and Detergents—				
Soap, Personal Toilet .. .. .	Cwt.	320,846	372,680	397,756
Household .. .. .	"	716,568	769,680	695,445
Industrial (incl. Wool Scouring) (d) .. .. .	"	194,476	169,679	155,408
Extracts and Powders, Household .. .. .	"	791,267	804,713	710,463
Industrial .. .. .	"	75,694	85,246	90,636
Detergents, Personal Toilet .. .. .	"	8,763	9,048	10,743
Household .. .. .	"	114,510	146,847	164,214
Industrial .. .. .	"	34,460	35,797	47,017
Extracts and Powders—				
Household .. .. .	"	78,089	183,218	273,977
Industrial .. .. .	"	45,558	48,846	50,898

(a) Water paint in powder form only, including Kalsomine. Excludes production of emulsion types which was 1,801,000 gallons in 1957-58 and 2,032,000 gallons in 1958-59. (b) Not recorded.  
(c) Includes canned apple, all types. (d) Includes industrial flakes and chips.

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

Article.	Unit of Quantity.	1956-57.	1957-58.	1958-59.
Socks and Stockings—				
Men's and Youths' .. .. .	'000 doz. pairs	1,454	1,472	1,311
Women's and Maids' .. .. .	"	2,570	2,218	2,458
Infants' and Babywear (including Anklets)	"	1,191	1,125	1,068
Soup, Tinned .. .. .	'000 pints	44,538	27,346	31,480
Dry-Mix .. .. .	'000 lb.	4,532	3,606	4,329
Spades and Shovels .. .. .	Doz.	33,255	23,796	39,787
Starch, Edible .. .. .	Cwt.	468,308	443,894	407,245
Inedible .. .. .	"	124,895	140,891	165,939
Steel, Structural, Fabricated	Ton	240,491	226,653	256,904
Stoves, Ovens and Ranges—				
Domestic Cooking—				
Electric (a) .. .. .	No.	99,525	92,413	100,224
Gas .. .. .	"	54,966	56,300	67,919
Solid Fuel .. .. .	"	46,005	43,229	39,453
Sugar, Raw (94 net titre) .. .. .	Ton	1,207,797	1,293,125	1,412,286
Refined .. .. .	"	480,393	493,093	518,921
Sulphate of Ammonia .. .. .	"	110,898	118,732	117,489
Superphosphate .. .. .	"	1,975,015	2,219,592	2,124,087
Talcum Powder .. .. .	Cwt.	35,084	36,708	37,593
Tallow—				
Edible .. .. .	"	357,033	360,650	547,885
Inedible .. .. .	"	1,655,807	1,740,356	2,256,272
Television Sets .. .. .	No.	121,232	282,430	316,412
Tiles, Roofing—				
Cement .. .. .	'000	44,595	49,468	52,260
Terracotta .. .. .	"	57,673	58,935	59,232
Timber—				
From Native Logs—				
Hardwood .. .. .	'000 super. ft.	1,151,429	1,127,150	1,158,799
Softwood .. .. .	"	267,431	264,027	301,175
From Imported Logs—				
Hardwood .. .. .	"	26,853	28,534	36,037
Softwood .. .. .	"	174,531	167,984	188,033
Toasters, Electric (Domestic) .. .. .	No.	18,917	18,192	17,087
Tobacco .. .. .	'000 lb.	1,508,439	1,407,645	1,468,223
Tomato Juice .. .. .	Gal.	740,344	807,227	1,257,089
Towels .. .. .	Doz.			
Transformers, Chokes and Ballasts—				
For distribution of Power and Light, etc.	No.		51,333	72,541
For Fluorescent Lights and Neon Signs ..	"		1,306,429	1,458,976
For Radio Receivers, Record Players, etc.	"		250,052	240,610
For Television Receivers .. .. .	"		241,900	298,742
For Welders .. .. .	"		2,761	6,030
For other purposes .. .. .	"		50,918	30,525
Twine (all types) .. .. .	Cwt.	131,424	121,405	186,771
Tyres, Pneumatic—				
Motor Car and Motor Cycle .. .. .	No.	2,711,087	3,003,646	3,205,931
Truck and Omnibus .. .. .	"	536,384	502,725	567,286
Aero and Tractor .. .. .	"	148,277	155,170	166,946
Umbrellas .. .. .				
Underwear .. .. .	'000 doz.	622,554	470,953	510,580
		4,688	4,740	4,914
Vacuum Cleaners (Domestic) .. .. .	No.	83,910	81,257	86,287
Washing Machines, Household, Electric ..	No.	144,422	164,100	180,188
Weatherboards—				
Australian Timber .. .. .	'000 super. ft.	22,937	23,886	26,279
Imported Timber .. .. .	"	1,759	3,203	3,249
Wheatmeal (b) .. .. .	Ton (2,000 lb.)	134,245	136,257	85,662
Wheelbarrows (Metal) .. .. .	No.	66,999	67,309	77,378
Wireless and Television Cabinets .. .. .	No.	429,647	557,842	546,461
Wireless Receiving Sets (incl. Radiograms)	"	366,282	380,753	378,316
Wool Scoured—				
For Sale .. .. .	'000 lb.	43,632	36,866	40,285
For use in own works .. .. .	"	47,625	47,663	47,463
On Commission .. .. .	"	74,506	69,433	69,808
Wool Tops .. .. .	"	42,661	39,253	40,991
Yarn (c)				
Cotton .. .. .	"	42,707	44,645	43,443
Woolen .. .. .	"	22,884	24,152	21,680
Worsted .. .. .	"	24,818	21,455	18,894
Zinc Oxide (see Pigments)				

(a) Includes stovettes, cookers, etc.

(b) Excludes wheatmeal for baking included with flour.

(c) Including mixtures predominantly of the fibre mentioned.

## § 11. Individual Industries.

1. *General.*—Particulars on pages 164–91, §§ 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 publication, 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”.

*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, para. 6 of this chapter, page 160.

Details of some of the principal articles produced in factories in Australia during the years 1956–57 to 1958–59 are shown in the table on 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 1958–59 and for a series of years in the following table:—

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

AUSTRALIA, 1958–59.

Items.	Portland Cement.	Asbestos Cement Sheets and Mouldings.	Other Cement Goods.	Total.
Number of factories .. ..	14	15	470	499
Number of persons employed .. ..	3,105	2,522	5,765	11,392
Salaries and wages paid .. .. £'000	3,274	2,681	5,693	11,648
Value of power, fuel, etc., used .. .. £'000	4,632	340	293	5,265
Value of materials used .. .. £'000	7,109	5,786	15,844	28,739
Value of production .. .. £'000	9,576	4,801	11,802	26,179
Total value of output .. .. £'000	21,317	10,927	27,939	60,183
Value of land and buildings .. .. £'000	3,423	1,370	3,515	8,308
Value of plant and machinery .. .. £'000	14,048	2,381	5,325	21,754
Horse-power of engines ordinarily in use h.p.	90,634	15,269	19,179	125,082

PORTLAND CEMENT, ASBESTOS CEMENT SHEETS, ETC., AND OTHER CEMENT GOODS—*continued.*

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	132	480	489	479	481	499
Number of persons employed ..	3,932	10,444	11,167	10,688	10,994	11,392
Salaries and wages paid ..	£'000 897	8,704	10,044	10,312	10,864	11,648
Value of power, fuel, etc., used ..	£'000 562	4,445	4,792	5,119	5,124	5,265
Value of materials used ..	£'000 1,542	19,418	21,999	23,226	25,579	28,739
Value of production ..	£'000 2,385	17,009	19,460	21,228	23,121	26,179
Total value of output ..	£'000 4,489	40,872	46,251	49,573	53,824	60,183
Value of land and buildings ..	£'000 1,350	4,726	6,128	6,994	7,407	8,308
Value of plant and machinery ..	£'000 2,516	13,208	15,542	18,454	19,823	21,754
Horse-power of engines ordinarily in use .. .. . h.p.	39,617	95,870	108,715	105,805	106,905	125,082

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 1958-59 with comparable figures for 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).

## 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	162	91	20	14	13	2	302
Number of persons employed ..	7,453	6,840	350	912	(a)	(a)	15,813
Salaries and wages paid ..	£'000 8,594	7,151	318	951	(a)	(a)	17,240
Value of power, fuel, etc., used ..	£'000 2,643	1,212	100	575	(a)	(a)	4,616
Value of materials used ..	£'000 27,086	16,701	890	1,368	(a)	(a)	46,605
Value of production ..	£'000 23,575	14,675	776	2,940	(a)	(a)	42,512
Total value of output ..	£'000 53,304	32,588	1,766	4,883	(a)	(a)	93,733
Value of land and buildings ..	£'000 11,292	10,160	250	899	(a)	(a)	22,948
Value of plant and machinery ..	£'000 19,349	15,379	754	1,714	(a)	(a)	38,137
Horse-power of engines ordinarily in use .. .. . h.p.	61,554	58,510	1,820	5,432	(a)	(a)	130,928

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

## AUSTRALIA.

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	165	248	258	270	281	302
Number of persons employed ..	10,228	13,032	14,107	14,509	15,085	15,813
Salaries and wages paid ..	£'000 3,450	11,833	13,574	14,684	15,875	17,240
Value of power, fuel, etc., used ..	£'000 618	3,043	3,462	3,845	4,208	4,616
Value of materials used ..	£'000 6,007	29,004	33,506	38,335	43,497	46,605
Value of production ..	£'000 6,627	25,095	29,895	34,513	35,930	42,512
Total value of output ..	£'000 13,252	57,142	66,863	76,693	83,635	93,733
Value of land and buildings ..	£'000 11,697	14,190	15,987	17,831	21,055	22,948
Value of plant and machinery ..	£'000 10,964	25,607	27,125	29,190	36,157	38,137
Horse-power of engines ordinarily in use .. .. . h.p.	69,399	95,188	101,527	107,787	121,393	130,928

## PHARMACEUTICAL AND TOILET PREPARATIONS.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	128	57	7	13	4	1	210
Number of persons employed ..	3,503	2,748	126	525	(a)	(a)	6,976
Salaries and wages paid .. £'000	2,801	2,577	81	380	(a)	(a)	5,886
Value of power, fuel, etc., used .. £'000	115	601	1	34	(a)	(a)	754
Value of materials used .. £'000	10,876	6,591	324	1,671	(a)	(a)	19,575
Value of production .. £'000	15,045	6,786	184	959	(a)	(a)	23,130
Total value of output .. £'000	26,036	13,978	509	2,664	(a)	(a)	43,459
Value of land and buildings .. £'000	5,457	4,800	61	317	(a)	(a)	10,750
Value of plant and machinery .. £'000	1,511	2,811	33	138	(a)	(a)	4,519
Horse-power of engines ordinarily in use .. h.p.	5,428	9,504	91	1,541	(a)	(a)	16,702

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

## AUSTRALIA.

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	215	210	206	206	212	210
Number of persons employed ..	5,514	6,233	6,400	6,446	6,834	6,976
Salaries and wages paid .. £'000	1,699	4,255	4,635	5,020	5,531	5,886
Value of power, fuel, etc., used .. £'000	57	223	259	312	386	754
Value of materials used .. £'000	5,402	12,729	13,565	15,292	18,226	19,575
Value of production .. £'000	4,790	14,380	15,279	17,312	21,856	23,130
Total value of output .. £'000	10,249	27,332	29,103	32,916	40,468	43,459
Value of land and buildings .. £'000	1,534	6,022	6,830	7,828	9,677	10,750
Value of plant and machinery .. £'000	598	2,129	2,686	2,746	3,262	4,519
Horse-power of engines ordinarily in use .. h.p.	6,324	13,592	14,301	16,666	14,962	16,702

4. White Lead, Paints and Varnish.—The following table shows particulars of this industry for each State during 1958-59 and for Australia for a series of years:—

## WHITE LEAD, PAINTS AND VARNISH.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	84	52	19	16	13	4	188
Number of persons employed ..	2,892	1,664	306	518	(a)	(a)	5,532
Salaries and wages paid .. £'000	2,951	1,644	250	471	(a)	(a)	5,448
Value of power, fuel, etc., used .. £'000	260	109	16	28	(a)	(a)	419
Value of materials used .. £'000	13,343	7,633	1,554	2,184	(a)	(a)	25,448
Value of production .. £'000	7,082	3,045	1,133	1,572	(a)	(a)	13,184
Total value of output .. £'000	20,685	10,787	2,703	3,784	(a)	(a)	39,051
Value of land and buildings .. £'000	2,596	2,406	357	585	(a)	(a)	6,327
Value of plant and machinery .. £'000	1,355	1,839	173	213	(a)	(a)	3,696
Horse-power of engines ordinarily in use .. h.p.	13,088	7,271	1,536	2,201	(a)	(a)	25,093

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

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	102	175	178	186	184	188
Number of persons employed ..	2,271	5,322	5,804	5,815	5,749	5,532
Salaries and wages paid .. £'000	535	4,636	5,300	5,508	5,608	5,448
Value of power, fuel, etc., used .. £'000	45	376	384	400	445	419
Value of materials used .. £'000	2,275	21,553	23,504	23,916	24,619	25,448
Value of production .. £'000	1,585	11,980	12,874	13,567	13,853	13,184
Total value of output .. £'000	3,905	33,909	36,762	37,883	38,917	39,051
Value of land and buildings .. £'000	761	5,089	5,563	6,680	6,397	6,327
Value of plant and machinery .. £'000	324	2,892	3,261	3,408	3,986	3,696
Horse-power of engines ordinarily in use .. h.p.	7,696	24,178	25,050	26,969	25,443	25,093



5. **Soap and Candle Factories.**—The following table shows particulars of factories in the Soap and Candle industry in each State for 1958–59 and for Australia for a series of years:—

## SOAP AND CANDLES.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	41	28	9	5	3	3	89
Number of persons employed ..	1,755	798	241	49	(a)	(a)	2,929
Salaries and wages paid .. £'000	1,709	820	197	33	(a)	(a)	2,822
Value of power, fuel, etc., used £'000	167	188	22	4	(a)	(a)	387
Value of materials used .. £'000	7,575	6,448	730	134	(a)	(a)	15,253
Value of production .. £'000	6,961	4,418	406	48	(a)	(a)	11,941
Total value of output .. £'000	14,703	11,054	1,158	186	(a)	(a)	27,581
Value of land and buildings £'000	681	1,080	168	30	(a)	(a)	2,039
Value of plant and machinery £'000	1,483	1,326	197	40	(a)	(a)	3,118
Horse-power of engines ordinarily in use .. .. h.p.	5,691	5,306	1,030	279	(a)	(a)	12,632

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

## AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	65	91	92	87	90	89
Number of persons employed ..	2,620	2,962	3,167	2,932	2,983	2,929
Salaries and wages paid .. £'000	501	2,589	2,858	2,704	2,830	2,822
Value of power, fuel, etc. used £'000	76	420	406	393	441	387
Value of materials used .. £'000	1,568	11,941	12,057	12,437	14,446	15,253
Value of production .. £'000	1,886	7,425	8,147	9,150	10,525	11,941
Total value of output .. £'000	3,530	19,786	20,610	21,980	25,412	27,581
Value of land and buildings £'000	666	1,619	1,743	1,784	1,871	2,039
Value of plant and machinery £'000	577	2,653	3,001	3,150	2,973	3,118
Horse-power of engines ordinarily in use .. .. h.p.	5,267	8,676	10,711	10,922	11,296	12,632
Materials used—						
Tallow .. .. cwt.	535,511	1,151,146	1,162,578	1,152,865	1,219,538	1,161,856
Alkali for Soap (a) .. .. cwt.	194,869	421,401	390,757	366,796	386,712	384,680
Coconut oil—refined and unrefined .. cwt.	138,954	93,498	83,346	80,395	94,952	92,719
Articles produced—						
Soap (excl. Sand Soap) .. ..	908,797	1,263,226	1,269,648	1,231,890	1,311,796	1,248,609
Cleansers and Scourers (inc. Sand Soap) .. .. cwt.	123,702	115,350	105,046	78,186	72,586	64,466
Soap Extracts and Powders .. ..	191,232	1,007,494	910,443	866,961	875,959	801,099
Candles made .. ..	28,649	10,369	10,011	10,354	7,444	8,588

(a) Includes Soda Ash.

NOTE.—Preliminary figures of production in 1959–60 were Soap, 1,259,000 cwt.; Cleansers and Scourers, 66,000 cwt.; and Soap Extracts and Powders, 827,000 cwt.

6. **Chemical Fertilizers.**—The following table shows particulars of the factories engaged in the manufacture of chemical fertilizers in each State during 1958–59 and for Australia for a series of years. Details of the consumption, imports and exports of fertilizers will be found in Chapter XXII.—Agricultural Production.

## CHEMICAL FERTILIZERS.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	12	7	8	8	6	7	48
Number of persons employed ..	819	1,551	(a)	851	975	(a)	4,959
Salaries and wages paid .. £'000	878	1,715	(a)	845	956	(a)	5,207
Value of power, fuel, etc., used £'000	255	284	(a)	86	151	(a)	995
Value of materials used .. £'000	3,230	7,643	(a)	5,316	5,394	(a)	25,756
Value of production .. £'000	1,822	3,554	(a)	1,827	1,972	(a)	11,440
Total value of output .. £'000	5,307	11,481	(a)	7,229	7,517	(a)	38,191
Value of land and buildings £'000	3,124	814	(a)	740	1,896	(a)	7,633
Value of plant and machinery £'000	2,744	1,665	(a)	3,109	1,906	(a)	10,808
Horse-power of engines ordinarily in use .. .. h.p.	13,853	14,218	(a)	9,928	8,819	(a)	57,587

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

## CHEMICAL FERTILIZERS—continued.

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	36	53	54	52	49	48
Number of persons employed ..	2,540	4,735	4,911	5,074	5,050	4,959
Salaries and wages paid .. £'000	601	4,372	4,809	5,069	5,309	5,207
Value of power, fuel, etc., used .. £'000	114	852	939	1,160	950	995
Value of materials used .. £'000	3,231	21,519	24,098	25,479	28,862	25,756
Value of production .. £'000	1,600	8,794	10,267	10,158	12,175	11,440
Total value of output .. £'000	4,945	31,165	35,304	36,797	41,987	38,191
Value of land and buildings .. £'000	1,449	6,512	7,033	7,341	7,583	7,633
Value of plant and machinery .. £'000	2,353	9,270	11,645	11,404	10,835	10,808
Horse-power of engines ordinarily in use .. h.p.	18,165	47,595	58,044	59,457	58,212	57,587

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. Detailed statistics for the four groups mentioned are shown in the following tables.

(ii) *Smelting, Converting, Refining and Rolling of Iron and Steel.* In the following table, particulars are shown for each State for 1958-59 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.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S.A.	W.A.	Tas.	Aust.
Number of factories .. ..	17	10	..	5	2	..	34
Number of persons employed ..	28,065	1,324	..	(a)	(a)	..	29,982
Salaries and wages paid .. £'000	32,236	1,393	..	(a)	(a)	..	34,220
Value of power, fuel, etc., used .. £'000	20,885	348	..	(a)	(a)	..	23,539
Value of materials used .. £'000	150,054	1,523	..	(a)	(a)	..	153,563
Value of production .. £'000	73,550	1,869	..	(a)	(a)	..	78,154
Total value of output .. £'000	244,489	3,740	..	(a)	(a)	..	255,256
Value of land and buildings .. £'000	10,614	444	..	(a)	(a)	..	11,400
Value of plant and machinery .. £'000	78,600	651	..	(a)	(a)	..	82,451
Horse-power of engines ordinarily in use .. h.p.	608,749	8,136	..	(a)	(a)	..	633,180

## AUSTRALIA.

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	27	33	(b) 28	34	35	34
Number of persons employed ..	10,413	17,842	20,805	26,078	28,526	29,982
Salaries and wages paid .. £'000	4,164	18,238	22,037	28,636	31,469	34,220
Value of power, fuel, etc., used .. £'000	2,777	15,670	17,864	20,538	22,150	23,539
Value of materials used .. £'000	19,134	94,928	101,416	136,483	137,674	153,563
Value of production .. £'000	7,393	34,381	44,269	66,385	70,379	78,154
Total value of output .. £'000	29,304	144,979	163,549	223,406	230,203	255,256
Value of land and buildings .. £'000	2,197	6,615	6,457	9,054	9,953	11,400
Value of plant and machinery .. £'000	5,669	26,394	29,154	61,608	71,048	82,451
Horse-power of engines ordinarily in use .. h.p.	198,317	339,135	363,751	448,541	536,530	633,180

(a) Not available for publication; figures are included in the total for Australia. (b) The reduction in the number of establishments is due to combined returns being furnished where formerly separate returns were submitted for Blast Furnaces, Steel Furnaces and Rolling Mills operated by the one establishment.

Particulars of the production of pig-iron and steel will be found on page 193 and in Chapter XXVII.—Mineral Industry.

(iii) *Foundries (Ferrous)*. Particulars covering those industries classified as founding of iron and steel are shown for each State for 1958-59 and for Australia in selected years in the following table:—

## FOUNDRIES—FERROUS.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	86	193	24	26	17	..	346
Number of persons employed ..	2,831	2,722	858	541	424	..	7,376
Salaries and wages paid .. £'000	2,880	2,726	797	518	372	..	7,293
Value of power, fuel, etc., used .. £'000	348	371	60	79	97	..	955
Value of materials used .. .. £'000	2,095	2,856	885	481	370	..	6,687
Value of production .. .. £'000	4,224	3,922	1,128	814	527	..	10,615
Total value of output .. .. £'000	6,667	7,149	2,073	1,374	994	..	18,257
Value of land and buildings .. £'000	1,462	1,531	415	220	284	..	3,912
Value of plant and machinery .. £'000	1,042	1,049	444	202	226	..	2,963
Horse-power of engines ordinarily in use .. .. h.p.	11,713	10,891	3,560	2,558	2,890	..	31,612

## AUSTRALIA.

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	312	368	373	368	373	346
Number of persons employed ..	5,344	7,099	7,434	7,633	7,801	7,376
Salaries and wages paid .. .. £'000	1,612	6,116	6,706	7,060	7,548	7,293
Value of power, fuel, etc., used .. £'000	161	796	918	975	997	955
Value of materials used .. .. £'000	1,210	4,881	5,396	6,221	6,664	6,687
Value of production .. .. £'000	2,341	8,983	9,652	10,235	11,237	10,615
Total value of output .. .. £'000	3,712	14,660	15,966	17,431	18,898	18,257
Value of land and buildings .. .. £'000	988	2,623	3,564	3,899	4,244	3,912
Value of plant and machinery .. .. £'000	619	2,342	3,234	3,545	3,615	2,963
Horse-power of engines ordinarily in use h.p.	13,381	26,451	30,738	32,835	33,042	31,612

(iv) *Plant, Equipment and Machinery (including Machine Tools)*. The next table shows particulars for this group for each State during 1958-59 and for Australia in selected years:—

## PLANT, EQUIPMENT AND MACHINERY (INCLUDING MACHINE TOOLS).

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	1,136	714	161	207	116	11	2,345
Number of persons employed ..	28,230	24,712	6,003	8,712	2,995	253	70,905
Salaries and wages paid .. .. £'000	29,265	25,059	5,077	8,098	2,633	239	70,371
Value of power, fuel, etc., used .. £'000	1,167	1,110	233	520	124	7	3,161
Value of materials used .. .. £'000	55,111	41,754	7,711	13,902	3,609	321	122,408
Value of production .. .. £'000	49,570	41,164	7,898	12,467	4,032	341	115,472
Total value of output .. .. £'000	105,848	84,028	15,842	26,889	7,765	669	241,041
Value of land and buildings .. .. £'000	21,301	19,000	2,540	4,526	2,274	286	49,927
Value of plant and machinery .. .. £'000	13,842	14,585	2,059	3,985	1,677	252	36,400
Horse-power of engines ordinarily in use .. .. h.p.	96,816	89,830	19,824	31,420	12,050	640	250,580

## AUSTRALIA.

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	1,038	1,980	2,062	2,212	2,240	2,345
Number of persons employed ..	46,123	64,588	68,699	69,476	69,540	70,905
Salaries and wages paid .. .. £'000	14,259	54,561	61,872	65,272	67,000	70,371
Value of power, fuel, etc., used .. £'000	605	2,378	2,570	2,775	2,964	3,161
Value of materials used .. .. £'000	16,455	80,462	93,510	99,172	114,716	122,408
Value of production .. .. £'000	21,044	87,040	98,574	106,922	110,365	115,472
Total value of output .. .. £'000	38,104	169,880	194,654	208,869	228,045	241,041
Value of land and buildings .. .. £'000	7,227	28,687	34,019	39,692	45,592	49,927
Value of plant and machinery .. .. £'000	7,046	23,548	26,621	29,112	32,805	36,400
Horse-power of engines ordinarily in use h.p.	101,810	201,626	217,880	222,937	236,230	250,580

(v) *Other Engineering.* Details covering jobbing and general engineering works not elsewhere included are shown for each State for 1958–59 and for Australia in selected years in the following table:—

## OTHER ENGINEERING.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	804	815	173	181	154	93	2,220
Number of persons employed ..	6,901	8,557	1,831	3,670	894	1,614	23,467
Salaries and wages paid .. £'000	6,418	8,252	1,485	3,392	694	1,441	21,682
Value of power, fuel, etc., used £'000	259	308	44	106	34	55	806
Value of materials used .. £'000	7,781	8,798	2,149	4,652	889	1,790	26,059
Value of production .. £'000	10,417	13,923	2,394	4,849	1,165	2,081	34,829
Total value of output .. £'000	18,457	23,029	4,587	9,607	2,088	3,926	61,694
Value of land and buildings £'000	5,437	6,141	914	2,506	563	1,094	16,655
Value of plant and machinery £'000							
Horse-power of engines ordinarily in use .. h.p.	3,403	5,394	675	1,776	312	641	12,201
	22,190	26,626	5,010	12,330	3,845	6,108	76,109

## AUSTRALIA.

Items.	1945–46.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories ..	963	2,128	2,220	2,166	2,223	2,220
Number of persons employed ..	13,112	22,540	24,445	23,148	23,370	23,467
Salaries and wages paid .. £'000	3,634	17,491	20,477	20,037	20,768	21,682
Value of power, fuel, etc., used .. £'000	162	599	698	674	699	806
Value of materials used .. £'000	3,599	20,834	24,534	22,320	23,780	26,059
Value of production .. £'000	5,432	28,025	32,949	31,568	34,274	34,829
Total value of output .. £'000	9,193	49,458	58,181	54,562	58,753	61,694
Value of land and buildings .. £'000	2,369	11,289	13,205	13,801	15,485	16,655
Value of plant and machinery .. £'000	2,091	8,070	9,363	9,440	10,746	12,201
Horse-power of engines ordinarily in use h.p.	26,095	66,406	78,246	72,254	76,500	76,109

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 1958–59 and for Australia for a series of years. It should be noted that as Ore Beneficiation and Concentration, formerly included as part of this section of Manufacturing Industry, was transferred to the Mining Industry in 1952–53 details for 1938–39 are not comparable with those for later years.

## EXTRACTING AND REFINING OF NON-FERROUS METALS: ALLOYS.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust. (a)	Tas.	Aust.
Number of factories ..	32	23	4	2	4	3	68
Number of persons employed ..	1,355	324	596	(b)	11	(b)	7,269
Salaries and wages paid .. £'000	1,666	368	774	(b)	11	(b)	8,880
Value of power, fuel, etc., used £'000	608	58	1,061	(b)	4	(b)	4,724
Value of materials used .. £'000	13,444	3,064	18,497	(b)	49	(b)	61,060
Value of production .. £'000	3,406	922	2,249	(b)	34	(b)	18,129
Total value of output .. £'000	17,458	4,044	21,807	(b)	87	(b)	83,913
Value of land and buildings £'000	945	405	974	(b)	9	(b)	7,326
Value of plant and machinery £'000	2,514	244	1,364	(b)	35	(b)	15,764
Horse-power of engines ordinarily in use .. h.p.	8,672	1,129	8,443	(b)	261	(b)	76,680

## AUSTRALIA.

Items.	1938–39. (c)	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories ..	42	62	56	58	63	68
Number of persons employed ..	5,532	6,782	7,029	7,212	7,254	7,269
Salaries and wages paid .. £'000	1,613	6,432	7,434	8,720	8,667	8,880
Value of power, fuel, etc., used .. £'000	598	3,253	3,753	4,282	4,413	4,724
Value of materials used .. £'000	16,844	62,859	70,000	68,426	58,120	61,060
Value of production .. £'000	3,892	14,148	17,787	19,773	18,138	18,129
Total value of output .. £'000	21,334	80,260	91,540	92,481	80,671	83,913
Value of land and buildings .. £'000	1,177	3,044	6,155	6,566	6,907	7,326
Value of plant and machinery .. £'000	3,526	6,019	13,367	14,485	15,262	15,764
Horse-power of engines ordinarily in use h.p.	54,450	66,280	79,696	76,212	76,070	76,680

(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. (c) See text above table.

9. **Electrical Machinery, Cables and Apparatus.**—The following table shows particulars of this industry for each State during 1958–59 and for Australia for a series of years:—

## ELECTRICAL MACHINERY, CABLES AND APPARATUS.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	572	384	69	82	88	18	1,213
Number of persons employed ..	31,330	13,734	2,063	1,777	961	204	50,069
Salaries and wages paid .. £'000	30,025	12,969	1,591	1,469	755	170	46,979
Value of power, fuel, etc., used £'000	1,557	810	48	42	24	12	2,493
Value of materials used .. £'000	62,319	27,166	2,367	1,876	914	322	94,964
Value of production .. £'000	50,969	19,721	2,412	2,181	1,181	344	76,808
Total value of output .. £'000	114,845	47,697	4,827	4,099	2,119	678	174,265
Value of land and buildings £'000	19,184	10,960	1,083	898	648	185	32,958
Value of plant and machinery £'000	13,962	8,297	707	410	159	92	23,627
Horse-power of engines ordinarily in use .. h.p.	63,608	37,445	6,810	2,247	1,536	334	111,980

## AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories ..	360	1,064	1,099	1,153	1,152	1,213
Number of persons employed ..	10,666	42,007	43,841	44,594	46,394	50,069
Salaries and wages paid .. £'000	2,031	33,403	36,663	38,780	41,892	46,979
Value of power, fuel, etc., used .. £'000	105	1,651	1,808	1,964	2,155	2,493
Value of materials used .. £'000	3,195	69,962	75,129	76,256	84,212	94,964
Value of production .. £'000	3,655	54,637	57,036	63,198	69,589	76,808
Total value of output .. £'000	6,955	126,250	133,973	141,418	155,956	174,265
Value of land and buildings .. £'000	1,627	16,885	19,992	25,306	28,316	32,958
Value of plant and machinery .. £'000	897	11,915	13,854	16,409	20,046	23,627
Horse-power of engines ordinarily in use h.p.	12,043	81,058	83,279	91,991	98,679	111,980

10. **Railway and Tramway Workshops (Government and Local Authority).**—The railway and tramway workshops, which form an important part of Class IV., are owned chiefly by State Governments and Local Authorities. *Workshops (fourteen in 1958–59) controlled by non-public bodies are not included in the figures below.*

## TRAMCARS AND RAILWAY ROLLING STOCK.(a)

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	40	22	29	14	27	7	139
Number of persons employed ..	14,284	7,391	7,780	4,053	3,738	747	37,993
Salaries and wages paid .. £'000	12,974	6,429	6,831	3,629	3,044	692	33,599
Value of power, fuel, etc., used £'000	420	222	155	135	118	30	1,080
Value of materials used .. £'000	5,924	5,479	3,078	3,213	1,607	262	19,563
Value of production .. £'000	15,884	8,684	8,017	4,463	3,619	890	41,557
Total value of output .. £'000	22,228	14,385	11,250	7,811	5,344	1,182	62,200
Value of land and buildings £'000	6,216	2,139	1,028	1,631	656	704	12,374
Value of plant and machinery £'000	10,072	1,429	1,460	2,218	1,030	338	16,547
Horse-power of engines ordinarily in use .. h.p.	44,528	22,881	18,278	14,502	11,701	3,272	115,162

## AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories ..	117	123	125	125	124	139
Number of persons employed ..	27,310	38,599	38,357	38,780	38,079	37,993
Salaries and wages paid .. £'000	6,721	30,777	33,159	33,670	32,946	33,599
Value of power, fuel, etc., used .. £'000	726	1,025	1,061	1,090	1,083	1,080
Value of materials used .. £'000	4,976	18,818	20,555	21,565	20,050	19,563
Value of production .. £'000	8,021	37,505	40,404	41,172	40,685	41,557
Total value of output .. £'000	13,223	57,348	62,020	63,827	61,818	62,200
Value of land and buildings .. £'000	6,737	10,524	11,076	11,494	11,775	12,374
Value of plant and machinery .. £'000	5,290	13,124	14,072	14,673	15,234	16,547
Horse-power of engines ordinarily in use h.p.	53,671	112,184	116,775	122,852	114,805	115,162

(a) Government and Local Authority only.

Two railway workshops in the Northern Territory are engaged in repairing rolling stock, etc., no new goods being manufactured. Particulars of these establishments 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 1958–59 for each branch of industry associated with the motor trade of Australia.

**MOTOR VEHICLES: CONSTRUCTION, ASSEMBLY, REPAIRS, ETC., AUSTRALIA.**  
1958-59.

Items.	Construction and Assembly.	Repairs.	Motor Bodies. (a)	Motor Accessories.	Total.
Number of factories .. ..	62	9,383	1,650	259	11,354
Number of persons employed ..	18,670	58,602	25,882	10,046	113,200
Salaries and wages paid .. £'000	19,549	43,850	24,110	9,369	97,078
Value of power, fuel, etc., used .. £'000	1,477	1,435	1,052	639	4,603
Value of materials used .. .. £'000	41,756	48,072	46,531	13,218	149,577
Value of production .. .. .. £'000	39,366	67,965	37,011	17,227	161,569
Total value of output .. .. . £'000	82,599	117,472	84,594	31,084	315,749
Value of land and buildings .. £'000	17,108	60,055	15,431	7,140	99,734
Value of plant and machinery .. £'000	16,485	12,947	11,357	6,953	47,742
Horse-power of engines ordinarily in use h.p.	58,707	67,812	59,142	38,240	223,901

(a) Includes motor body repairing, panel beating, duco spraying, etc.

In the next table, similar details are shown on a State basis for 1958-59 and for Australia for selected years for these industries combined:—

**MOTOR VEHICLES: CONSTRUCTION, ASSEMBLY, REPAIRS, ETC.**  
1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	4,764	2,756	1,378	1,038	1,060	358	11,354
Number of persons employed ..	38,074	38,212	10,352	17,491	6,601	2,470	113,200
Salaries and wages paid .. £'000	32,031	34,762	7,323	16,021	5,080	1,861	97,078
Value of power, fuel, etc., used £'000	1,449	1,920	244	723	208	59	4,603
Value of materials used .. .. £'000	58,006	42,449	8,377	30,666	7,930	2,149	149,577
Value of production .. .. . £'000	52,823	59,183	15,265	22,548	8,548	3,202	161,569
Total value of output .. .. . £'000	112,278	103,552	23,886	53,937	16,686	5,410	315,749
Value of land and buildings £'000	37,928	36,325	7,049	10,430	5,541	2,461	99,734
Value of plant and machinery £'000	17,049	17,311	2,105	9,043	1,662	572	47,742
Horse-power of engines ordinarily in use .. .. h.p.	62,046	87,777	13,172	44,108	13,749	3,049	223,901

**AUSTRALIA.**

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	3,592	8,993	9,707	10,334	10,909	11,354
Number of persons employed ..	39,706	98,343	105,959	107,480	110,380	113,200
Salaries and wages paid .. £'000	10,582	73,073	84,082	86,282	91,886	97,078
Value of power, fuel, etc., used .. £'000	395	2,798	3,189	3,747	4,250	4,603
Value of materials used .. .. £'000	12,143	108,119	126,933	120,297	143,724	149,577
Value of production .. .. . £'000	15,818	112,541	126,459	132,018	148,383	161,569
Total value of output .. .. . £'000	28,356	223,458	256,581	256,062	296,357	315,749
Value of land and buildings .. £'000	9,878	55,451	66,235	78,817	89,561	99,734
Value of plant and machinery .. £'000	3,758	26,073	32,390	40,890	46,630	47,742
Horse-power of engines ordinarily in use h.p.	56,117	160,001	202,963	206,792	211,264	223,901

The table below shows the production and imports of motor bodies for 1938-39 and 1954-55 to 1959-60:—

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

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.	1959-60.
Motor Bodies(a)—							(b)
Made .. .. . No.	79,436	126,079	129,700	120,781	160,675	169,992	195,876
Assembled from Panels imported or made elsewhere .. .. . No.	(c)	62,383	94,676	77,548	81,630	78,482	98,009
Imported (d) .. .. . No.	532	37,924	19,041	7,062	(e)5,890	(e)6,104	(e)6,178

(a) Excludes sidecars. (b) Preliminary—subject to revision. (c) Not available.  
(d) Includes bodies on complete vehicles imported. (e) Since 20th March, 1958, includes only those bodies imported as complete vehicles.

**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 establishments classified as agricultural implement works in each State for 1958-59 and for Australia for a series of years:—

## AGRICULTURAL MACHINES AND IMPLEMENTS.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	149	91	49	34	35	..	358
Number of persons employed ..	1,797	5,761	1,353	1,517	299	..	10,727
Salaries and wages paid .. £'000	1,707	5,802	1,117	1,306	246	..	10,178
Value of power, fuel, etc., used .. £'000	85	422	60	97	10	..	674
Value of materials used .. £'000	1,989	8,892	1,234	1,775	272	..	14,162
Value of production .. £'000	2,527	8,992	1,570	1,967	370	..	15,426
Total value of output .. £'000	4,601	18,306	2,864	3,839	652	..	30,262
Value of land and buildings .. £'000	2,157	2,709	732	707	361	..	6,666
Value of plant and machinery .. £'000	766	2,525	510	511	106	..	4,418
Horse-power of engines ordinarily in use .. h.p.	6,379	20,399	5,739	5,495	1,189	..	39,201

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	161	308	324	348	370	358
Number of persons employed ..	6,563	12,182	11,938	10,387	10,449	10,727
Salaries and wages paid .. £'000	1,373	10,206	10,364	9,107	9,534	10,178
Value of power, fuel, etc., used .. £'000	82	695	670	581	638	674
Value of materials used .. £'000	1,485	13,572	13,082	11,084	13,438	14,162
Value of production .. £'000	1,836	14,558	14,650	14,038	15,599	15,426
Total value of output .. £'000	3,403	28,825	28,402	25,703	29,675	30,262
Value of land and buildings .. £'000	997	5,038	5,774	6,153	6,620	6,666
Value of plant and machinery .. £'000	911	4,282	4,673	4,800	4,537	4,418
Horse-power of engines ordinarily in use h.p.	13,346	39,858	39,878	40,254	39,652	39,201

13. *Wireless and Amplifying Apparatus.*—Prior to 1930-31, statistics of the manufacture of wireless and amplifying apparatus were grouped with those relating to other electrical apparatus, but the new factory classification adopted in that year provided for separate details to be shown for Wireless Apparatus. The industry is confined mainly to New South Wales, Victoria and South Australia. Technical advances and the requirements of the fighting forces led to considerable expansion in the industry during the 1939-45 War and this development has continued, with one or two exceptions, in each subsequent year. The introduction of television services in 1956 gave a further stimulus to the industry. The number of broadcast listeners' licences increased from a third of a million in 1930-31 to 2,283,000 at 30th June, 1960, and this increase reflects the advancement of the industry during that period. At 30th June, 1960, 955,000 television viewers' licences were in force.

## WIRELESS AND AMPLIFYING APPARATUS: AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	72	175	181	205	211	257
Number of persons employed ..	4,828	8,550	9,171	12,074	16,002	16,482
Salaries and wages paid .. £'000	754	6,398	7,051	9,145	13,264	14,264
Value of power, fuel, etc., used .. £'000	23	205	231	312	479	550
Value of materials used .. £'000	1,356	10,076	10,363	16,801	36,756	39,255
Value of production .. £'000	1,123	8,624	8,907	11,767	20,725	23,431
Total value of output .. £'000	2,502	18,905	19,501	28,880	57,960	63,236
Value of land and buildings .. £'000	558	2,300	3,428	4,752	6,374	7,897
Value of plant and machinery .. £'000	305	1,242	1,761	3,101	4,250	5,018
Horse-power of engines ordinarily in use h.p.	2,710	8,930	9,624	11,658	13,506	12,952
Wireless receiving sets made(a) .. No.	163,821	456,034	458,012	366,282	380,753	378,316
Television receiving sets made .. No.	..	..	2,636	121,232	282,430	316,412

(a) Including radiograms and car radios.

NOTE.—There were 406,000 wireless receiving sets (including radiograms) and 435,000 television receiving sets made in 1959-60.

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 was 18 million lb. during the five years ended 1938–39, and slightly over 5 million lb. in the five years ended 1959–60. The growing of cotton, which is mainly confined to Queensland, is referred to in some detail in Chapter XXII.—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 (in 1959–60) from India, Pakistan, Mexico and the United States of America.

(iii) *Spinning and Weaving.* The post war expansion in the spinning and weaving section of the cotton industry marks an important stage 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 and 1954–55 to 1958–59.

#### COTTON SPINNING AND WEAVING: AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	33	96	97	91	97	97
Number of persons employed .. ..	3,589	9,582	9,598	9,754	9,879	9,770
Salaries and wages paid .. £'000	493	6,845	7,297	7,799	8,268	8,116
Value of power, fuel, etc., used .. £'000	50	706	703	890	958	988
Value of materials used .. .. £'000	1,357	18,505	18,571	19,485	24,025	19,403
Value of production .. .. £'000	979	11,343	12,227	14,202	15,622	14,751
Total value of output .. .. £'000	2,386	30,554	31,501	34,577	40,605	35,142
Value of land and buildings .. £'000	704	5,078	5,719	6,478	7,179	10,625
Value of plant and machinery .. £'000	736	4,355	4,637	5,312	6,702	9,949
Horse-power of engines ordinarily in use h.p.	9,128	34,356	34,637	34,568	35,880	38,779

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.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	40	87	4	3	3	4	141
Number of persons employed ..	5,907	10,995	920	581	(a)	(a)	20,809
Salaries and wages paid .. £'000	4,502	8,475	564	420	(a)	(a)	15,714
Value of power, fuel, etc., used .. £'000	390	798	44	41	(a)	(a)	1,445
Value of materials used .. .. £'000	8,985	20,295	1,840	785	(a)	(a)	37,252
Value of production .. .. £'000	7,787	14,047	735	753	(a)	(a)	26,458
Total value of output .. .. £'000	17,162	35,140	2,619	1,579	(a)	(a)	65,155
Value of land and buildings .. £'000	2,699	6,579	191	234	(a)	(a)	10,519
Value of plant and machinery .. £'000	3,618	6,386	347	262	(a)	(a)	12,082
Horse-power of engines ordinarily in use .. .. h.p.	16,597	43,084	3,735	1,618	(a)	(a)	72,301

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



WOOL CARDING, SPINNING AND WEAVING—*continued.*

## AUSTRALIA.

Items.	1938-39. (a)	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	90	151	145	143	146	141
Number of persons employed .. ..	19,608	21,844	21,899	23,217	22,386	20,809
Salaries and wages paid .. .. £'000	2,888	13,945	14,409	16,340	16,380	15,714
Value of power, fuel, etc., used .. .. £'000	393	1,288	1,345	1,479	1,463	1,445
Value of materials used .. .. £'000	7,331	38,938	39,532	49,303	46,012	37,252
Value of production .. .. £'000	4,791	21,898	24,082	27,649	25,737	26,458
Total value of output .. .. £'000	12,515	62,124	64,959	78,431	73,212	65,155
Value of land and buildings .. .. £'000	2,380	7,369	7,713	9,019	9,364	10,519
Value of plant and machinery .. .. £'000	3,370	10,053	10,673	10,855	11,641	12,082
Horse-power of engines ordinarily in use h.p.	42,944	66,817	71,752	99,385	70,433	72,301
Articles produced—						
Woollen and worsted cloth(b)(c)'000 sq. yds.	31,768	31,067	30,279	32,782	31,719	27,265
Blankets and rugs(b) .. .. '000	1,279	1,673	1,799	1,841	2,032	1,838

(a) Includes Woollscouring Works in Victoria and Tasmania and Woollscouring Works and Fellmongeries in South Australia. (b) Includes production in other industries. (c) Includes mixtures.

NOTE.—Preliminary production figures for 1959-60 were: Woollen and Worsted Cloth, 30,170,000 square yards; Blankets and Rugs, 2,114,000.

16. Hosiery and Other Knitted Goods.—Details for each State for 1958-59 and for Australia for a series of years are shown in the following table:—

## HOSIERY AND OTHER KNITTED GOODS.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	200	438	4	9	8	4	663
Number of persons employed .. ..	6,607	15,285	588	127	(a)	(a)	22,851
Salaries and wages paid .. .. £'000	4,873	10,979	352	60	(a)	(a)	16,421
Value of power, fuel, etc., used .. .. £'000	218	549	11	3	(a)	(a)	787
Value of materials used .. .. £'000	11,134	21,820	1,321	115	(a)	(a)	34,701
Value of production .. .. £'000	9,292	20,846	826	94	(a)	(a)	31,325
Total value of output .. .. £'000	20,644	43,215	2,158	212	(a)	(a)	66,813
Value of land and buildings .. .. £'000	3,425	8,240	296	44	(a)	(a)	12,144
Value of plant and machinery .. .. £'000	2,464	6,529	250	34	(a)	(a)	9,353
Horse-power of engines ordinarily in use .. .. h.p.	6,568	15,518	709	198	(a)	(a)	23,290

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

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	313	661	664	665	657	663
Number of persons employed .. ..	18,159	24,614	23,409	23,492	22,939	22,851
Salaries and wages paid .. .. £'000	2,332	15,117	15,117	16,052	16,124	16,421
Value of power, fuel, etc., used .. .. £'000	133	656	687	744	770	787
Value of materials used .. .. £'000	4,284	31,317	31,822	34,769	38,002	34,701
Value of production .. .. £'000	3,809	27,535	27,236	29,035	28,615	31,325
Total value of output .. .. £'000	8,226	59,508	59,745	64,548	67,387	66,813
Value of land and buildings .. .. £'000	1,962	8,643	9,339	9,939	10,910	12,144
Value of plant and machinery .. .. £'000	1,931	7,917	8,159	8,143	8,539	9,353
Horse-power of engines ordinarily in use h.p.	8,884	20,884	20,315	22,911	21,858	23,290

The following quantities of yarn were used in these establishments during 1958-59:—Worsted or woollen 7,806,279 lb.; mixtures predominantly woollen or worsted, 1,203,362 lb.; cotton, 11,874,913 lb.; mercerised cotton, 228,434 lb.; rayon, spun, 759,025 lb.; rayon filament, 3,193,719 lb.; silk, 2,142 lb.; polyamides (nylon, etc.), spun 1,208,670 lb.; filament 2,665,262 lb.; other, including mixtures, 1,517,334 lb. Production of garments and stockings is shown in § 10 (see p. 192).

17. Tanning, Currying and Leather Dressing.—(i) *Details of Industry.* In Class VII. the most important 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.**  
1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	60	36	13	8	5	1	123
Number of persons employed ..	1,779	1,911	565	205	(a)	(a)	4,617
Salaries and wages paid .. £'000	1,822	1,857	497	201	(a)	(a)	4,510
Value of power, fuel, etc., used .. £'000	187	219	45	25	(a)	(a)	490
Value of materials used .. £'000	5,429	4,578	1,628	584	(a)	(a)	12,635
Value of production .. £'000	2,748	2,696	922	351	(a)	(a)	6,919
Total value of output .. £'000	8,364	7,493	2,595	960	(a)	(a)	20,044
Value of land and buildings .. £'000	1,126	1,121	107	94	(a)	(a)	2,535
Value of plant and machinery .. £'000	881	856	252	160	(a)	(a)	2,223
Horse-power of engines ordinarily in use .. .. h.p.	12,561	11,404	3,683	1,925	(a)	(a)	30,749

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

**AUSTRALIA.**

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	132	140	137	133	124	123
Number of persons employed ..	4,375	5,393	4,972	4,746	4,708	4,617
Salaries and wages paid .. .. £'000	920	4,518	4,468	4,383	4,413	4,510
Value of power, fuel etc., used .. £'000	88	408	415	446	470	490
Value of materials used .. .. £'000	2,983	10,675	11,180	11,738	11,938	12,635
Value of production .. .. £'000	1,522	6,743	6,082	5,736	6,214	6,919
Total value of output .. .. £'000	4,593	17,826	17,677	17,920	18,622	20,044
Value of land and buildings .. £'000	814	2,219	2,176	2,314	2,341	2,535
Value of plant and machinery .. £'000	524	2,231	2,231	2,264	2,154	2,223
Horse-power of engines ordinarily in use h.p.	12,345	31,708	31,590	30,799	32,378	30,749

(ii) *Materials Used and Articles Produced.* The quantities of materials used and leather produced in tanneries in each State in 1958-59 are shown in the following table:—

**TANNERIES: MATERIALS USED AND PRODUCTION, 1958-59.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
<b>Materials used—</b>							
<b>Hides (cattle)—</b>							
Yearling .. .. No.	(a)	(a)	(a)	(a)	(a)	..	147,996
Light Hides(b) .. ..	439,641	538,434	214,942	68,411	(a)	(a)	1,317,189
Heavy Hides(c) .. ..	345,873	421,746	170,579	61,506	(a)	(a)	1,054,112
<b>Skins—</b>							
Calf .. ..	652,931	243,239	(a)	(a)	..	..	918,159
Goat .. ..	(a)	(a)	..	..	..	..	523,392
Sheep including Pelts ..	2,196,240	334,116	(a)	(a)	..	..	3,160,080
Marsupial .. ..	38,433	..	66,377	(a)	(a)	..	111,127
<b>Bark used—</b>							
Wattle .. .. tons	1,596	3,994	751	(a)	..	(a)	6,757
Mallet and Other .. ..	(a)	337	..	..	(a)	..	656
Tanning extract (veg.) used ..	1,876	2,128	1,613	(a)	650	(a)	6,718
<b>Articles produced—</b>							
<b>Leather made—</b>							
Sole .. .. lb.	6,268,139	12,122,047	5,922,253	(a)	(a)	(a)	26,601,172
Harness, Belting, etc. ..	557,342	312,137	394,220	(a)	(a)	..	1,978,766
Upholstery .. .. sq. ft.	(a)	(a)	(a)	(a)	(a)	..	959,927
<b>Dressed and Upper from Hides—</b>							
<b>Sold by Measurement—</b>							
Patent .. .. sq. ft.	(a)	(a)	..	..	..	..	738,084
All Other .. ..	24,059,962	24,595,023	8,772,423	4,550,811	963,900	(a)	63,270,161
<b>Sold by Weight (all kinds) .. .. lb.</b>	(a)	(a)	..	..	..	(a)	218,118
<b>Dressed from skins—</b>							
Calf .. .. sq. ft.	4,338,318	2,004,051	(a)	(a)	..	..	6,526,843
Goat .. ..	(a)	(a)	..	..	..	..	2,114,228
Sheep .. ..	8,418,175	675,194	(a)	(a)	..	..	10,750,208
Marsupial .. ..	192,849	(a)	372,236	(a)	(a)	..	741,142

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

(b) Up to

45 lb.

(c) Over 45 lb.

18. Tailoring and Ready-made Clothing.—Statistics showing the distribution of this industry among the States in 1958–59 and for Australia for a series of years are shown in the following table:—

**TAILORING AND READY-MADE CLOTHING.**  
1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	921	575	116	89	122	18	1,841
Number of persons employed ..	17,572	9,713	2,032	1,253	641	195	31,406
Salaries and wages paid .. £'000	10,936	6,536	975	696	288	102	19,533
Value of power, fuel, etc., used .. £'000	231	155	22	20	10	2	440
Value of materials used .. £'000	20,437	12,977	1,382	854	531	72	36,253
Value of production .. £'000	17,722	10,466	1,555	984	508	136	31,371
Total value of output .. £'000	38,390	23,398	2,959	1,858	1,049	210	68,064
Value of land and buildings .. £'000	6,124	4,134	533	644	421	92	11,948
Value of plant and machinery .. £'000	1,615	1,141	142	93	60	12	3,063
Horse-power of engines ordinarily in use .. h.p.	5,418	3,436	605	448	190	46	10,143

**AUSTRALIA.**

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	1,177	1,985	1,952	1,944	1,914	1,841
Number of persons employed ..	26,499	33,384	32,587	31,920	31,457	31,406
Salaries and wages paid .. £'000	3,168	17,968	18,261	18,760	19,337	19,533
Value of power, fuel, etc., used .. £'000	72	390	393	416	422	440
Value of materials used .. £'000	4,947	34,237	35,941	35,883	36,680	36,253
Value of production .. £'000	4,812	28,031	28,940	29,811	31,117	31,371
Total value of output .. £'000	9,831	62,658	65,274	66,110	68,219	68,064
Value of land and buildings .. £'000	3,176	8,917	9,484	10,137	11,014	11,948
Value of plant and machinery .. £'000	356	2,663	2,746	2,861	2,913	3,063
Horse-power of engines ordinarily in use h.p.	2,607	9,198	9,017	9,133	9,671	10,143

19. Dressmaking and Millinery Establishments.—Particulars of dressmaking and millinery establishments in Australia for the years 1938–39 and 1954–55 to 1958–59 are shown in the following table:—

**DRESSMAKING AND MILLINERY: AUSTRALIA.**

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	869	1,411	1,410	1,311	1,295	1,249
Number of persons employed ..	16,398	18,014	17,675	16,265	15,668	15,048
Salaries and wages paid .. £'000	1,653	8,975	9,063	8,783	8,859	8,599
Value of power, fuel, etc., used .. £'000	33	176	177	185	184	184
Value of materials used .. £'000	2,610	13,109	13,029	12,447	11,999	11,272
Value of production .. £'000	2,592	14,501	14,585	14,244	14,220	13,766
Total value of output .. £'000	5,235	27,786	27,791	26,876	26,403	25,222
Value of land and buildings .. £'000	2,052	5,256	5,788	5,966	6,693	6,937
Value of plant and machinery .. £'000	189	1,123	1,174	1,152	1,246	1,171
Horse-power of engines ordinarily in use h.p.	1,732	4,740	4,697	4,635	4,558	5,159

20. Shirts, Collars and Underclothing.—Particulars of this industry are shown below for each State for 1958–59 and for Australia for a series of years:—

**SHIRTS, COLLARS AND UNDERCLOTHING.**  
1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	162	169	23	24	14	2	394
Number of persons employed ..	4,880	6,621	1,091	421	(a)	(a)	13,589
Salaries and wages paid .. £'000	3,047	4,142	532	221	(a)	(a)	8,223
Value of power, fuel, etc., used .. £'000	58	70	9	5	(a)	(a)	147
Value of materials used .. £'000	7,261	7,845	661	268	(a)	(a)	16,410
Value of production .. £'000	4,698	7,108	745	302	(a)	(a)	13,271
Total value of output .. £'000	12,017	15,023	1,415	575	(a)	(a)	29,828
Value of land and buildings .. £'000	1,396	1,855	225	105	(a)	(a)	3,924
Value of plant and machinery .. £'000	533	636	75	22	(a)	(a)	1,317
Horse-power of engines ordinarily in use .. h.p.	1,900	2,799	272	163	(a)	(a)	5,357

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

### SHIRTS, COLLARS AND UNDERCLOTHING—continued.

#### AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58	1958-59.
Number of factories .. ..	283	392	404	397	384	394
Number of persons employed .. ..	11,081	12,745	12,686	13,157	13,038	13,589
Salaries and wages paid .. .. £'000	1,143	6,702	6,957	7,640	7,718	8,223
Value of power, fuel, etc., used .. .. £'000	23	106	119	129	134	147
Value of materials used .. .. £'000	2,651	15,020	16,112	16,285	16,595	16,410
Value of production .. .. £'000	1,761	10,927	11,328	12,051	11,945	13,271
Total value of output .. .. £'000	4,435	26,053	27,559	28,465	28,674	29,828
Value of land and buildings .. .. £'000	946	2,719	2,999	3,543	3,587	3,924
Value of plant and machinery .. .. £'000	231	1,053	1,146	1,229	1,233	1,317
Horse-power of engines ordinarily in use h.p.	1,874	4,468	4,881	5,177	5,064	5,357

21. **Boots and Shoes.**—(i) *Details of Industry.* Boot and shoe factories hold an important place in respect of both employment afforded and extent of output. The following tables refer to boot and shoe factories as distinct from those devoted to repairing, except in Tasmania, where it has been necessary to include details of boot and shoe repairing, in order to avoid disclosure of confidential information for that State. Factories engaged in the manufacture of sand shoes, goloshes and gum, etc., boots of rubber are not included here, being classified under Rubber Goods, *see* para. 38, page 223.

### BOOTS AND SHOES.

#### 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Aust.
Number of factories .. ..	172	215	27	15	12	41	482
Number of persons employed .. ..	6,369	11,231	1,082	1,095	512	160	20,449
Salaries and wages paid .. .. £'000	4,751	8,328	760	886	333	90	15,148
Value of power, fuel, etc., used .. .. £'000	85	156	11	14	7	2	275
Value of materials used .. .. £'000	7,240	14,786	1,211	1,403	449	133	25,222
Value of production .. .. £'000	6,998	12,730	924	1,285	426	167	22,530
Total value of output .. .. £'000	14,323	27,672	2,146	2,702	882	302	48,027
Value of land and buildings .. .. £'000	1,586	2,915	198	258	166	131	5,254
Value of plant and machinery .. .. £'000	781	2,684	245	420	142	35	4,307
Horse-power of engines ordinarily in use .. .. h.p.	4,812	10,153	936	940	575	156	17,572

#### AUSTRALIA.

Items.	1945-46.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	383	516	494	474	486	482
Number of persons employed .. ..	18,264	22,323	21,557	21,432	20,839	20,449
Salaries and wages paid .. .. £'000	4,408	14,241	14,310	15,234	15,090	15,148
Value of power, fuel, etc., used .. .. £'000	75	227	233	257	266	275
Value of materials used .. .. £'000	7,520	21,020	21,812	22,221	22,854	25,222
Value of production .. .. £'000	6,472	19,640	20,480	21,222	22,019	22,530
Total value of output .. .. £'000	14,067	40,887	42,525	43,700	45,139	48,027
Value of land and buildings .. .. £'000	1,518	3,733	3,846	4,267	4,567	5,254
Value of plant and machinery .. .. £'000	1,222	3,380	3,646	3,715	3,979	4,307
Horse-power of engines ordinarily in use h.p.	9,678	17,488	16,485	16,496	16,663	17,572

(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 boots and shoes in each State are shown for 1958-59 in the following table. Particulars relating to the output of sand shoes, goloshes and gum, etc., boots of rubber are not included:—

### BOOT AND SHOE FACTORIES: OUTPUT, 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Boots, shoes and sandals							
pairs	8,088,698	12,624,824	1,129,703	1,565,949	566,970	78,256	24,054,400
£	13,833,377	23,242,898	1,901,017	2,656,937	743,210	148,059	42,525,498
Slippers .. ..							
pairs	2,274,139	5,696,595	294,908	35,805	(a)	(a)	8,535,305
£	1,633,664	3,000,598	218,005	27,530	(a)	(a)	5,065,477

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

Preliminary figures for 1959-60 were—Boots, Shoes and Sandals, 25,378,000 pairs; and Slippers, 9,708,000 pairs.

22. Flour-milling.—(i) *Details of Industry.* The following table shows the position of the flour-milling industry in each State for the year 1958-59 and for Australia for a series of years:—

## FLOUR-MILLING.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	46	33	12	21	20	3	135
Number of persons employed ..	1,496	1,279	532	440	428	126	4,301
Salaries and wages paid .. £'000	1,566	1,286	484	426	386	133	4,281
Value of power, fuel, etc., used £'000	318	218	88	87	101	15	827
Value of materials used .. £'000	17,910	16,352	5,668	5,218	5,536	1,122	51,806
Value of production .. £'000	4,125	3,046	916	740	773	216	9,816
Total value of output .. £'000	22,353	19,616	6,672	6,045	6,410	1,353	62,449
Value of land and buildings .. £'000	2,705	1,969	820	413	735	69	6,711
Value of plant and machinery .. £'000	2,419	1,543	843	449	571	77	5,902
Horse-power of engines ordinarily in use .. h.p.	18,359	14,671	5,435	3,821	5,280	1,118	48,684

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	172	151	151	143	142	135
Number of persons employed ..	3,783	4,528	4,548	4,729	4,284	4,301
Salaries and wages paid .. £'000	896	3,851	4,073	4,375	4,190	4,281
Value of power, fuel, etc., used .. £'000	231	805	835	946	827	827
Value of materials used .. £'000	10,573	54,436	54,498	59,094	53,659	51,806
Value of production .. £'000	2,091	7,311	7,575	9,608	9,934	9,816
Total value of output .. £'000	12,895	62,552	62,908	69,648	64,420	62,449
Value of land and buildings .. £'000	2,091	4,533	5,211	5,686	6,322	6,711
Value of plant and machinery .. £'000	1,814	5,060	5,405	5,690	5,962	5,902
Horse-power of engines ordinarily in use h.p.	27,795	46,566	47,786	48,103	48,449	48,684

(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 and 1954-55 to 1959-60 was as follows:—

## FLOUR-MILLING: PRODUCTION OF FLOUR.(a)

(Tons of 2,000 lb.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	547,162	436,829	84,314	146,262	138,583	19,582	1,372,732
1954-55 ..	586,549	455,906	157,904	143,840	178,851	29,969	1,553,019
1955-56 ..	571,084	454,628	169,793	154,327	193,490	27,983	1,571,305
1956-57 ..	621,476	492,956	170,397	164,274	184,717	29,157	1,662,977
1957-58 ..	416,490	482,731	143,613	138,537	163,347	28,739	1,373,457
1958-59 ..	455,709	428,280	151,457	137,806	160,909	29,707	1,363,868
1959-60 (b) ..	539,055	427,491	161,507	148,340	153,549	30,384	1,460,326

(a) Includes wheatmeal for baking and sharps.

(b) Preliminary, subject to revision.

In addition, 520,000 tons (2,000 lb. per ton) of bran and pollard were produced in 1958-59 and 533,000 tons in 1959-60. The total quantity of wheat ground in flour mills was 61,830,000 bushels in 1958-59 and 67,201,000 bushels in 1959-60.

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 bakeries, etc. 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).

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.(a)	Aust.(a)
Number of factories ..	1,643	1,253	527	270	301	156	4,150
Number of persons employed ..	8,026	6,043	2,467	1,654	1,063	1,741	20,994
Salaries and wages paid .. £'000	5,478	3,820	1,356	1,109	598	1,368	13,729
Value of power, fuel, etc., used .. £'000	1,034	745	271	196	131	169	2,546
Value of materials used .. £'000	17,152	12,081	5,039	3,638	2,325	5,377	45,612
Value of production .. £'000	12,730	9,032	3,395	2,438	1,614	2,973	32,182
Total value of output .. £'000	30,916	21,858	8,705	6,272	4,070	8,519	80,340
Value of land and buildings .. £'000	9,274	7,041	1,692	1,574	1,024	1,615	22,220
Value of plant and machinery .. £'000	4,826	3,753	1,181	1,017	707	2,067	13,551
Horse-power of engines ordinarily in use .. h.p.	11,911	8,030	3,352	3,082	1,998	5,343	33,716

### AUSTRALIA.(a)

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	1,958	3,800	3,878	3,813	3,986	4,150
Number of persons employed ..	11,715	19,125	19,543	19,964	20,323	20,994
Salaries and wages paid .. £'000	1,993	10,648	11,611	12,663	13,110	13,729
Value of power, fuel, etc., used .. £'000	306	1,902	2,090	2,308	2,440	2,546
Value of materials used .. £'000	6,651	35,899	37,820	40,704	43,476	45,612
Value of production .. £'000	4,509	23,582	26,418	29,706	29,816	32,182
Total value of output .. £'000	11,466	61,383	66,328	72,718	75,732	80,340
Value of land and buildings .. £'000	4,960	14,352	15,865	17,991	20,205	22,220
Value of plant and machinery .. £'000	1,478	8,373	9,461	10,590	11,797	13,551
Horse-power of engines ordinarily in use h.p.	10,855	27,815	29,535	30,204	32,162	33,716

(a) Includes confectionery in Tasmania.

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 XXII.—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 included 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 XXII.—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 and 1954-55 to 1958-59:—

## SUGAR-MILLS.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
NEW SOUTH WALES.						
Number of factories ..	3	3	3	3	3	3
Number of persons employed ..	212	187	152	153	170	254
Cane crushed .. tons	337,038	222,313	284,539	294,087	303,086	471,658
Raw sugar produced (94 net titre) .. tons	45,106	26,301	36,028	35,918	36,854	58,743
QUEENSLAND.						
Number of factories ..	33	31	31	31	31	31
Number of persons employed ..	4,419	7,272	7,044	7,099	6,547	6,621
Cane crushed .. tons	5,432,193	9,864,304	8,616,163	8,978,081	8,945,617	9,740,795
Raw sugar produced (94 net titre) .. tons	775,064	1,301,245	1,135,685	1,171,879	1,256,271	1,353,543
Molasses—						
Sold to distilleries .. '000 gals	8,276	23,167	22,772	24,094	20,558	24,045
Used as fodder .. " "	4,237	5,753	5,285	5,536	4,861	6,028
Used as manure .. " "	3,293	10,501	10,637	9,177	10,880	10,059
Run to waste .. " "	499	233	185	51	285	106
Burnt as fuel .. " "	3,749	1,079	1,519	1,405	284	111
Sold or used for other purposes .. '000 gals	232	473	588	523	508	507
Total molasses disposed of .. '000 gals	20,286	41,206	40,986	40,786	37,376	40,856

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 1958-59, there were two sugar refineries in Queensland and one each in New South Wales, Victoria, South Australia and Western Australia. The total quantity of raw sugar treated amounted to 536,086 tons for a yield of 518,921 tons of refined sugar.

26. *Confectionery.*—Particulars for 1958-59 for each State and for Australia for a series of years are shown hereunder:—

## CONFECTIONERY.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.(b)
Number of factories ..	85	84	20	14	6	(a)	209
Number of persons employed ..	2,858	3,061	174	347	264	(a)	6,704
Salaries and wages paid .. £'000	2,270	2,282	87	219	179	(a)	5,037
Value of power, fuel, etc., used .. £'000	260	229	9	23	15	(a)	536
Value of materials used .. £'000	8,204	7,111	364	611	552	(a)	16,842
Value of production .. £'000	5,474	4,287	154	308	363	(a)	10,586
Total value of output .. £'000	13,938	11,627	527	942	930	(a)	27,964
Value of land and buildings .. £'000	2,263	2,075	93	284	97	(a)	4,812
Value of plant and machinery .. £'000	2,209	2,069	69	144	81	(a)	4,572
Horse-power of engines ordinarily in use .. h.p.	13,374	14,870	351	1,413	496	(a)	30,504

## AUSTRALIA.(b)

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	148	238	226	213	217	209
Number of persons employed ..	7,256	7,069	7,183	6,818	6,789	6,704
Salaries and wages paid .. £'000	1,041	4,516	4,805	4,866	4,982	5,037
Value of power, fuel, etc., used .. £'000	107	447	473	509	529	536
Value of materials used .. £'000	3,102	14,917	15,583	15,391	16,052	16,842
Value of production .. £'000	2,418	8,320	8,932	9,885	9,771	10,586
Total value of output .. £'000	5,627	23,684	24,988	25,785	26,352	27,964
Value of land and buildings .. £'000	1,423	2,964	3,324	3,239	4,351	4,812
Value of plant and machinery .. £'000	1,364	3,368	3,612	3,582	3,891	4,572
Horse-power of engines ordinarily in use h.p.	16,154	27,374	29,156	27,348	29,256	30,504

(a) Not available for publication. Included with bakeries.

(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 1958–59 and for Australia for a series of years:—

**JAM, FRUIT AND VEGETABLE CANNING, PICKLES, SAUCES, VINEGAR.**  
1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	53	60	19	19	9	20	180
Number of persons employed ..	2,530	4,425	1,484	926	118	1,279	10,762
Salaries and wages paid .. £'000	2,118	4,002	1,404	643	85	934	9,186
Value of power, fuel, etc., used .. £'000	250	468	84	55	8	84	949
Value of materials used .. £'000	7,835	19,829	6,219	1,879	287	2,309	38,358
Value of production .. £'000	4,100	8,440	2,312	1,142	196	1,268	17,458
Total value of output .. £'000	12,185	28,737	8,615	3,076	491	3,661	56,765
Value of land and buildings .. £'000	2,340	6,858	764	659	147	862	11,630
Value of plant and machinery .. £'000	1,742	5,451	490	975	67	848	9,573
Horse-power of engines ordinarily in use .. h.p.	10,163	28,565	2,771	2,521	378	4,141	48,539

**AUSTRALIA.**

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories ..	123	184	183	182	187	180
Number of persons employed ..	6,476	11,061	11,578	12,019	11,407	10,762
Salaries and wages paid .. £'000	1,149	7,945	8,924	9,698	9,752	9,186
Value of power, fuel, etc., used .. £'000	97	699	802	957	978	949
Value of materials used .. £'000	4,800	29,708	32,323	39,874	41,159	38,358
Value of production .. £'000	2,334	15,312	16,103	18,792	19,753	17,458
Total value of output .. £'000	7,231	45,719	49,228	59,623	61,890	56,765
Value of land and buildings .. £'000	1,382	6,193	8,874	9,790	10,621	11,630
Value of plant and machinery .. £'000	721	5,496	8,083	8,752	9,275	9,573
Horse-power of engines ordinarily in use h.p.	7,873	32,661	38,508	45,820	55,824	48,539

(ii) *Production.* During the 1939–45 War, production of jams increased greatly and an 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 again to 78.2 million lb. in 1958–59. Preliminary figures for 1959–60 show production as being 84.5 million lb.

Production of preserved fruit in 1958–59 was 312.6 million lb., the highest on record being 349.4 million lb. in 1957–58. Preliminary figures for 1959–60 show production as being 339.8 million lb.

There has also been a marked development in the production of canned vegetables. In 1938–39, output totalled 10.3 million lb. but, as a result of the war-time demand by the armed services, production reached the record level of 119.1 million lb. in 1944–45. However, it has since declined and in 1958–59 amounted to 66.9 million lb. Preliminary figures for 1959–60 show production as being 81.6 million lb.

The following table shows the total quantity of jams, pickles, sauces and other items manufactured in each State in 1958–59:—

**JAMS, PRESERVED FRUIT AND VEGETABLES, PICKLES AND SAUCES: 1958–59.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Jams .. .. '000 lb.	21,488	33,639	9,728	(a)	(a)	(a)	78,234
Fruit, preserved .. ..	36,914	151,393	87,142	19,778	(a)	(a)	312,563
Fruit Pulp(b) .. .. cwt.	(a)	(a)	(a)	(a)	..	51,315	114,113
Fruit Juices, natural .. .. '000 gals.	357	160	3,951	(a)	(a)	66	5,073
Vegetables, preserved .. .. '000 lb.	27,528	25,664	(a)	(a)	(a)	(a)	66,883
Pickled Vegetables .. ..	4,758	1,136	303	1,131	318	(a)	7,646
Tomato Pulp(b) .. .. cwt.	22,235	381,931	(a)	27,007	(a)	(a)	458,410
Tomato Paste, Puree, etc., .. '000 pints	1,259	1,223	..	..	(a)	(a)	2,507
Tomato Juice .. ..	49	949	(a)	422	(a)	..	1,468
Pickles .. .. '000 pints	1,808	1,953	(a)	1,164	(a)	..	5,210
Chutney .. ..	335	396	(a)	(a)	(a)	..	1,143
Sauces .. ..	11,827	13,819	1,401	2,528	(a)	(a)	30,694
Soup (canned) .. ..	2,920	28,075	..	(a)	(a)	..	31,480
Soup, Dry Mix .. .. '000 lb.	(a)	350	79	(a)	(a)	..	4,329

(a) Not available for publication. Figures are included in the total for Australia.  
quantities made and used in the works producing them.

(b) Includes



28. Bacon-curing.—(i) *Details of Industry.* The table hereunder shows particulars of factories engaged in bacon-curing in each State for 1958-59 and for Australia for a series of years:—

## BACON-CURING.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	29	16	9	14	4	8	80
Number of persons employed ..	697	847	1,660	545	301	112	4,162
Salaries and wages paid .. £'000	658	762	1,394	502	232	101	3,649
Value of power, fuel, etc., used £'000	86	105	119	70	39	12	431
Value of materials used .. £'000	4,632	5,859	8,339	2,922	2,450	835	25,037
Value of production .. £'000	1,442	1,233	2,579	650	304	265	6,473
Total value of output .. £'000	6,160	7,197	11,037	3,642	2,793	1,112	31,941
Value of land and buildings £'000	670	676	1,025	458	132	143	3,104
Value of plant and machinery £'000	288	402	671	302	103	40	1,806
Horse-power of engines ordinarily in use .. h.p.	2,153	2,878	5,096	2,343	1,125	513	14,108

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	76	84	82	81	80	80
Number of persons employed ..	2,047	3,201	3,414	3,472	3,745	4,162
Salaries and wages paid .. £'000	480	2,517	2,754	2,956	3,311	3,649
Value of power, fuel, etc., used .. £'000	77	322	339	362	403	431
Value of materials used .. £'000	3,768	18,318	20,814	22,373	22,147	25,037
Value of production .. £'000	865	5,715	4,997	5,273	6,798	6,473
Total value of output .. £'000	4,710	24,355	26,150	28,008	29,348	31,941
Value of land and buildings .. £'000	750	1,956	2,308	2,452	2,667	3,104
Value of plant and machinery .. £'000	357	1,100	1,329	1,512	1,654	1,806
Horse-power of engines ordinarily in use h.p.	9,389	11,791	13,019	13,472	14,747	14,108

(ii) *Quantity of Production.* The number of pigs cured and the quantity of bacon and ham and lard produced in factories in each State for 1958-59 are shown in the following table:—

## BACON-CURING FACTORIES: PIGS CURED AND PRODUCTION, 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Pigs killed for bacon and ham—							
For curing on own account	155,046	147,617	276,083	76,504	101,893	38,111	795,254
For curing on commission	10,174	2,502	2,177	975	(a)	(a)	16,296
Pork and green bacon used for—							
Curing on own account '000 lb.	5,222	4,850	105	1,154	(a)	..	12,016
Curing on commission '000 lb.	5,613	277	..	(a)	..	(a)	5,897
Sugar used .. ton	42	36	146	24	31	16	295
Finished bacon and ham made (b)—							
On own account '000 lb.	16,500	15,550	21,147	6,392	6,600	1,808	67,997
On commission ..	5,890	498	283	105	(a)	(a)	6,818
Green bacon and ham ..	567	1,805	708	546	324	300	4,250
Lard produced .. cwt.	3,963	4,933	18,925	4,162	6,177	962	39,122

(a) Not available for publication; figures are included in the total for Australia. (b) Includes smoked bacon and ham, cooked ham (not smoked) made for retail sale, and canned bacon and ham.

Bacon and ham and other pig products are dealt with more fully in Chapter XXIV.—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 1958-59 and for Australia for a series of years:—

**BUTTER, CHEESE AND CONDENSED AND DRIED MILK.**  
1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	77	127	78	41	19	21	363
Number of persons employed ..	2,405	5,452	1,621	732	325	362	10,897
Salaries and wages paid .. £'000	2,230	5,465	1,377	580	277	341	10,270
Value of power, fuel, etc., used .. £'000	732	1,528	319	101	63	73	2,816
Value of materials used ..	17,291	51,382	20,776	4,877	3,033	4,570	101,929
Value of production .. £'000	4,441	11,799	2,783	1,104	615	704	21,446
Total value of output .. £'000	22,464	64,709	23,878	6,082	3,711	5,347	126,191
Value of land and buildings .. £'000	3,356	6,763	1,956	675	379	389	13,518
Value of plant and machinery .. £'000	3,653	7,995	2,558	713	447	453	15,819
Horse-power of engines ordinarily in use .. h.p.	31,171	39,283	24,826	6,960	3,078	2,562	107,880

**AUSTRALIA.**

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	523	379	375	371	366	363
Number of persons employed ..	6,851	10,567	11,119	11,189	10,870	10,897
Salaries and wages paid .. £'000	1,570	8,680	9,568	10,068	9,995	10,270
Value of power, fuel, etc., used .. £'000	390	2,423	2,741	2,797	2,692	2,816
Value of materials used ..	29,162	100,706	106,883	101,517	94,566	101,929
Value of production ..	3,543	15,394	18,893	19,265	19,561	21,446
Total value of output ..	33,095	118,523	128,517	123,579	116,819	126,191
Value of land and buildings ..	2,880	10,037	11,188	11,985	12,558	13,518
Value of plant and machinery ..	3,067	12,553	13,923	14,631	15,254	15,819
Horse-power of engines ordinarily in use .. h.p.	45,059	98,442	102,182	108,157	109,647	107,880

(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 1958-59. These details are restricted to factory production and therefore exclude farm output.

**BUTTER, CHEESE AND CONDENSED MILK, ETC., FACTORIES: PRODUCTION.**  
1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Total.
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**MATERIALS USED.**

Whole Milk used in manufacture of							
Butter .. .. '000 gal.	175,381	411,443	184,030	29,879	27,685	48,056	876,474
Cheese .. ..	10,745	37,638	18,625	24,280	2,600	836	94,724
Condensed, Dried and other Milk Products .. .. '000 gal.	14,912	60,859	7,831	4	3,715	2,941	90,262
Sugar .. .. ton	1,109	12,658	(a)	..	(a)	(a)	15,571

**PRODUCTION.**  
(Tons.)

Butter .. ..	37,733	88,143	41,022	7,055	6,166	10,804	190,923
Cheese (Green Weight) .. ..	5,044	17,440	8,220	11,200	1,181	339	43,424
Cheese (Processed) (b) .. ..	(a)	(a)	1,682	..	..	(a)	14,367
Casein .. ..	856	10,423	(a)	..	(a)	..	11,328
Condensed, Concentrated and Evaporated Milk—							
Full Cream—Sweetened .. ..	(a)	27,986	..	..	(a)	..	31,626
Unsweetened .. ..	(a)	14,265	(a)	..	(a)	(a)	29,846
Skim and/or Buttermilk .. ..	(a)	(a)	(a)	..	(a)	..	4,943
Milk Powder—							
Full Cream .. ..	5,389	10,929	(a)	(a)	..	..	19,183
Skim .. ..	11,496	21,154	706	(a)	(a)	..	34,128
Buttermilk and Whey .. ..	1,050	3,013	1,306	(a)	(a)	(a)	6,024
Other Whole Milk Products .. ..	(a)	(a)	(a)	..	..	(a)	14,134
Ice Cream Mix—Powder .. ..	(a)	524	(a)	(a)	(a)	..	642

(a) Not available for publication; figures are included in the total for Australia. (b) The cheese used in the manufacture of these products is included in Cheese (Green Weight) made as shown above.

The butter, cheese and condensed milk industries are dealt with more fully in Chapter XXIV.—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 is referred to in Chapter XXIII.—Pastoral Production. In recent years, there has been considerable expansion in the canning of meat and fish.

## MEAT AND FISH PRESERVING.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	8	13	35	20	35	4	115
Number of persons employed ..	494	740	7,113	294	1,448	53	10,142
Salaries and wages paid .. £'000	433	754	7,805	210	1,433	64	10,699
Value of power, fuel, etc., used £'000	80	186	834	34	151	7	1,292
Value of materials used .. £'000	2,166	4,604	50,028	1,491	3,414	113	61,816
Value of production .. £'000	961	1,727	10,217	318	2,040	91	15,354
Total value of output .. £'000	3,207	6,517	61,079	1,843	5,605	211	78,462
Value of land and buildings £'000	277	985	3,765	215	2,136	81	7,459
Value of plant and machinery £'000	199	1,010	2,836	163	1,030	23	5,261
Horse-power of engines ordinarily in use .. .. h.p.	1,259	4,199	23,749	1,075	8,344	368	38,994

## AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	32	114	116	113	114	115
Number of persons employed ..	4,093	9,432	9,550	8,866	8,878	10,142
Salaries and wages paid .. £'000	1,180	8,327	8,704	8,366	8,690	10,699
Value of power, fuel, etc. used .. £'000	134	1,110	1,119	1,099	1,128	1,292
Value of materials used .. £'000	6,351	46,642	46,359	45,483	45,695	61,816
Value of production .. £'000	1,601	12,182	14,345	14,385	13,723	15,354
Total value of output .. £'000	8,086	59,934	61,823	60,967	60,546	78,462
Value of land and buildings .. £'000	1,966	5,403	5,934	6,241	6,710	7,459
Value of plant and machinery .. £'000	1,325	3,409	4,118	4,147	4,594	5,261
Horse-power of engines ordinarily in use h.p.	13,385	35,600	33,086	36,517	36,956	38,994

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 XXIII.—Pastoral Production.

31. Breweries.—(i) *Details of Industry.* The following table gives particulars of breweries in each State for the year 1958–59 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 directly concerned with the brewing of beer, although associated with it. These extraneous activities include cooperage, malt works, aerated waters, etc.

## BREWERIES.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	6	7	6	3	3	2	27
Number of persons employed ..	1,923	1,889	843	(a)	(a)	(a)	5,830
Salaries and wages paid .. £'000	2,113	2,060	800	(a)	(a)	(a)	6,232
Value of power, fuel, etc. used £'000	552	389	213	(a)	(a)	(a)	1,488
Value of materials used .. £'000	8,228	7,773	2,303	(a)	(a)	(a)	22,416
Value of production .. £'000	6,592	3,814	2,482	(a)	(a)	(a)	16,964
Total value of output(b) .. £'000	15,372	11,976	4,998	(a)	(a)	(a)	40,868
Value of land and buildings £'000	4,025	3,038	3,023	(a)	(a)	(a)	12,716
Value of plant and machinery £'000	5,711	4,249	2,327	(a)	(a)	(a)	15,727
Horse-power of engines ordinarily in use .. .. h.p.	15,369	12,860	8,965	(a)	(a)	(a)	46,525

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

(b) Excludes

## BREWERIES—continued.

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	34	30	28	27	26	27
Number of persons employed .. ..	3,698	6,791	6,835	6,107	5,909	5,830
Salaries and wages paid .. .. £'000	1,215	6,272	6,588	6,196	6,228	6,232
Value of power, fuel, etc., used .. .. £'000	251	1,369	1,396	1,509	1,479	1,488
Value of materials used .. .. £'000	3,407	20,810	22,437	21,238	22,146	22,416
Value of production .. .. £'000	5,372	14,855	15,224	16,266	17,271	16,964
Total value of output(a) .. .. £'000	9,030	37,034	39,057	39,013	40,896	40,868
Value of land and buildings .. .. £'000	2,801	8,307	10,099	11,069	11,797	12,716
Value of plant and machinery .. .. £'000	2,737	10,295	12,917	14,863	15,510	15,727
Horse-power of engines ordinarily in use h.p.	23,231	42,359	44,908	45,268	44,869	46,525

(a) Excludes Excise Duty.

(ii) *Production, Consumption, Materials Used.* The quantity of ale, beer and stout 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 annual output remained static at about 100 million gallons from 1942-43 to 1944-45. Thereafter, production increased, and in 1959-60 amounted to over 237 million gallons.

The average annual consumption of ale, beer and stout per head of population exceeded 11 gallons prior to the economic depression of the early thirties; it dropped to 7.3 gallons in 1931-32, increased to 13.8 gallons in 1941-42 and declined again to about 13 gallons during the period of control from 1942 to 1946. The consumption per head had increased to 22.6 gallons by 1959-60.

The table below shows the quantities of materials used and the quantity and value of ale, beer (excluding waste beer) and stout brewed in each State during 1958-59:—

## BREWERIES: MATERIALS USED AND PRODUCTION, 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
MATERIALS USED.							
Malt .. .. '000 bus.	2,463	(a)	755	(a)	(a)	(a)	6,525
Hops .. .. '000 lb.	1,951	(a)	504	(a)	(a)	(a)	4,317
Sugar .. .. ton	20,323	(a)	4,592	(a)	(a)	(a)	42,528

## ALE, BEER AND STOUT BREWED (EXCLUDING WASTE BEER).

Quantity .. .. '000 gals.	91,685	(a)	24,695	(a)	(a)	(a)	223,597
Value (b) .. .. £'000	15,183	(a)	4,949	(a)	(a)	(a)	40,171

(a) Not available for publication; figures are included in the 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 1958-59 and for Australia for a series of years:—

## WINERIES AND DISTILLERIES.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	32	27	5	72	22	..	158
Number of persons employed .. ..	229	309	158	1,254	71	..	2,021
Salaries and wages paid .. .. £'000	237	280	155	1,114	41	..	1,827
Value of power, fuel, etc., used .. .. £'000	127	57	70	139	3	..	396
Value of materials used .. .. £'000	2,318	665	511	4,260	146	..	7,900
Value of production .. .. £'000	640	857	290	2,008	94	..	3,889
Total value of output .. .. £'000	3,085	1,579	871	6,407	243	..	12,185
Value of land and buildings .. .. £'000	395	382	115	1,622	74	..	2,588
Value of plant and machinery .. .. £'000	557	360	357	1,234	65	..	2,573
Horse-power of engines ordinarily in use .. .. h.p.	1,364	1,188	777	7,086	358	..	10,773

WINERIES AND DISTILLERIES—*continued.*

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	135	158	155	157	160	158
Number of persons employed .. ..	1,133	2,022	1,908	2,027	2,066	2,021
Salaries and wages paid .. .. £'000	246	1,506	1,532	1,699	1,800	1,827
Value of power, fuel, etc., used .. .. £'000	58	387	368	423	426	396
Value of materials used .. .. £'000	1,421	4,885	5,074	6,461	7,448	7,900
Value of production .. .. £'000	811	2,846	2,890	3,704	4,569	3,889
Total value of output .. .. £'000	2,290	8,118	8,332	10,588	12,443	12,185
Value of land and buildings .. .. £'000	1,002	2,312	2,254	2,363	2,458	2,588
Value of plant and machinery .. .. £'000	916	2,170	2,099	2,348	2,339	2,573
Horse-power of engines ordinarily in use h.p.	4,396	11,054	11,159	11,412	11,548	10,773

33. *Tobacco, Cigars and Cigarettes.*—Particulars of establishments in which the manufacture of tobacco, cigars or cigarettes was carried on during 1958-59 are shown below for each State and for Australia for a series of years. There are no such factories in South Australia or Tasmania.

## TOBACCO, CIGARS AND CIGARETTES.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	W. Aust.	Aust.
Number of factories .. ..	8	8	(a)	(a)	22
Number of persons employed .. ..	2,763	1,918	(a)	(a)	4,779
Salaries and wages paid .. .. £'000	2,432	1,694	(a)	(a)	4,178
Value of power, fuel, etc., used .. .. £'000	78	78	(a)	(a)	160
Value of materials used .. .. £'000	21,429	14,250	(a)	(a)	35,775
Value of production .. .. £'000	8,196	5,211	(a)	(a)	13,451
Total value of output(b) .. .. £'000	29,703	19,539	(a)	(a)	49,386
Value of land and buildings .. .. £'000	990	1,541	(a)	(a)	2,700
Value of plant and machinery .. .. £'000	2,124	1,962	(a)	(a)	4,178
Horse-power of engines ordinarily in use h.p.	5,462	4,502	(a)	(a)	10,384

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	30	34	33	29	27	22
Number of persons employed .. ..	5,544	4,707	4,622	4,630	4,754	4,779
Salaries and wages paid .. .. £'000	1,096	3,516	3,728	4,038	4,203	4,178
Value of power, fuel, etc., used .. .. £'000	34	158	128	127	145	160
Value of materials used .. .. £'000	7,081	28,825	31,227	33,535	35,408	35,775
Value of production .. .. £'000	2,685	9,745	9,244	10,999	11,177	13,451
Total value of output(b) .. .. £'000	9,800	38,728	40,599	44,661	46,730	49,386
Value of land and buildings .. .. £'000	1,042	1,504	1,867	1,764	2,962	2,700
Value of plant and machinery .. .. £'000	943	2,190	2,784	3,059	4,136	4,178
Horse-power of engines ordinarily in use h.p.	4,610	8,466	10,778	10,990	10,586	10,384
Leaf used—						
Australian (stemmed) .. .. '000 lb.	4,489	4,482	5,204	5,299	7,158	8,792
Imported (stemmed) .. .. '000 lb.	16,011	36,053	37,399	40,860	38,369	40,179
Tobacco made .. .. '000 lb.	16,305	21,466	18,836	18,917	18,192	17,087
Cigars made .. .. '000 lb.	238	151	132	114	119	109
Cigarettes made .. .. '000 lb.	6,731	22,859	27,162	30,513	32,748	35,255

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

(b) Excludes

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 materials. 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 and the 1958-59 usage was 8.8 million lb. For further information see Chapter XXII.—Agricultural Production.

Imports of tobacco during 1958-59 comprised: manufactured tobacco, 367,441 lb., cigars, 91,394 lb., cigarettes, 386,789 lb., unmanufactured tobacco, 38,678,767 lb.; and in 1959-60 were 591,796 lb., 139,714 lb., 975,434 lb. and 37,004,900 lb. respectively.

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

#### SAWMILLS AND PLYWOOD AND VENEER MILLS.

1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	1,012	553	586	95	245	314	2,805
Number of persons employed ..	10,826	7,257	8,425	2,491	4,289	2,603	35,891
Salaries and wages paid .. £'000	8,966	6,375	6,494	2,134	3,367	2,142	29,478
Value of power, fuel, etc., used £'000	740	521	444	160	304	213	2,382
Value of materials used .. £'000	24,103	15,348	13,446	6,501	5,761	5,094	70,253
Value of production .. £'000	17,191	11,909	10,664	3,815	6,050	4,020	53,649
Total value of output .. £'000	42,034	27,778	24,554	10,476	12,115	9,327	126,284
Value of land and buildings £'000	5,415	3,071	1,936	2,341	892	890	14,545
Value of plant and machinery £'000	5,181	3,317	3,516	2,820	1,981	1,922	18,737
Horse-power of engines ordinarily in use .. .. . h.p.	119,477	81,950	90,605	26,955	42,007	34,636	395,630

#### AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59
Number of factories ..	1,639	3,033	3,025	3,000	2,910	2,805
Number of persons employed ..	19,056	36,631	37,102	35,835	35,185	35,891
Salaries and wages paid .. £'000	3,626	25,530	27,086	27,563	27,932	29,478
Value of power, fuel, etc., used .. £'000	225	1,805	1,938	2,056	2,143	2,382
Value of materials used .. £'000	8,441	61,073	65,618	66,817	69,644	70,253
Value of production .. £'000	5,762	45,319	47,042	47,928	50,246	53,649
Total value of output .. £'000	14,428	108,197	114,598	116,801	122,033	126,284
Value of land and buildings .. £'000	2,029	10,321	11,136	12,079	13,924	14,545
Value of plant and machinery .. £'000	2,777	14,896	16,201	17,086	17,971	18,737
Horse-power of engines ordinarily in use h.p.	89,843	359,786	371,003	378,902	380,203	395,630

The sawmill output of Australian grown 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 1959-60 had risen to 1,500 million super. feet. Further reference is made to the sawmilling industry in Chapter XXV.—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 1958-59 and for Australia for a series of years.

#### CABINET AND FURNITURE MAKING AND UPHOLSTERY, 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	570	505	232	121	150	51	1,629
Number of persons employed ..	6,225	4,716	2,261	1,436	1,010	364	16,012
Salaries and wages paid .. £'000	5,541	3,886	1,541	1,081	676	238	12,963
Value of power, fuel, etc., used £'000	139	101	39	31	19	5	334
Value of materials used .. £'000	10,405	5,713	2,686	1,761	1,288	369	22,222
Value of production .. £'000	8,992	6,578	2,453	1,731	1,080	394	21,228
Total value of output .. £'000	19,536	12,392	5,178	3,523	2,387	768	43,784
Value of land and buildings £'000	4,304	3,509	1,131	725	590	198	10,457
Value of plant and machinery £'000	971	842	355	279	179	53	2,679
Horse-power of engines ordinarily in use .. .. . h.p.	16,013	13,785	6,746	5,161	3,628	1,206	46,539

CABINET AND FURNITURE MAKING AND UPHOLSTERY—*continued.*

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	880	1,658	1,642	1,635	1,644	1,629
Number of persons employed .. ..	11,576	15,271	15,250	15,164	15,929	16,012
Salaries and wages paid .. .. £'000	2,139	10,067	10,840	11,193	12,462	12,963
Value of power, fuel, etc., used .. .. £'000	64	258	272	289	311	334
Value of material used .. .. £'000	3,380	16,538	17,470	17,926	20,860	22,222
Value of production .. .. £'000	3,223	15,888	17,064	18,059	20,163	21,228
Total value of output .. .. £'000	6,667	32,684	34,806	36,274	41,334	43,784
Value of land and buildings .. .. £'000	1,897	6,204	6,799	7,759	9,069	10,457
Value of plant and machinery .. .. £'000	574	2,196	2,292	2,424	2,515	2,679
Horse-power of engines ordinarily in use h.p.	18,971	46,413	46,957	45,096	46,447	46,539

36. **Printing Works.**—Printing and bookbinding rank high in importance among the industries of Australia and in 1958-59 afforded employment for 41,705 employees, and paid £38,995,268 in salaries and wages while the value of output amounted to £130,259,383. The following table gives particulars of establishments engaged in general printing in each State for 1958-59 and for Australia for a series of years. These establishments include those engaged in lithographic printing, bookbinding, paper ruling and linotyping and Government printing works.

## GOVERNMENT AND GENERAL PRINTING WORKS, 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	667	542	114	86	82	27	1,518
Number of persons employed .. ..	10,999	9,669	2,417	1,688	1,438	616	26,827
Salaries and wages paid .. .. £'000	10,204	8,748	1,785	1,389	1,080	499	23,705
Value of power, fuel, etc., used .. .. £'000	325	269	49	38	33	15	729
Value of materials used .. .. £'000	14,911	12,323	1,878	1,609	1,224	475	32,420
Value of production .. .. £'000	17,535	15,581	2,925	2,270	1,938	787	41,036
Total value of output .. .. £'000	32,771	28,173	4,852	3,917	3,195	1,277	74,185
Value of land and buildings .. .. £'000	9,209	6,769	963	826	750	524	19,041
Value of plant and machinery .. .. £'000	7,433	6,672	1,165	1,090	834	341	17,535
Horse-power of engines ordinarily in use .. .. h.p.	17,762	14,836	2,783	2,344	2,116	910	40,751

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories .. ..	1,028	1,285	1,347	1,399	1,431	1,518
Number of persons employed .. ..	18,369	23,571	24,453	25,271	25,916	26,827
Salaries and wages paid .. .. £'000	3,435	17,672	19,421	20,632	22,099	23,705
Value of power, fuel, etc., used .. .. £'000	110	511	551	621	675	729
Value of materials used .. .. £'000	3,703	23,950	25,792	27,202	29,809	32,420
Value of production .. .. £'000	5,749	28,968	32,075	35,136	38,068	41,036
Total value of output .. .. £'000	9,562	53,429	58,418	62,959	68,552	74,185
Value of land and buildings .. .. £'000	3,956	10,120	11,715	13,310	15,084	19,041
Value of plant and machinery .. .. £'000	3,186	11,769	13,560	14,586	15,705	17,535
Horse-power of engines ordinarily in use h.p.	17,759	34,507	35,667	36,784	37,963	40,751

The following table gives similar particulars in respect of establishments producing newspapers and periodicals:—

## NEWSPAPERS AND PERIODICALS, 1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	177	128	58	36	19	5	423
Number of persons employed ..	6,959	3,317	2,288	1,169	737	408	14,878
Salaries and wages paid .. £'000	7,233	3,471	2,141	1,183	819	444	15,291
Value of power, fuel, etc., used .. £'000	286	135	79	39	41	10	590
Value of materials used .. £'000	11,823	8,660	3,205	2,268	1,408	382	27,746
Value of production .. £'000	12,961	6,173	3,985	2,260	1,749	610	27,738
Total value of output .. £'000	25,070	14,968	7,269	4,567	3,198	1,002	56,074
Value of land and buildings .. £'000	7,514	2,350	1,398	1,478	771	228	13,739
Value of plant and machinery .. £'000	6,423	2,211	1,498	682	561	220	11,595
Horse-power of engines ordinarily in use .. h.p.	14,990	10,020	5,617	3,465	2,542	806	37,440

## AUSTRALIA.

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	472	413	416	412	407	423
Number of persons employed ..	10,091	13,675	14,446	14,640	14,387	14,878
Salaries and wages paid .. £'000	2,667	11,598	13,273	13,134	13,997	15,291
Value of power, fuel, etc., used .. £'000	131	493	511	551	562	590
Value of materials used .. £'000	3,131	22,391	23,491	24,009	25,299	27,746
Value of production .. £'000	4,561	20,902	23,437	25,110	25,580	27,738
Total value of output .. £'000	7,823	43,786	47,439	49,670	51,441	56,074
Value of land and buildings .. £'000	3,755	7,277	9,414	10,763	12,112	13,739
Value of plant and machinery .. £'000	2,970	9,214	10,716	11,315	10,833	11,595
Horse-power of engines ordinarily in use h.p.	22,497	36,610	40,305	36,980	37,440	37,440

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, while 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. It remained at about this level until 1949-50 but has since increased steadily to a total of nearly 217,000 tons in 1958-59.

The number of factories operating in 1958-59 comprised four in New South Wales, seven in Victoria, two in Queensland, one each in South Australia and Western Australia, and three in Tasmania. In Tasmania, 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.	1954-55.	1955-56. (a)	1956-57. (a)	1957-58. (a)	1958-59. (a)
Number of factories ..	7	20	17	17	18.	18
Number of persons employed ..	1,961	7,611	7,480	7,903	8,088	8,406
Salaries and wages paid .. £'000	467	7,095	7,813	8,783	9,752	10,422
Value of power, fuel, etc., used .. £'000	201	2,560	2,735	2,996	3,131	3,341
Value of materials used .. £'000	1,096	17,474	18,963	22,419	22,903	25,025
Value of production .. £'000	1,005	18,294	17,330	19,383	23,910	25,817
Total value of output .. £'000	2,302	38,328	39,028	44,798	49,944	54,183
Value of land and buildings .. £'000	850	8,255	9,312	9,527	12,203	12,317
Value of plant and machinery .. £'000	1,713	18,050	18,640	18,141	21,835	22,482
Horse-power of engines ordinarily in use h.p.	31,548	157,948	164,123	170,382	174,557	179,364

(a) Excludes several establishments previously included, engaged in processing but not manufacturing paper.



38. Rubber Goods.—The following table shows particulars of this industry for each State during 1958–59 and for Australia for a series of years. Establishments engaged primarily in the retreading and repairing of tyres are excluded.

## RUBBER GOODS, 1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	43	56	14	7	2	..	122
Number of persons employed ..	6,654	6,529	1,136	(a)	(a)	..	15,227
Salaries and wages paid .. £'000	6,863	6,669	945	(a)	(a)	..	15,442
Value of power, fuel, etc., used .. £'000	933	1,057	114	(a)	(a)	..	2,205
Value of materials used .. £'000	16,143	16,418	2,608	(a)	(a)	..	36,339
Value of production .. £'000	9,333	14,065	2,153	(a)	(a)	..	27,108
Total value of output .. £'000	26,409	31,540	4,875	(a)	(a)	..	65,652
Value of land and buildings .. £'000	2,602	3,759	480	(a)	(a)	..	7,288
Value of plant and machinery .. £'000	3,080	3,855	407	(a)	(a)	..	7,632
Horse-power of engines ordinarily in use .. h.p.	53,823	60,379	8,723	(a)	(a)	..	126,901

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

## AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	37	108	117	120	118	122
Number of persons employed ..	1,779	13,645	14,480	14,859	15,017	15,227
Salaries and wages paid .. £'000	284	12,364	13,616	14,296	14,931	15,442
Value of power, fuel, etc., used .. £'000	35	1,759	1,831	2,007	2,131	2,205
Value of materials used .. £'000	455	32,733	38,329	34,378	36,044	36,339
Value of production .. £'000	431	18,982	21,211	23,246	24,782	27,108
Total value of output .. £'000	921	53,474	61,371	59,631	62,957	65,652
Value of land and buildings .. £'000	235	5,057	5,841	6,292	7,120	7,288
Value of plant and machinery .. £'000	194	5,285	7,156	6,645	7,839	7,632
Horse-power of engines ordinarily in use .. h.p.	5,915	98,836	106,720	114,562	120,602	126,901

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 VII.—Electric Power Generation and Distribution. Particulars of the industry for each State during the year 1958–59 and for Australia for a series of years are shown below:—

## ELECTRIC LIGHT AND POWER WORKS.

1958–59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories .. ..	64	44	63	35	88	11	305
Number of persons employed ..	5,542	3,398	1,644	(a)	1,106	(a)	13,124
Salaries and wages paid .. £'000	5,758	3,851	1,650	(a)	1,181	(a)	14,011
Value of power, fuel, etc., used .. £'000	15,486	9,970	6,622	(a)	3,529	(a)	39,383
Value of materials used .. £'000	2,039	600	1,228	(a)	334	(a)	4,744
Value of production .. £'000	28,101	18,529	5,883	(a)	3,493	(a)	63,422
Total value of output .. £'000	45,626	29,099	13,733	(a)	7,356	(a)	107,549
Value of land and buildings .. £'000	47,066	19,551	9,483	(a)	4,096	(a)	122,460
Value of plant and machinery .. £'000	85,564	59,923	37,255	(a)	16,140	(a)	235,844
Generators installed—Kilowatt capacity .. .. '000 kW	2,276	1,310	712	(a)	330	(a)	5,531

## AUSTRALIA.

Items.	1938–39.	1954–55.	1955–56.	1956–57.	1957–58.	1958–59.
Number of factories .. ..	395	351	332	328	319	305
Number of persons employed ..	6,508	11,927	12,111	12,473	12,833	13,124
Salaries and wages paid .. £'000	1,977	11,457	12,497	13,571	13,467	14,011
Value of power, fuel, etc., used .. £'000	3,239	36,548	37,479	39,830	40,261	39,383
Value of materials used .. £'000	530	4,170	4,090	4,396	4,740	4,744
Value of production .. £'000	8,714	37,568	43,219	50,722	55,514	63,422
Total value of output .. £'000	12,483	78,286	84,788	94,948	100,515	107,549
Value of land and buildings .. £'000	8,388	60,120	71,680	100,011	104,512	122,460
Value of plant and machinery .. £'000	27,751	146,273	152,672	191,352	213,926	235,844

(a) Not available for publication; figures are included in the 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 169.

(ii) *Production.* The generation of electricity in each of the States in 1938-39 and a series of years is shown in the following table:—

**ELECTRIC LIGHT AND POWER WORKS: ELECTRICITY GENERATED.**  
(Million kWh.)

Year.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
1938-39 ..	1,948	1,223	387	256	307	567	4,688
1954-55 ..	5,951	4,152	1,658	1,119	703	1,589	15,172
1955-56 ..	6,505	4,633	1,786	1,204	753	1,794	16,675
1956-57 ..	7,008	5,037	1,937	1,315	782	2,210	18,289
1957-58 ..	7,595	5,320	2,133	1,581	829	2,338	19,796
1958-59 ..	8,275	5,704	2,305	1,583	876	2,456	21,199
1959-60(a) ..	9,197	6,203	2,542	1,945	926	2,531	23,344

(a) Preliminary—subject to revision.

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 1958-59 and for Australia for a series of years:—

**GAS-WORKS.**  
1958-59.

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Number of factories ..	37	27	16	3	3	2	88
Number of persons employed ..	1,337	1,584	351	(a)	182	(a)	3,917
Salaries and wages paid .. £'000	1,551	1,796	311	(a)	180	(a)	4,298
Value of power, fuel, etc., used £'000	2,023	398	44	(a)	137	(a)	2,712
Value of materials used .. £'000	5,654	5,800	1,057	(a)	602	(a)	14,996
Value of production .. £'000	5,959	3,319	1,003	(a)	336	(a)	11,239
Total value of output .. £'000	13,636	9,517	2,104	(a)	1,075	(a)	28,947
Value of land and buildings £'000	1,543	3,284	740	(a)	214	(a)	6,079
Value of plant and machinery £'000	7,175	13,333	2,100	(a)	1,611	(a)	28,127
Horse-power of engines ordinarily in use .. .. h.p.	18,640	6,357	2,874	(a)	1,204	(a)	46,743

**AUSTRALIA.**

Items.	1938-39.	1954-55.	1955-56.	1956-57.	1957-58.	1958-59.
Number of factories ..	107	97	95	94	88	88
Number of persons employed ..	2,931	4,103	4,087	4,138	3,783	3,917
Salaries and wages paid .. £'000	785	3,882	4,148	4,448	4,309	4,298
Value of power, fuel, light, etc., used .. £'000	251	2,291	2,297	2,591	2,720	2,712
Value of materials used .. £'000	1,872	15,187	15,350	15,598	15,030	14,996
Value of production .. £'000	2,694	9,103	9,272	9,894	10,577	11,239
Total value of output .. £'000	4,817	26,581	26,919	28,083	28,327	28,947
Value of land and buildings .. £'000	1,463	2,488	2,748	5,189	5,710	6,079
Value of plant and machinery .. £'000	7,498	19,134	19,828	27,667	26,823	28,127
Horse-power of engines ordinarily in use h.p.	17,905	33,389	42,082	44,373	44,913	46,743

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

(ii) *Coal Used and Production.* The following table shows details for 1958-59:—

**GAS-WORKS: COAL USED AND PRODUCTION, 1958-59.**

Items.	N.S.W.	Vic.	Q'land.	S. Aust.	W. Aust.	Tas.	Aust.
Coal used '000 tons	829	513	190	158	(a)	(a)	1,761
Gas produced million cu. ft.	22,634	17,306	3,161	3,706	(a)	(a)	48,567
Gas sold	19,128	14,908	2,724	3,361	(a)	(a)	41,622
Coke produced (b) '000 tons	417	198	79	92	(a)	(a)	815

(a) Not available for publication; figures are included in the total for Australia.  
2,210,621 tons of metallurgical coke were made in Coke Works in 1958-59.

(b) In addition

Since 1938-39, when the output of gas was 21 thousand million cubic feet, production has increased each year and reached 50,618 million cubic feet with an equivalent of 256,790 thousand therms (1 Therm=100,000 B.T.U.), in 1959-60.